



Government of Bihar
Finance Department

Economic Survey
2015 - 16



बिहार सरकार

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Foreword

The annual Economic Survey 2015-16 for Bihar, as in the past, presents the detailed information on its economy, along with an objective assessment of the recent economic trends. It is a matter of satisfaction that even in the face of severe constraints, Bihar has continued to maintain its growth momentum. Significantly, the State government has also pursued a number of development strategies that has made the growth process an inclusive one, resulting in substantial reduction of poverty and improved status of human development in the recent past. Our holistic approach of 'Growth with Justice' has reduced social inequality and positively impacted the marginalized sections of the society.

The basic purpose of the survey is to appraise the citizen about the current state of economic affairs. But, the effort will be more meaningful if the survey enthuses development professionals, scholars and interested minds to send their valuable feedbacks on our development strategy.


(Nitish Kumar)

ABDUL BARI SIDDIQUI
Finance Minister, Bihar



PATNA

Preface

The state government has been publishing the annual Economic Survey since 2006-07 and this is the tenth Report. Based on data, the survey attempts to present an authentic account of the Bihar's economy. From the data, one can decipher not just developments in the last year, but the overall trend in important economic indicators.

I sincerely hope that policy makers, academicians, development experts and professionals in different fields will find the report informative and useful.

(Abdul Bari Siddiqui)

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GLOSSARY OF ABBREVIATIONS

AIBP	Accelerated Irrigation Benefit Programme
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ANM	Auxiliary Nurse-cum-Midwife
AREP	Accelerated Rural Electrification Programme
ASER	Annual Survey of Education Report
ASHA	Accredited Social Health Activist
ASI	Annual Survey of Industries
AWC	Anganwadi Centres
AWW	Anganwadi Worker
BERC	Bihar Electricity Regulatory Commission
BIADA	Bihar Industrial Area Development Authority
BIGWIS	Bihar Ground Water Irrigation Scheme
BREDA	Bihar Renewable Energy Development Agency
BRGF	Backward Region Grant Fund
BSDM	Bihar Skill Development Mission
BSHP	Bihar State Highway Programme
BSHPC	Bihar State Hydro Electric Power Corporation
BSUP	Basic Services for Urban Poor
BSWAN	Bihar State Wide Area Network
BUDCL	Bihar Urban Development Corporation Limited
BUIDCO	Bihar Urban Infrastructure Development Corporation Limited
CADA	Command Area Development Agencies
CADWM	Command Area Development & Water management
CAGR	Compounded Annual Growth Rate
CBS	Core Banking Services
CLRI	Central Leather Research Institute
COMFED	Cooperative Milk Producers Federation Limited
CPWD	Central Public Works Department
CSO	Central Statistical Organisation
CSS	Centrally Sponsored Scheme
CST	Central Sales Tax
DCRF	Debt Consolidation and Relief Facility
DDUGJY	Deendayal Upadhyaya Gram Jyoti Yojna
DFID	Department for International Development
DIC	District Industries Centre
DPAP	Drought Prone Area Programme
FRBMA	Fiscal Responsibility and Budget Management Act
GDDP	Gross District Domestic Product
IAY	Indira Awas Yojana
ICDS	Integrated Child Development Scheme

IGMSY	Indira Gandhi Matruva Sahyog Yojana
IHSDP	Integrated Housing and Slum Development Programme
KGBV	Kasturba Gandhi Balika Vidyalaya
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MMGSY	Mukhyamantri Gram Sadak Yojna
MNSY	Mukhyamantri Nari Shakti Yojna
MSME	Micro, Small and Medium Enterprises
NABARD	National Bank of Agricultural and Rural Development
NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NHAI	National Highway Authority of India
NRHM	National Rural Health Mission
NRLM	National Rural Livelihood Mission
NSSO	National Sample Survey Organisation
NULM	National Urban Livelihood Mission
PACS	Primary Agricultural Cooperative Societies
PDS	Public Distribution System
PHC	Primary Health Centre
PMEGP	Prime Minister Employment Generation Programme
PRI	Panchayati Raj Institution
PSU	Public Sector Undertakings
R-APDRP	Restructured Accelerated Power Development and Reforms Programme
RAY	Rajiv Awas Yojana
RGSEAG	Rajiv Gandhi Scheme for Empowerment of Adolescent Girls
RIDF	Rural Infrastructure Development Fund
RSETI	Rural Self Employment Training Institute
RSVY	Rashtriya Sam Vikas Yojna
SCADA	Supervisory Control and Data Acquisition
SDRF	State Disaster Response Force
SIPB	State Investment Promotion Board
SJVNL	Sutluj Jal Vidyut Nigam Limited
SLBC	State Level Bankers Committee
SPUR	Support Programme for Urban Reforms
SRR	Seed Replacement Rate
SRI	System of Rice Intensification
SRS	Sample Registration System
SSA	Sarva Shiksha Abhiyan
UIDSSMT	Urban infrastructure Development Scheme for Small and Medium Towns
UIG	Urban Infrastructure and Governance
WUA	Water Users Association

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EXECUTIVE SUMMARY

BIHAR ECONOMY : AN OVERVIEW

1. The growth performance of the Bihar economy has been steady in the recent decade. During 2005-06 to 2014-15, the GSDP at constant prices grew annually at 10.52 percent. In the immediate past (2010-11 to 2014-15) the growth rate of GSDP was slightly lower at 9.89 percent. This slower growth during the recent past is a reflection of the slowing down of the overall national economy. But, even now the growth of the Bihar economy is faster than that of the national economy. Presently, Bihar is one of the fastest growing states in India.
2. During the period 2005-06 to 2014-15, the sectors which recorded more than 15 percent growth rate are — Registered Manufacturing (19.31 percent), Construction (16.58 percent), Banking and Insurance (17.70 percent), and Transport/Storage/Communication (15.08 percent). The growth rate of Agriculture and Animal Husbandry sector, the main sources of livelihood of nearly 90 percent of states' population, has been 6.02 percent.
3. In spite of a high growth phase, Bihar even now ranks at the lowest rung of the per capita income table. In 2012-13, the per capita income of Bihar was 37.0 percent of all-India average; in 2014-15, this ratio went up to 40.6 percent. So, the momentum of growth has got to be sustained for many more years if the gap between the per capita income of Bihar and India is to be wiped out.
4. During the triennium of 2004-05 to 2006-07, the shares of three major sectors in GSDP were — 30.2 percent for primary, 14.8 percent for secondary, and 55.0 percent for tertiary sector. About a decade later, during the triennium of 2012-13 to 2014-15, the share of primary sector has come down to 20.5 percent. Simultaneously, the share of secondary sector rose to 18.4 percent and that of tertiary sector to 61.2 percent. Within the major sectors, the shares of some sub-sectors have shown substantial change over the period. In the primary sector, Agriculture and Animal Husbandry showed substantial decline in its share. Within the secondary sector, it is Construction whose share has increased substantially from 8.0 percent to 12.8 percent. Within the tertiary sector, the sub-sectors which recorded higher growth rate and propelled its share to increase was Communication, Banking and Insurance, Trade, Hotel and Restaurants. The Public Administration and other services experienced a drop in their shares in GSDP.
5. There exists substantial disparity in per capita income among the districts of Bihar. In 2011-12, Patna (Rs. 63,063), Munger (Rs. 22,051) and Begusarai (Rs. 17,587) turn out to be the most prosperous districts of the state. The poorest districts according to the data are — Madhepura (Rs. 8609), Supaul (Rs. 8492) and Sheohar (Rs.7092). If one leaves out Patna (the capital of the state), the per capita income of Munger is around 3 times that of Sheohar, the poorest district.

6. The rise in Consumer Price Index (CPI), for agricultural and rural labourers, has been relatively slower in Bihar compared to India as a whole. In case of Industrial workers, the price rise was higher for Bihar compared to India. In November 2015, the CPI for agricultural workers stood at 746 (Bihar) and 853 (India); for rural labourers, the figures were 752 (Bihar) and 857 (India) and, for industrial workers, the figures were 287 (Bihar) and 270 (India).

STATE FINANCES

1. The revenue surplus of Bihar increased to Rs 6441 crore in 2013-14 before decreasing again to Rs 5848 crore in 2014-15. The Gross Fiscal Deficit (GFD) has increased continuously from Rs 3970 crore in 2010-11 to Rs 11,178 crore in 2014-15 due to substantial increases (Rs. 8954 crore) in capital investments. In spite of this, the GFD of the state government is still comfortably within the limit of 3 percent, as per FRBM Act.
2. The revenue receipts of the state government increased by Rs 9499 crore during 2014-15 to reach Rs 78,418 crore. The revenue expenditure went up by Rs 10,093 crore to reach Rs 72570 crore in 2014-15. The increases in development expenditure accounted for 57 percent of the increase in revenue expenditure (Rs 5703 crore).
3. The 14 percent growth in the revenue receipts witnessed during 2014-15 was less than nearly 16 percent growth seen during the preceding three years. The growth in revenue receipts during 2014-15 was mainly due to the 52 percent increase in central grants, from Rs 12,584 crore to Rs 19,146 crore. The central grants in fact will get reduced to Rs 18,171 crore in the current fiscal which is the first year of the period of the Fourteenth Finance Commission.
4. Between 2010-11 and 2014-15, the developmental revenue expenditure increased more than two-fold from Rs. 22,92 crore to Rs. 46,158 crore. The non-developmental revenue expenditure grew at a little slower rate, rising from Rs. 15,287 crore to Rs. 26,408 crore, bulk of it owing to pension as well as interest payments.
5. Of the total capital outlay of Rs 18,150 crore in 2014-15, as much as Rs 14,728 crore was spent on economic services, almost 28 percent of it (Rs 4177 crore) on creating the infrastructure of roads and bridges. The capital outlay on social services amounted to Rs 1674 crore; out of this, 19 percent (Rs 315 crore) was spent on creating and improving health infrastructure, 53 percent (Rs. 885 crore) on improving the water supply and sanitation, and 16 percent (Rs 263 crore) on creating educational infrastructure in the state.
6. The gap between plan and non-plan expenditure had started closing since 2007-08. During 2014-15, the non-plan expenditure was only 1.2 times the plan expenditure, compared to 1.4 times the year before. During 2014-15, the total plan and non-plan expenditure was Rs 43,939 crore and Rs. 50,759 crore, respectively.
7. The state government had an outstanding public debt of Rs. 47,285 crore in 2010-11, equaling 23.2 percent of its GSDP. In 2014-15, the outstanding debt had increased to Rs. 74,570 crore, and the Debt: GSDP ratio had declined substantially to 18.5 percent, well below the prescribed limit of 28 percent. The ratio of interest payment to revenue

receipts also got reduced to 7.8 percent in 2014-15, much below the prescribed limit of 15 percent. This clearly indicates that the debt problem is well under the control of the state government.

8. In 2007-08, own tax and non-tax revenue receipts of Bihar together covered barely 24 percent of its total revenue expenditure. The ratio has improved since then, reaching the peak of nearly 31 percent in 2014-15. But it is still a long way from attaining the desired level of financial self-sufficiency.
9. During 2010-11 to 2014-15, the revenue receipts grew at an annual rate of 15 percent, while revenue expenditure grew at a higher rate of 17 percent. Thus, though there was a revenue surplus in each of these five years, the surplus decreased over the years. The total revenue receipts increased 1.76 times during the five-year period from Rs. 44,532 crore (2010-11) to Rs. 78,418 crore (2014-15). Simultaneously, its own revenue, tax and non-tax combined, have grown at a faster rate of 20 percent during this period, increasing from Rs. 10,855 crore (2010-11) to Rs. 22,309 crore (2014-15).
10. An analysis of the tax receipts of the state government reveals that its major sources are Sales Tax (VAT), Stamp and Registration Fees, State Excise Duty, Taxes on Goods and Passengers and Taxes on Vehicles. These five taxes together account for 93 percent of the state government's total tax receipts.
11. During the period 2010-11 to 2014-15, the growth in per capita expenditure on social services was nearly twofold, as it increased from Rs 1479 to Rs 2849, and the growth in per capita expenditure on economic services was also 1.7 times (from Rs 768 to Rs 1298). The per capita capital outlay increased 1.8 times from Rs 902 to Rs 1631.

AGRICULTURE AND ALLIED SECTORS

1. Bihar's water resources are indeed abundant, as it receives an average of 1009 mms. of rainfall each year, around 85 percent of it from the south-west monsoon. The annual rainfall is reasonably adequate for the state's agricultural operations. However, it is the year-to-year variation which tends to create flood or draught-like situations in some years. During the period 2001 to 2013, the annual rainfall has varied from being 678 mms. in 2010 to 1506 mms. in 2007.
2. The net area sown was 56.2 percent of total geographical area in 2010-11 and it has increased marginally to 57.7 percent in 2012-13. Simultaneously, there has also been an increase in gross sown area between 2010-11 (7194 thousand hectares) and 2012-13 (7778 thousand hectares). The cropping intensity has increased marginally from 1.37 in 2010-11 to 1.44 in 2012-13.
3. The agricultural economy of Bihar is very much skewed in favour of the subsistence sector, since the acreage under foodgrains, even after a decrease in recent years, is more than 90 percent. Presently, Bihar produces rice (82.4 lakh tonnes), wheat (35.7 lakh tonnes), pulses (4.3 lakh tonnes), oilseeds (1.3 lakh tonnes) and sugarcane (155.0 lakh tonnes). The total cereals production is estimated at 143.2 lakh tonnes for its population of nearly 10 crores.

4. The Gangetic alluvial soil is a major boon for the vegetable producers of the state. Bihar ranks first among all the states in terms of vegetable production. In 2014-15, the total vegetable production in Bihar was 144.99 lakh tonnes. Out of the total production, potato accounted for 63.46 lakh tones. The levels of production of five major fruits in Bihar in 2014-15 were — mango (1272 thousand tonnes), guava (370 thousand tonnes), litchi (198 thousand tonnes), lemon (129 thousand tonnes), and banana (1527 thousand tonnes). In 2013-14, about 99 tonnes of rose, 6799 tonnes of marigold, 318 tonnes of jasmine (Bela) and 536 tonnes of the tuberose were also produced in Bihar.
5. Under the Agriculture Road Map II, as many as 23 crops were identified and promotion programmes for their seeds have been initiated by the state government. There has also been the revival of Bihar Rajya Beej Nigam (BRBN), strengthening of Bihar Seeds Certification Agency, and multiplication of foundation and breeder seeds by state farms. Recently, the scheme of 'Mukhyamantri Tibra Beej Vistar Yojana' has helped farmers in the field of paddy cultivation. The Seed Replacement Rate (SRR) for major crops like paddy, wheat and maize have increased substantially in recent years. More specifically, the SRR for self-pollinated crops have reached the scientific level of 33 percent.
6. In 2012-13, the total consumption of fertilizers in Bihar was 46.42 lakh tonnes, which came down to 41.16 lakh tonnes in 2014-15, registering a decrease of 11.3 percent in three years. However, this is not particularly worrisome, as the farmers are recently replacing chemical fertilizers with eco-friendly bio-fertilizers.
7. The promotion of organic farming has been made a part of the Agricultural Road Map II of Bihar. This programme would cost Rs. 255 crore over a period of 5 years. The vermi-compost production has been made demand-based, with a provision of 50 percent subsidy for a commercial unit producing of at least 1000 tonnes of vermi-compost per year. During 2013-14, a total of Rs. 149.79 crore has been spent on promoting organic farming.
8. Along with physical inputs, agricultural operations also require adequate credit support. The data related to the agricultural credit reveals that credit supply is not adequate in Bihar in comparison to its demand. The share of three different sources in agricultural credit in 2014-15 stood at Commercial Banks (61.30 percent), Regional Rural Banks (37.65 percent) and Cooperative Banks (1.05 percent).
9. Animal husbandry is one of the key sectors as it contributes about one-fifth of the total rural income. Milk is the most important produce of this sector. The production of milk has increased from 65.17 lakh tonnes in 2010-11 to 77.75 lakh tonnes in 2014-15. The production of egg has also increased from 74.46 crores in 2010-11 to 98.45 crores in 2014-15. The production of fish was 4.79 lakh tonnes in 2014-15.

ENTERPRISES SECTOR

1. In 2014-15, the industrial sector in Bihar has grown by 9.10 percent, which was marginally lower than the growth rate of GSDP at 9.45 percent. The slower growth of industrial sector in 2014-15 is due to the slower growth of manufacturing sector which grew at a little over 5 percent. This is basically a reflection of the slower growth of manufacturing sector in the entire national economy. A deceleration in growth rate was also observed for construction and electricity/water supply/gas; but even after that, construction sector grew by 10.45 percent and the latter grew by 7.52 percent. With a considerable improvement in availability of power in Bihar, it is expected that its industrial sector will grow at higher rate in the coming years.
2. The distribution of the factories between agro-based and non-agro-based indicates that the share of agro-based industries in Bihar is lower (34.1 percent), compared to the national figure (39.5 percent). This actually implies that the substantial potential that Bihar has for agro-based industries is yet to be realised fully.
3. The number of registered micro, small and medium enterprises is — 54 units (medium), 1964 units (small) and 2.00 lakh units (micro) at present. Between 2010-11 and 2014-15, a period of 5 years, the growth of enterprises has been — 315 percent (medium units), 27 percent (small units) and 9 percent (micro units). This higher growth of medium enterprises, compared to small and micro enterprises, is a positive trend in the industrial scenario in Bihar.
4. Both in 2012-13 and 2013-14, the performance of PMEGP was modest, the actual attainments being nearly half of the target. In 2013-14, 3093 persons were benefited by the programme, against a target of 5591. A total credit of Rs. 76.75 crore was distributed to them against a target of Rs. 128.60 crore. In 2014-15, however, the achievements under this programme was limited, when only 1734 persons were benefited with a credit of Rs. 43.58 crore.
5. At the end of 2014-15, there were 366 food processing industries in the state, of which 207 (56.6 percent) were operational. By September, 2015, there were a few additions, resulting 379 units, of which 210 (55.4 percent) were operational. Although cereal-based food processing industries are the largest in number (rice, wheat and maize), there are also a number of units producing milk products and edible oils. The total employment in these food processing industries is around 45 thousand.
6. During 2014-15, a total of 574.45 lakh qntls. of sugarcane was crushed in Bihar, providing 52.67 lakh qntls. of sugar. The production of sugar was about 11 percent less than the level in 2013-14. The overall recovery percentage of sugar has increased marginally in Bihar from 8.6 percent (2012-13) to 9.2 percent (2014-15).
7. The number of milk cooperative societies in 2014-15 was 18.4 thousand, of which 14.2 thousand were working, and 5.8 thousand were registered. The number of working cooperative has increased by 12.1 percent in 2014-15 over the last year when there were

12.7 thousand societies. During the five year period of 2010-11 to 2014-15, it had grown annually at 12.6 percent.

8. There are 1089 primary handloom weaver societies, with nearly 34 thousand handlooms operating under them. The bulk of the weavers are, however, operating outside the cooperative fold. There are two apex-level marketing organisations, viz., Bihar State Handloom Cooperative Union and Bihar State Wool and Sheep Union. There is one Corporation — Bihar State Handloom and Handicraft Corporation — with 6 Regional Handloom Unions located in Nalanda, Sitamarhi, Siwan, Madhubani, Purnea and Bhagalpur.
9. A jute park at the cost of Rs. 42.36 crore is being established at Maranga in Purnea district on Private-Public-Partnership basis. A Jute park is being establishing in Maranga, Purna with investment cost Rs. 42.36 crore, by registered SPV M/S Punrasar Jute Park Ltd. Under PPP mode. State Govt. has provided 44.30 acres land as equity and Rs. 2.00 crores (two crores) as a grant. In Jute Park, Two units M/S Tirupati Commodities Private Ltd. & M/S Punrasar Jute Park training centre has been established & functional. They are producing Jute yarn, Jute twin, Jute cloths & other Jute Products. 481 peoples has been employed directly and 800 peoples has been indirectly employed as yet.

INFRASTRUCTURE

1. Total length of National Highways (NH) has increased substantially from 3410 kms. (2001) to 4595 kms. (2015). The highest increase in length of NH by 861 kms. was registered between 2010 and 2015. The length of State Highways (SH) has also increased from 2383 kms. (2001) to 4253 kms. (2015), with the highest increase of 1610 kms. between 2005 and 2010. During 2001 to 2015, Major District Road (MDR) has also increased significantly from 7739 kms. to 10,634 kms.
2. As on September, 2014, a total of 35 NHs, measuring 4321 kms were there in Bihar. With the addition of 3 more NHs during the year, the total length of NH has become 4595 kms. Around 68 percent of NH are double and multiple lane roads and the rest 32 percent single and intermediate lane roads.
3. The total length of the SH in Bihar in 2015 was 4253 kms. Around 65 percent of it were double-lane roads, 20 percent single-lane roads, and 15 percent intermediate-lane roads. The multiple-lane roads with more than 7-meter width constituted only 1.0 percent of the SH.
4. There was 10,634 kms. of MDR in the state as on September, 2015, with a major portion (54 percent) having a width of 3.75 meters. Out of the total length of MDR, 4897 kms have been converted into intermediate or 2-lane width. Those roads which are yet to be converted into wider roads, have undergone surface renewal or repair work. In future, they will be converted into intermediate or 2-lane roads.

5. Rural roads connect the village to one-another and act as feeder to the nearest road of higher category (MDR, SH and NH). During 2014-15, a total of 50,596 kms. of rural roads were constructed with an expenditure of Rs. 26,233 crore.
6. During 2005-06 to 2015-2016 (up to January 2016), the construction of 1013 major and minor bridges under Mukhyamantri Setu Nirman Yojna and 710 mega, major and minor bridges under other different heads have been completed. The mega bridge over river Sone between Arwal-Sahar (Rs. 163.00 crore), Balauaha Ghat Bridge over river Kosi under district Saharsa (Rs. 531 crore), bridge over river Gandak between Dhanha-Ratwal under West Champaran (Rs. 358.67 crore), bridge over river Kosi at Vijay Ghat of Nawgachia under District Bhagalpur (367.81 crore), flyover between Sheikhpura more to Jagdeopath on Bailey Road in Patna (Rs. 298.70 crore) and 6 Lane RCC HL bridge over river Falgu under district Gaya have been completed.
7. The registration of vehicles has increased to 614 thousand in 2014-15 from 387 thousand in 2010-11. This implied an annual growth rate of 12.2 percent. During the same period, the growth rate was in double digit for Auto Rickshaw (18.6 percent), Truck (13.5 percent), Tractor (13.4 percent) and Two Wheeler (12.9 percent).
8. The number of aircraft movement increased from 9900 in 2013-14 to 11,054 in 2014-15. Over these two years, the number of passengers increased from 10.5 lakh to 12.0 lakh and freight also increased from 4849 tonnes to 5198 tonnes.
9. The number of telephone connections increased more than 15 times between 2005-06 (42.14 lakh) and 2014-15 (661.69 lakh). This expansion in the telecom sector is mainly driven by the private network, with the share of BSNL showing a decline. The tele-density has increased from 1.15 to 51.17 per hundred population during 2001 to 2015. However, the rural tele-density of Bihar is still the lowest among all the major states of India.
10. As on March 2014, a total of 9064 post offices were in existence in Bihar, out of which 8591 (95 percent) were in rural areas and 473 (5 percent) in the urban areas. In terms of share in the all-India postal network, the 6.2 percent of rural post offices in Bihar is rather less, since Bihar accounts for 11.1 percent of country's for rural population.
11. The ultimate irrigation potential in the state is estimated to be around 117.54 lakh hectares, including major, medium and minor irrigation schemes. This irrigation potential includes both surface and ground water sources. Till date, the created potential (67.46 lakh hectares) is 57.4 percent of the ultimate potential (117.54 lakh hectares). The utilised potential (57.63 lakh hectares) is 49.0 percent of ultimate potential.

ENERGY SECTOR

1. The peak deficit in power has been around 30 percent for several years till 2012-13. In 2013-14 and 2014-15, this deficit was reduced to around 20 percent. Due to increased availability of power from an average of 6-8 hours to 14-16 hours in rural areas and

from 10-12 hours to 20-22 hours in urban areas, the per capita consumption of the state has risen from 145 kwh in 2012-13 to 203 kwh in 2014-15, implying a growth of about 40 percent in two years, which is the highest in the country.

2. The installed power capacity in the state was 3704.63 MW in March, 2015. Out of this, 83.5 percent is from coal based thermal power, 14.12 percent from hydro power, and the balance 2.3 percent from renewable energy sources. In terms of ownership, central sector has the largest share of 77.9 percent, followed by the private sector/IPPs (14.7 percent), and state sector (7.4) percent. In order to meet the increased demand, the state has already planned for increased capacity of 6521.30 MW from different sources in a phased manner by 2018-19. These sources are — own generating stations, renewable energy sources, central generating stations, and long/ medium term Power Purchase Agreements (PPA) through competitive bidding.
3. The allocation of fund for Bihar State Power (Holding) Company Limited (BSPHCL) and its subsidiary companies, Bihar Renewable Energy Development Agency (BREDA) and Bihar State Hydroelectric Power Corporation (BSHPC) was Rs. 3110.92 crore in 2013-14, which increased to Rs. 4189.92 crore in 2014-15.
4. At the end of October 2015, the distribution network in Bihar consisted of 1,33,491 circuit km low tension lines, 11 kV lines with 73,359 circuit km network, and 33 kV lines with 9815 circuit km network. There are 641 power substations (33/11 kV) and 1,00,842 distribution substations (11/0.4 kV).
5. The generation and purchase of power (net of central transmission loss) in Bihar increased from 10,883 MU in 2010-11 to 17,418 MU in 2014-15. With increase in sales, the revenue collection has also increased. The cost coverage has also risen from 69 percent in 2010-11 to about 89 percent in 2014-15, thus bringing down financial loss from 31 percent to 11 percent.
6. About 9307 circuit km EHV (Extra High Tension) transmission line, 98 grid substations with total transformation capacity of 6700 MVA and evacuation capacity of 5360 MW comprise its transmission system in Bihar. The projection for 2017-18 is 13,900 circuit km transmission line, 152 grid sub-stations with 12,830 MVA at 220/132 KV level and 13,020 MVA at 132/33 KV level. The power availability during the peak period was 2831 MW in 2014-15, which increased to 3459 MW in October 2015, implying an increase of 23 percent.
7. There are 13 minor hydel projects that are currently operational in the state, with a total installed capacity of 54.3 MW. Presently, Bihar State Hydroelectric Power Corporation (BSHPC) is also engaged in exploring the possibilities of more minor hydel power projects in the state. There are 17 such schemes where the exploration work is in progress.

RURAL DEVELOPMENT

1. According to the Tendulkar Committee estimates, the poverty ratio for Bihar is 34.1 percent for rural and 31.2 percent for urban households in 2011-12, implying an overall poverty ratio of 33.7 percent. Between 2004-05 and 2011-12, the poverty ratio declined by 20.7 percentage points for Bihar, as against 15.3 percentage points for all-India. The pace of reduction of rural poverty has been faster than that of the urban poverty, in both Bihar and India.
2. JEEVIKA is an initiative of the state government for poverty alleviation. The Bihar Rural Livelihoods Promotion Society (BRLPS) is functioning under the overall framework of National Rural Livelihood Mission (NRLM) and implementing the JEEVIKA scheme. By the end of September, 2015, 47 lakh poor households were mobilised into 4.40 lakh Self-Help Groups (SHGs). Out of these SHGs, 60 percent were federated into 21,529 Village Organisations (VO).
3. The MGNREGS has become a powerful instrument for inclusive growth in rural areas through its impact on livelihood security and social protection. As regards the number of job cards issued, it was 131.22 lakh in 2014-15. However, the number of households provided with employment has been decreasing over the years and, in 2014-15; it was only 10.36 lakhs. To the advantage of the women workers, their share in total employment has been above 25 percent in all the years; in 2014-15, this share was as high as 37.3 percent.
4. The Indira Awaas Yojana (IAY) is a flagship scheme of the Ministry of Rural Development for rural housing. Since 2012-13, more than 100 percent of physical targets were achieved in Bihar under IAY. The share of SCs and STs in the total houses completed was barely half upto 2013-14, but there has been a notable improvement in 2014-15 when the share was 90.2 percent.
5. The Public Distribution System (PDS) is a target group strategy to alleviate poverty, and it is extremely important for Bihar where incidence of poverty is very high. The lifting of both wheat and rice under Antyodaya scheme has been close to 100 percent during the last five years. Under Privileged Household (PHH) scheme, the lifting percentage was less than 100 percent for both wheat and rice upto 2012-13. But, during the last two years, it has been close to 100 percent. For wheat, liftings were 94.8 percent (2013-14) and 95.0 percent (2014-15). For rice, the liftings were 96.4 percent (2013-14) and 97.0 percent (2014-15).
6. Under Disaster Management, the state government has formulated Bihar Scheme for Assistance to Farmers in Farm Distress, 2015 to provide assistance to farmers and take measures to prevent farm distress. Under this scheme, there is a provision of an ex-gratia payment of Rs. 4.00 lakh to be deposited in the name of the next-of-kin of the farmer who has died. This creates a fund with a Nationalized Bank which provides monthly interest to the account holder as a financial relief.

7. A new scheme of town beautification plantation ‘Har Parisar Hara Parisar’ has been started by the Department of Environment and Forest from 2014. Under this scheme, 1.71 lakh plants have been planted in 234 campuses, against the target of 175 campuses. During the monsoon of 2015-16, another 1.82 lakh plants will be planted in 1114 campuses.

URBAN DEVELOPMENT

1. With the level of urbanisation at 11.3 percent, Bihar is the least urbanised state in India. For the entire country, the urbanisation level stands at 31.2 percent. Bihar accounts for 8.6 percent of India’s total population, but it has only 3.1 percent of its urban population. This pattern of urbanisation in Bihar has continued for long. Between 1961 and 2011, the level of urbanisation has increased by only 3.9 percent — 7.4 percent in 1961 to 11.3 percent in 2011.
2. Bihar has 141 Urban Local Bodies – 11 Municipal Corporations, 42 Nagar Parishads and 88 Nagar Panchayats. The state has already prepared a Bihar Urban Agenda, 2031. This document has a detailed roadmap for building urban infrastructure across all towns consistent with standards defined by the Ministry of Urban Development of the central government. The actual expenditure for urban development was Rs. 1391 crore in 2014-15. There has been a steady increase in such expenditure in last five years, growing annually at 40.1 percent. The utilisation of the disbursed amount has also been very high, at more than 90 percent in recent years.
3. To improve, the status of municipal finances in Bihar, the SPUR project has conducted detailed analysis of the status of municipal finances in the 28 largest ULBs of the state. On an average, these ULBs raised Rs. 589 per capita in 2012-13, which comprised 25 percent of own revenues and the balance is accounted for by state devolutions, assignments and grants-in-aid.

BANKING AND ALLIED SECTORS

1. In March 2015, a total of 6297 branches of commercial banks were operating in Bihar. During 2014-15, 389 new branches of Scheduled Commercial Banks were opened, with as many as 178 branches in rural areas, 97 branches in semi-urban areas, and 115 branches in urban areas. The growth in number of banks in 2014-15 was 6.6 percent, compared to 12.1 percent in 2013-14 which was the highest during the last six years.
2. The total number of Cooperative Bank branches in Bihar was 288 in 2014, compared to 323 in 2013 and 295 in 2012. In addition to scheduled commercial banks and cooperative banks, the RRBs provide a multi-agency approach for agricultural and rural credit in India. At the end of September, 2015, Bihar had 2058 RRB branches which was 1889 in September, 2014. Of the three RRBs in Bihar, Uttar Bihar Kshetriya Gramin Bank alone accounted for 50 percent of the total RRB branches in the state.
3. There has been a significant growth (15.3 percent) in the total deposits in Bihar in 2013-14 over the previous year. Simultaneously, the credit in 2013-14 has also expanded by

25.6 percent. Bihar's share in the total deposits of Scheduled Commercial Banks increased slightly from 2.34 percent in 2012-13 to 2.39 percent in 2013-14, and its share of credit also improved marginally from 0.90 percent to 0.99 percent in this period. But, the total bank credit in Bihar does not account for even 1 percent of the total bank credit in the country. As on September 2015, the aggregate deposits of all banks in Bihar were Rs 2,20,667 crore, against a credit of Rs 1,04,004 crore, resulting in a CD ratio of 47.1 percent, substantially higher than the 32.1 percent in 2005-06.

4. In 2014-15, the priority sector advances constituted 73 percent of the total bank advances in the state. The share of agriculture in the total advances was 50 percent, about the same as in the previous year. The advances made to the small and medium scale industries were 13 percent of the total loans disbursed in 2014-15, which was a little higher than 11 percent registered in 2013-14. The overall achievement under the Annual Credit Plan was 93 percent in 2014-15, which was about the same achieved in 2013-14 (92 percent). There was also an overachievement in respect of credit to small and medium enterprises during the last four years.
5. As on March 2014, with 8463 PACS, Bihar accounts for 9.1 percent of all PACS in India. Out of the total 8463 PACS in Bihar, 3962 societies are making losses, their total loss amounting to Rs 1crore, while 1180 societies have earned a total profit of Rs 6 crore. The total deposits of all PACS were only Rs 175 crore, and their total borrowings amounted to Rs 508 crore.
6. Till March, 2015, 19 tranches of RIDF have been sanctioned for Bihar, totaling to Rs 9735 crore. Out of this, Rs. 7586 crore (77.9 percent) was disbursed, and 84.6 percent of which was utilised.
7. Till March, 2015, bank-linked SHG coverage in rural Bihar was 29.2 lakh households. The average savings per SHG in Bihar was Rs. 13,216, compared to the national average of Rs 14,368. The average credit of Rs 72 thousand per SHG was, however, far below the national average of Rs 1.69 lakh. NABARD has identified 16 districts in Bihar for promoting and financing women SHGs through positioning an anchor NGO in each identified district.

HUMAN DEVELOPMENT

1. During the last five years, the level of Per Capita Development Expenditure (PCDE) in Bihar has been low compared to the national average; but thanks to the commitment of the state government, the annual growth rate PCDE in Bihar has been 29.6 percent, compared to a much lower growth rate of 17.8 percent for all states.
2. The concerted efforts of the state government through ensuring round the clock delivery services in all PHCs had paid rich dividends in bringing down the IMR considerably in Bihar. In 2012-13, the IMRs in Bihar were — male (40), female (43), and overall (42). The corresponding figures for India were — male (39), female (42), and overall (40).

Thus, the situation in Bihar was very close to the national average, in spite of its serious economic and social disadvantages.

3. The average number of patients visiting government hospitals per month was 4675 in 2010, which has increased to 9871 in 2014. This more than two fold increase is due to better infrastructure facilities, larger manpower, and proper monitoring of the health institutions.
4. The number of institutional deliveries in Bihar has increased rapidly in the recent years, growing annually at 24.2 percent. Bihar has also made substantial progress towards universal immunisation in the recent years. Bihar was declared as 'Maternal and Neonatal Tetanus free State' in 2015. The pentavalent vaccination in which five individual vaccines has been conjugated (Haemophilus Influenza type B, whooping cough, tetanus, hepatitis B and diphtheria) has started in 2015.
5. The ICDS programme is running in all the 38 districts of Bihar through 544 project offices. In all, 91.6 thousand AWCs have been established to cater to 19.1 million children (0-6 years) and 60.3 lakh pregnant and lactating women. The budget provision for ICDS has steadily increased from Rs. 880.24 crore in 2010-11 to Rs. 2238.31 crore in 2014-15, implying an annual growth rate of 24.3 percent.
6. In 2014-15, as many as 24.3 thousand handpumps have been installed under the National Rural Drinking Water Programme (NRDWP). The goal of NRDWP is to ensure that, by 2022, every rural household in the country has access to at least 70 litres of water per capita per day (lpcd) within their household premises or at a distance of less than 50 meters from their households. In 2014-15, there were also additions in the construction of individual household latrines (1.65 lakh), sanitary complexes (20), school toilets (1046) and Anganwadi toilets (11). The smaller figures for sanitary complexes, school toilets and Anganwadi toilets is mainly because most of them have already been covered in previous years.
7. The literacy rate in Bihar is low at 61.8 percent, with male literacy at 71.2 percent and female literacy at 51.5 percent (2011 census). However, the increase in literacy rate in Bihar was 17.9 percentage points between 2001 and 2011, compared to 10.9 percentage points for the entire country. This decadal increase is not only the highest among all the decadal growth rates in Bihar since 1961, it is also the highest among all the states for the decade 2001-11.
8. The total enrolment in primary level was 161.20 lakhs in 2013-14, increasing from 139.08 lakhs in 2009-10. At the upper primary level also, the enrolment has shown an increasing trend. The total enrolment has increased from 41.27 lakh in 2009-10 to 65.41 lakh in 2013-14, implying an annual growth rate of 12.0 percent. As a whole, the total enrolment, taking both primary and upper primary levels, rose to 226.61 lakhs in 2013-14 from 180.35 lakhs in 2009-10, with an annual growth rate of 6.0 percent. Additionally, the total enrolment for SC and ST students during this period has also grown at the rate of 8.1 and 16.0 percent respectively.

9. At all levels of education, the dropout rates have continuously declined during the recent years. At the primary level, dropout rate recorded a decrease of 13.4 percentage points between 2009-10 (42.5 percent) and 2013-14 (29.1 percent). At the upper primary level, this decrease was 12.3 percentage points. However, the dropout rates at secondary and higher secondary levels are much higher than that at the elementary level.
10. In 2010-11, the coverage of MDMS at primary level was 55.5 percent, which increased to 65.9 percent in 2014-15. Similarly, the coverage of MDMS at upper primary level was 48.6 in 2010-11 and it is 61.1 percent in 2014-15. Thus, the coverage at both the levels have increased in the recent years, although there was decline in coverage in some intervening years.
11. According to the ASER Report, the quality of learning has been declining over the years, both in Bihar and India. As regards learning outcomes in the recent years, in Standard III, the percentage of students with satisfactory reading skills is lower in Bihar than the national average, while for mathematical skills it is nearly the same. For Standard V students, the percentage of students with satisfactory reading skills is same for both Bihar and India. However, for mathematical skills, the figures for Bihar are much higher than that of India. These results underline the necessity of improving the quality of elementary education throughout the country, including Bihar.
12. In 2014, there were 278 government colleges and 416 local body colleges. In addition, there are 43 teacher training centres in Bihar. Till date, 31 colleges in Bihar have been accredited to NAAC.
13. At present, 80 residential schools are running for SC/ST students. The sanctioned strength of the schools were 30,560 in 2014-15. A sum of Rs. 17.50 crore will be spent for the construction of more such residential schools, with additional capacity of 560 students.
14. To expand the employment opportunities, the state government has taken several initiatives through Bihar Skill Development Mission. It has plans for skill upgradation of 1 crore youth by 2017. To help them obtain gainful employment, the skill upgradation scheme has a budget of Rs. 19.05 crore.

CHAPTER I

BIHAR ECONOMY : AN OVERVIEW

After the installation of a new government in November, 2015 in Bihar, the state has witnessed a major political change. The present Economic Survey is the first report by the new government. Besides the political change, yet another important event of 2015-16 was the submission of the report by Fourteenth Finance Commission which has substantial implications for the state's finances. Unfortunately, these recommendations have largely ignored the principle of equalisation and it would certainly make the task of the state government more difficult regarding its development agenda.

The growth performance of the Bihar economy has been steady in the recent decade. During the period 2005-06 to 2014-15, the state economy has grown annually at 10.5 percent, which is one of the highest among all major Indian states. This growth performance is even more appreciable in the background of slower growth rate for the national economy. Through higher development expenditure, the state government was able to insulate Bihar's economy from the macroeconomic constraints that had hampered the growth of national economy. Apart from attaining a high growth rate in economy, Bihar was also able to ensure that its growth process is indeed inclusive. This was possible first because of a high growth rate of the agricultural sector and, secondly, through a number of welfare programmes benefitting the marginalised sections of the population.

The high level of development expenditure by the state government has been one of the principal causes behind the appreciable growth performance of the state's economy. The state government was thus able to maintain high level of development expenditure, without compromising on the principles of financial management like generating revenue surplus, keeping Gross Fiscal Deficit within the limits, and containing the level of outstanding debt. During 2015-16, the state government has continued that practice of financial discipline which will facilitate its development agenda in near future.

The current status of the state's overall economy as well as its various sectors are presented in this Economic Survey for 2015-16. The sectoral analysis will highlight the efforts made by the state government for different sectors and their respective achievements. It will simultaneously point out the hindrances that the economy is still facing to maintain its growth momentum. Apart from this Introductory chapter on the overview of the state's economy, the survey has nine more chapters – State Finances, Agriculture and Allied Sectors, Enterprises Sector, Infrastructure, Energy Sector, Rural Development, Urban Development, Banking and Allied Sector and, finally, Human Development.

1.1 Demography

The demographic profile of any region is an important dimension of its macro-economic scenario. Table 1.1 presents the broad demographic profile of Bihar and India. According to 2011 census, the population of Bihar is 104.1 million, about 8.6 percent of India's total population of 1210.6 million. The demographic profile of Bihar is much different from that of the entire country. First, the decadal growth rate of population in Bihar during 2001-11 was as high as 25.1 percent, compared to only 17.6 percent for India. Bihar is yet to experience the demographic transition that most other states of India have already undergone. Secondly, the density of population in Bihar (1106 persons/ sq.km.) is much higher in Bihar than in India (382 persons/ sq.km.). Such population pressure makes the development challenge in Bihar even more difficult. Finally, the urbanisation level in Bihar (11.3 percent) is also extremely low, compared to the national average (31.2 percent). This is indeed the most ruralised state in India. In this context, it also needs to be noted that between 2001 and 2011, the urbanisation level in Bihar has increased by only 0.8 percent, whereas the increase was a substantial 3.4 percent for the entire country.

Table 1.1 : Demographic Profile and Administrative Structure of Bihar and India (2001 and 2011)

Demographic Indicator	Bihar		India	
	2001	2011	2001	2011
Population (million)	82.9	104.1	1028.7	1210.6
Sex Ratio (females per '000 males)	919	918	933	943
Child Sex Ratio	942	935	927	919
Density (persons per sq. km.)	880	1106	325	382
Urbanisation (Percentage)	10.5	11.3	27.8	31.2
Decadal Growth (Percentage)	28.6	25.1	21.5	17.6
No. of Districts	37	38	593	640
No. of CD blocks	533	534	5463	5924
No. of Towns (statutory/census)	130	199	5161	7935
No. of Villages	45098	39073	638596	597369

Source : Census of India, 2001 and 2011

The district-wise demographic features of Bihar points to a very heterogeneous pattern. Table A 1.1 (Appendix) presents the district-wise profile, depicting demographic variations over the districts. In terms of decadal growth rate of population, the best performing districts are — Arwal, Darbhanga and Gopalganj. Regarding sex-ratio, the range of variation is from 876 (Munger) to 1021 (Gopalganj), the state average being 918. The child sex-ratio seems to be rather uniform across the districts. Out of 38 districts, about 20 districts are having density of population greater than that of the state average.

1.2 State Domestic Product

The estimates of State Domestic Product of Bihar are prepared, separately for both Gross State Domestic Product (GSDP) and Net State Domestic Product (NSDP), both at current and constant prices. In Table A 1.2 (Appendix), the estimates of GSDP and NSDP are presented for the period 2004-05 to 2014-15. In Tables A 1.3 and A 1.4 (Appendix), the sector-wise estimates of GSDP are presented at current and constant (2004-05) prices for 2010-11 to 2014-15. Further, the sector-wise estimates of NSDP at current and constant (2004-05) prices for the same period are presented in Tables A 1.5 and A 1.6 (Appendix), respectively. The GSDP of Bihar at 2004-05 prices in 2014-15 was Rs. 1.90 lakh crore, yielding a per capita income of Rs. 18,560. The estimated GSDP at current prices in 2014-15 is Rs. 4.02 lakh crore, implying a per capita income of Rs. 39,341.

During the last decade (2005-06 to 2014-15), the state income at constant prices grew annually at 10.52 percent. In the immediate past (2010-11 to 2014-15) the growth rate of GSDP was slightly lower at 9.89 percent. During the last two years, the growth rates have been — 9.1 percent (2013-14) and 9.4 percent (2014-15). It is thus observed that the growth of the state economy has been a little slower in the recent years. This is basically a reflection of the slowing down of the overall national economy. But fortunately, even now the growth of the Bihar economy is faster than that of the national economy. Presently, Bihar is one of the fastest growing states in India.

To identify the major contributors to growth in state income, one needs to examine the sectoral growth rates (Table 1.2). During the period 2005-06 to 2014-15, the sectors which recorded more than 15 percent growth rate are — Registered Manufacturing (19.31 percent), Construction (16.58 percent), Banking and Insurance (17.70 percent), and Transport/Storage/Communication (15.08 percent). For Communication, the growth rate was 25.38 percent. One can thus conclude that Communication and Registered Manufacturing have emerged as leading contributors to the growth process. It is also heartening to note that the rate of growth of Agriculture and Animal Husbandry sector has been 6.02 percent during 2005-06 to 2014-15. This is of special significance, as nearly 90 percent of state's population live in rural areas and primarily depend on this sector for livelihood.

As can be seen from Table A 1.7 (Appendix), there is remarkable variation in year to year sectoral growth rates. The Agriculture and Animal Husbandry sector, which grew at 19.91 percent in 2010-11, recorded a growth rate of 8.64 percent in 2012-13, (-) 7.23 percent in 2013-14, and 4.64 percent in 2014-15. This is because of variation in rainfall patterns which cause fluctuation in agricultural production which accounts for about 20 percent of GSDP. It is,

therefore, essential that the rate of growth of Agricultural sector should be stabilized for a steady growth of GSDP in future years.

Table 1.2 : Annual Growth Rate of GSDP

Sl. No.	Sector	2013-14		2014-15		2010-11 to 2014-15		2005-06 to 2014-15	
		Current Prices	Constant Prices	Current Prices	Constant Prices	Current Prices	Constant Prices	Current Prices	Constant Prices
1	Agriculture/Animal Husbandry	1.6	-7.2	11.7	4.6	13.8	3.75	16.8	6.02
2	Forestry / Logging	5.8	-1.9	5.6	-1.8	6.0	-1.88	5.0	-1.95
3	Fishing	30.8	8.0	30.8	8.0	29.3	12.61	21.0	6.45
4	Mining/Quarrying	11.7	11.7	0.0	0.0	2.9	1.95	5.0	5.77
Sub-Total (Primary)		3.3	-6.1	12.6	4.4	14.2	3.74	16.1	5.33
5	Manufacturing	8.5	3.6	8.3	5.4	6.3	0.74	13.9	7.00
	5.1 Registered	6.6	0.8	5.9	5.7	2.9	-2.83	28.2	19.31
	5.2 Un-registered	9.7	5.2	9.7	5.2	8.6	2.95	9.5	3.38
6	Construction	24.5	15.1	19.5	10.5	16.9	8.05	25.7	16.58
7	Electricity/ Water Supply/ Gas	18.3	9.7	15.2	7.5	22.8	8.22	15.9	7.97
Sub-Total (Secondary)		20.3	11.9	16.8	9.1	14.6	6.20	21.6	13.07
8	Transport / Storage / Communication	20.0	11.9	21.2	12.8	19.6	12.72	16.5	15.08
	8.1 Railways	13.2	0.8	13.2	0.8	10.7	0.41	9.6	3.91
	8.2 Other Transport	24.4	14.1	25.9	16.2	25.5	15.49	22.1	12.17
	8.3 Storage	17.7	9.0	17.7	9.0	18.8	9.58	19.5	9.38
	8.4 Communication	14.4	14.4	14.4	14.4	13.2	15.74	11.4	25.38
9	Trade / Hotel / Restaurant	20.3	11.4	20.3	11.5	23.7	14.10	23.6	13.13
10	Banking / Insurance	23.0	20.5	23.0	20.5	22.5	19.60	20.7	17.70
11	Real Estate/ Ownership of Dwelling/Business Services	18.3	10.9	18.8	11.2	18.6	10.65	20.4	9.69
12	Public Administration	29.7	20.1	9.6	1.6	16.9	8.14	17.7	8.28
13	Other Services	28.4	18.1	18.4	9.1	23.5	13.70	18.5	8.70
Sub-Total (Tertiary)		22.7	14.3	18.9	11.2	22.0	13.46	20.6	12.00
Total GSDP		17.0	9.1	17.1	9.4	18.6	9.89	19.5	10.52
Per Capita GSDP		15.6	7.8	15.7	8.1	17.1	8.50	17.9	8.99

Source : Directorate of Economics and Statistics, GOB

To compare Bihar's economic position *vis-à-vis* other states, the per capita NSDP of various states has been presented in Table 1.3. These figures are presented at constant prices (2004-05) for the years 2012-13, 2013-14 and 2014-15. In spite of a high growth phase (2005-06 to 2014-15), Bihar even now ranks at the lowest rung of the per capita income table. In 2012-13, the per capita income of Bihar was 37.0 percent of all-India average; in 2014-15, this ratio went up to 40.6 percent. With the sustained growth process, the gap between Bihar and India was bridged by about 4 percentage point over a three year period. So, the momentum of growth has got to be sustained for many more years if the gap between the per capita income of Bihar and India is to be wiped out. Admittedly, once the growth process reaches a high point, the linkage effect within the economy starts working, thereby increasing the growth momentum. Yet, some big push in investment is required, be it public or private, to free Bihar economy from its present low level.

Table 1.3 : Per Capita Net State Domestic Product (NSDP) at 2004-05 Prices of Major Indian States

(Rupees)

States	2012-13	2013-14	2014-15	Annual Growth Rate (2010-15)	States	2012-13	2013-14	2014-15	Annual Growth Rate (2010-15)
Andhra Pradesh	39645	42170	44831	4.45	Maharashtra	65095	69097	72200	5.17
Bihar	14356	15506	16801	8.58	Odisha	25163	24929	26531	2.21
Chhattisgarh	28087	28373	29047	2.69	Punjab	47854	49529	51403	3.49
Gujarat	59157	63168	-	5.38	Rajasthan	30839	31836	33186	4.58
Haryana	64052	67260	71493	5.25	Tamil Nadu	58360	62361	66635	5.41
Jharkhand	27010	28882	30950	6.34	Uttar Pradesh	18635	19233	20057	3.57
Karnataka	43266	46012	48907	4.82	West Bengal	34177	36293	38624	5.55
Kerala	55643	58961	-	5.53					
Madhya Pradesh	24867	26853	29218	7.65	All India	38856	39904	41398	3.21

Source : Central Statistical Organisation; Government of India

It is historically observed that, with economic growth, the structure of any economy undergoes changes. This is primarily because, with increase in income, the pattern of demand changes from primary sector products to secondary sector products and services from the tertiary sectors. Such changes for the Bihar have been presented in Table 1.4. Two columns of the table present the average sectoral output shares for the triennium (2004-05 to 2006-07) and (2012-13 to 2014-15). The average shares of three major sectors in the first trienniums are — 30.2 percent for primary, 14.8 percent for secondary, and 55.0 percent for tertiary sector. In the second triennium, the share of primary sector has come down to 20.5 percent. Because of the tremendous growth of the economy, the share of secondary sector rose to 18.4 percent and that of tertiary sector to 61.2 percent.

Table 1.4 : Sectoral Composition of GSDP at Constant (2004-05) Prices

Sl. No.	Sector		2004-05 to 2006-07	2012-13 to 2014-15
1	Agriculture/Animal Husbandry		25.5	18.1
2	Forestry / Logging		3.3	1.3
3	Fishing		1.4	1.1
4	Mining/Quarrying		0.1	0.1
Sub-Total (Primary)			30.2	20.5
5	Manufacturing		5.3	4.3
	5.1	Registered	0.9	1.5
	5.2	Un-registered	4.4	2.8
6	Construction		8.0	12.8
7	Electricity / Water Supply / Gas		1.5	1.2
Sub-Total (Secondary)			14.8	18.4
8	Transport / Storage / Communication		6.4	8.7
	8.1	Railways	2.0	1.4
	8.2	Other Transport	2.6	2.9
	8.3	Storage	0.1	0.1
	8.4	Communication	1.7	4.4
9	Trade / Hotel / Restaurant		20.2	24.2
10	Banking / Insurance		3.7	6.2
11	Real Estate/ Ownership of Dwelling/Business Services		5.5	5.3
12	Public Administration		6.4	5.3
13	Other Services		12.9	11.4
Sub-Total (Tertiary)			55.0	61.2
Total GSDP			100.0	100.0

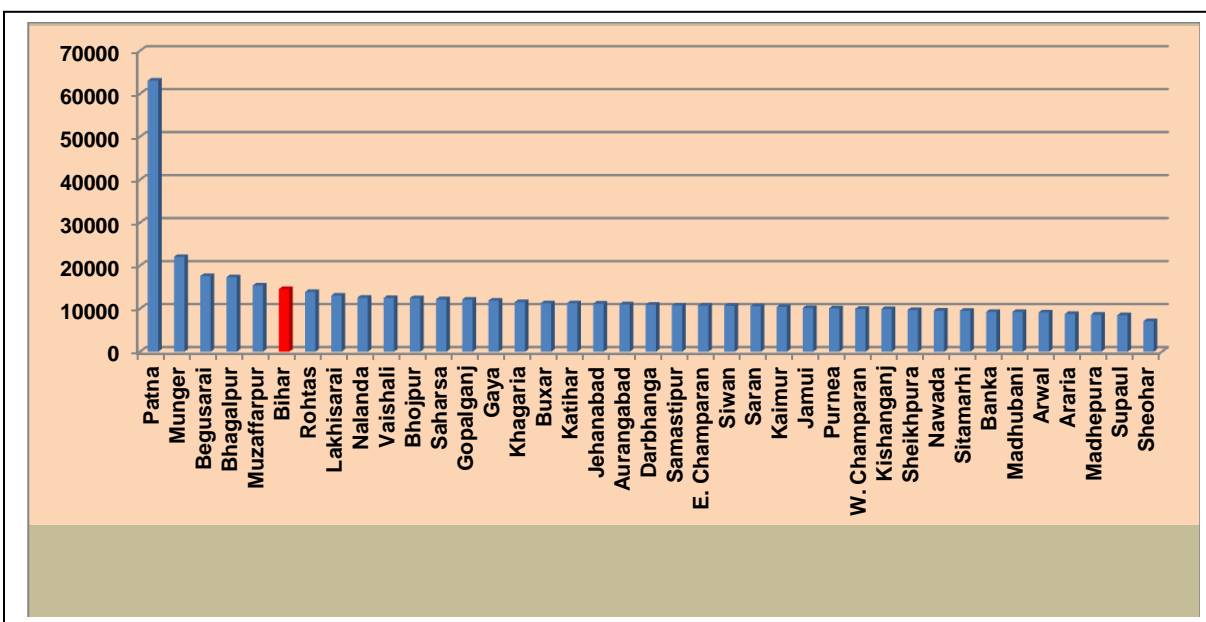
Within the major sectors, the shares of some sub-sectors have shown substantial change over the period. In the primary sector, Agriculture and Animal Husbandry showed substantial decline in its share. Within the secondary sector, it is Construction whose share has increased substantially from 8.0 percent to 12.8 percent. Within the tertiary sector, the sub-sectors which recorded higher growth rate and propelled its share to increase was Communication, Banking and Insurance, Trade, Hotel and Restaurants. The Public Administration and other services experienced a drop in their shares in GSDP.

1.3 Regional Disparity

As there exists disparity in per capita income across the states of India, there also exists similar disparity among the districts of Bihar. This is recorded by the district-wise data on Per Capita GDDP (Gross District Domestic Product) in 2011-12, as shown in Table A 1.8 (Appendix). In 2011-12, Patna, Munger and Begusarai turn out to be the most prosperous districts of the state. The poorest districts according to the data are — Madhepura, Supaul and Sheohar. If one leaves out Patna (the capital of the state), the per capita income of Munger is around 3 times that of Sheohar, the poorest district.

Apart from a measure of GDDP, consumption patterns of Petrol, Diesel and Cooking Gas also throw light on the economic disparity among the districts. In Table A 1.9 (Appendix), data relating to the consumption of various petroleum products in different districts is presented for 2013-14 and 2014-15. The table also presents the average consumption levels for those two years, the shares of districts in total consumption, and their shares of population. If the share of consumption happens to be higher than that of population share, the district is identified as relatively prosperous. Based on this method, 3 most prosperous and most backward districts have been identified, and their names have been presented in Table 1.5. Patna happens to be the most prosperous district on all three indicators. For Patna, compared to the population share of 5.6 percent, the consumption shares are — Petrol (14.6), Diesel (10.2 percent) and Cooking Gas (16.3 percent). As revealed by the data, for Petrol, Patna is followed by Muzaffarpur and Vaishali. In case of Diesel, Patna is followed by Begusarai and Muzaffarpur. In case of Cooking Gas, Patna is followed by Muzaffarpur and Vaishali.

Chart 1.1 : District-wise Per Capita Income in Bihar (2011-12)



In terms of these indicators, the most disadvantaged districts are Sheohar, Supaul, Madhepura, Arwal, Sitamarhi, Banka, Purnea and Katihar.

Table 1.5 : Relatively Prosperous and Backward Districts of Bihar

Criteria	Top 3 districts	Bottom 3 districts
GDDP	Patna, Munger, Begusarai	Sheohar, Supaul, Madhepura
Petrol	Patna, Muzaffarpur, Vaishali	Sitamarhi, Banka, Nawada
Diesel	Patna, Begusarai, Muzaffarpur	Madhubani, Sitamarhi, Darbhanga
LPG	Patna, Muzaffarpur, Vaishali	Araria, Katihar, Purnea
Small Savings	Patna, Bhojpurj, Nalanda	East Champaran, Purnea, Araria

The deposits in small savings kept in post offices and Public Provident Fund across the districts can also be considered as another index of relative prosperity of the districts. The data related to such deposits are given in Table A 1.10 (Appendix). In the table, the average for these deposits for the years 2013-14 and 2014-15 are presented, along with percentage share for each districts in total savings. A higher percentage share of each districts *vis-à-vis* its population share indicates the prosperity of the district. The relatively prosperous districts on this count are — Patna, Saran and Bhojpur (Table 1.5). At the other end, the backward districts as per the above indicator are — West Champaran, Sitamarhi and Araria.

1.4 Wholesale and Consumer Price Indices

The estimates of wholesale and consumer prices indices indicate the trend of price movement over time. In India, the Wholesale Price Index (WPI) is available for the country as a whole. The Consumer Price Index (CPI), however, is available separately for Industrial Workers, Agricultural Labours and Rural Labourers, for country as a whole as well as for different states. These index numbers have separate base years — 2004-05 for WPI, 2000-01 for CPI for Industrial Workers and 1986-87 for Agricultural Labourers and Rural Labourers. In Table 1.6, the data regarding all the indices have been presented.

From Table 1.6, we can visualize that the rise in prices for rural labourers have been comparatively slower in Bihar than in for India as a whole. For agricultural labourers, the picture remains the same. Between 2006-07 and November 15, 2015, the index for agricultural labourers rose from 372 to 853 (a rise of 481 points) for the entire country; whereas for Bihar, the index rose from 376 to 746 (a rise of 370 points) during the same reference period. In case of Industrial workers, the price rise has been nearly the same for Bihar and India. Between 2006-07 and November, 2015, the index rose by 162 points for Bihar; while for India as a whole, the rise was by 147 points. By November, 2015, the latest month for which the data have been reported, the CPI for Industrial workers stood at 287 for Bihar and 270 for India.

Table 1.6 : Wholesale and Consumer Price Indices in Bihar and India

Year	Wholesale Price Index (Base 2004-05=100)	Industrial Workers (Base 2000-2001=100)		Agricultural Labourers (Base 1986-87=100)		Rural Labourers (Base 1986-87=100)	
		India	Bihar	India	Bihar	India	Bihar
	2006-07	111.4	125	123	376	372	376
2007-08	116.6	134	131	403	402	403	391
2008-09	126.0	144	142	437	439	437	414
2009-10	130.8	162	157	488	494	488	461
2010-11	143.8	182	175	524	552	524	541
2011-12	156.1	199	195	545	622	547	623
2012-13	167.6	215	215	600	672	603	673
2013-14	177.6	238	236	671	750	675	751
2014-15	181.2	258	251	721	800	725	802
Apr-15	176.4	269	256	706	805	712	809
May-15	178.0	269	258	704	811	710	816
Jun-15	179.1	271	261	704	820	711	824
Jul-15	177.6	273	263	713	822	719	827
Aug-15	176.5	278	264	721	832	728	836
Sep-15	176.5	281	266	731	839	737	843
Oct-15	176.7	285	269	739	849	745	853
Nov-15	177.6	287	270	746	853	752	857

Source: RBI and Labour Bureau, Government of India.

APPENDIX

Table A 1.1 : District-wise Demographic Profile of Bihar (2001 and 2011)

District	Population (lakh)		Sex Ratio (Overall)		Sex Ratio (Child)		Density		Urbanisation		Decadal Growth
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2011
Patna	47.2	58.4	873	897	923	909	1471	1803	41.6	43.1	23.7
Nalanda	23.7	28.8	914	922	941	931	1006	1220	14.9	15.9	21.4
Bhojpur	22.4	27.3	901	907	940	918	903	1136	13.9	14.3	21.6
Buxar	14.0	17.1	900	922	929	934	864	1003	9.2	9.6	21.7
Rohtas	24.5	29.6	910	918	952	931	636	763	13.3	14.5	20.8
Kaimur	12.9	16.3	901	920	942	942	382	488	3.3	4.0	26.2
Gaya	34.7	43.9	938	937	968	960	699	880	13.7	13.2	26.4
Jehanabad	9.2	11.3	927	922	915	922	963	1206	12.1	12.0	21.7
Arwal	5.9	7.0	931	928	917	940	--	1099	0.0	7.4	18.9
Nawada	18.1	22.2	946	939	978	945	726	889	7.7	9.7	22.6
Aurangabad	20.1	25.4	934	926	941	944	607	760	8.4	9.3	26.2
Saran	32.5	39.5	966	954	949	926	1231	1493	9.2	8.9	21.6
Siwan	27.1	33.3	1031	988	933	940	1221	1495	5.5	5.5	22.7
Gopalganj	21.5	25.6	1001	1021	964	954	1057	1258	6.1	6.4	19.0
W. Champaran	30.4	39.4	901	909	952	953	582	750	10.2	10.0	29.3
E. Champaran	39.4	51.0	896	902	935	933	991	1281	6.4	7.9	29.4
Muzaffarpur	37.5	48.0	921	900	927	915	1180	1506	9.3	9.9	28.1
Sitamarhi	26.8	34.2	892	899	924	930	1214	1491	5.7	5.6	27.6
Sheohar	5.2	6.6	883	893	911	929	1161	1882	4.1	4.3	27.2
Vaishali	27.2	35.0	919	895	939	904	1332	1717	6.8	6.7	28.6
Darbhanga	33.0	39.4	914	911	913	931	1442	1721	8.1	9.7	19.5
Madhubani	35.8	44.9	942	926	941	936	1020	1279	3.5	3.6	25.5
Samastipur	33.9	42.6	928	911	937	923	1175	1465	3.7	3.5	25.5
Begusarai	23.5	29.7	911	895	947	919	1222	1540	4.6	19.2	26.4
Munger	11.4	13.7	872	876	916	922	800	958	27.9	27.8	20.2
Sheikhpura	5.3	6.4	920	930	964	940	762	922	15.6	17.1	21.1
Lakhisarai	8.0	10.0	919	902	954	920	652	815	14.7	14.3	24.8
Jamui	14.0	17.6	919	922	965	956	451	567	7.4	8.3	25.9
Khagaria	12.8	16.7	885	886	931	926	859	1115	5.9	5.2	30.2
Bhagalpur	24.2	30.4	875	880	967	938	946	1180	18.7	19.8	25.4
Banka	16.1	20.3	909	907	964	943	533	672	3.5	3.5	26.5
Saharsa	15.1	19.0	911	906	910	933	885	1125	8.3	8.2	26.0
Supaul	17.3	22.3	921	929	927	944	724	919	5.1	4.7	28.7
Madhepura	15.3	20.0	916	911	930	930	853	1116	4.5	4.4	31.1
Purnea	25.4	32.6	916	921	968	954	787	1014	8.7	10.5	28.3
Kishanganj	13.0	16.9	934	950	946	971	687	898	10.0	9.5	30.4
Araria	21.6	28.1	914	921	963	957	751	992	6.2	6.0	30.2
Katihar	23.9	30.7	919	919	966	961	782	1004	9.2	8.9	28.4
Bihar	830.0	1041.0	919	918	942	935	880	1106	10.5	11.3	25.4

Source : Census of India, 2001 and 2011

Table A 1.2 : Gross State Domestic Product (GSDP) and Net State Domestic Product (NSDP) of Bihar At Factor Cost

Year	GSDP (Rs. crore)		NSDP (Rs. crore)		Per Capita GSDP (Rs.)	
	At current prices	At constant (2004-05) prices	At current prices	At constant (2004-05) prices	At current prices	At constant (2004-05) prices
2004-05	77781	77781	70167	70167	8773	8773
2005-06	82490	76466	74144	68419	9149	8481
2006-07	100737	88840	91331	80260	10994	9695
2007-08	113680	93774	102853	84415	12215	10076
2008-09	142279	107412	129690	97284	15060	11369
2009-10	162923	113158	148151	101938	16998	11806
2010-11	203555	130171	185745	117503	20944	13393
2011-12	243269	143560	222442	129521	24696	14574
2012-13	293616	158909	268902	143250	29425	15925
2013-14	343663	173409	315225	156671	34014	17163
2014-15	402283	189789	369576	171802	39341	18560
CAGR	18.9	10.0	19.1	10.1	17.2	8.5

Source : Directorate of Economics and Statistics, GOB

Note: Data of 2013-14 Provisional Estimates and 2014-15 Advance Estimates

Table A 1.3 : Gross State Domestic Product (GSDP) of Bihar at Factor Cost (Current Prices)

(Rs. crore)

No.	Sector		2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
1	Agriculture/Animal Husbandry		47415	57981	71403	72537	81044	13.8
2	Forestry / Logging		3499	3753	3958	4189	4424	6.0
3	Fishing		2366	3244	3953	5171	6764	29.3
4	Mining/Quarrying		120	116	117	131	131	2.9
Sub-Total (Primary)			53400	65094	79432	82027	92362	14.2
5	Manufacturing		11046	10818	11751	12750	13808	6.3
	5.1	Registered	4718	4092	4469	4762	5045	2.9
	5.2	Un-registered	6328	6726	7282	7988	8763	8.6
6	Construction		27590	32049	34811	43325	51757	16.9
7	Electricity / Water Supply / Gas		1661	2539	2917	3452	3976	22.8
Sub-Total (Secondary)			40297	45405	49480	59526	69542	14.6
8	Transport / Storage / Communication		10324	11711	14346	17218	20861	19.6
	8.1	Railways	2807	2844	3220	3645	4126	10.7
	8.2	Other Transport	5357	6503	8416	10466	13172	25.5
	8.3	Storage	158	194	229	270	318	18.8
	8.4	Communication	2001	2169	2481	2838	3245	13.2
9	Trade / Hotel / Restaurant		46278	58163	74650	89767	108005	23.7
10	Banking / Insurance		6363	7672	9434	11600	14264	22.5
11	Real Estate/ Ownership of Dwelling/Business Services		12440	14922	17562	20778	24688	18.6
12	Public Administration		12040	13598	15302	19844	21758	16.9
13	Other Services		22413	26704	33410	42902	50804	23.5
Sub-Total (Tertiary)			109858	132770	164704	202109	240379	22.0
Total GSDP			203555	243269	293616	343663	402283	18.6
Per Capita GSDP			20944	24696	29425	34014	39341	17.1

Source : Directorate of Economics and Statistics, GOB

Note : Data of 2013-14 is Provisional Estimates and 2014-15 Advance Estimates

Table A 1.4 : Gross State Domestic Product (GSDP) of Bihar at Factor Cost (2004-05 Prices)

(Rs. crore)

No.	Sector		2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
1	Agriculture/Animal Husbandry		26365	29931	32518	30166	31567	3.7
2	Forestry / Logging		2414	2365	2320	2277	2237	-1.9
3	Fishing		1223	1458	1694	1830	1977	12.6
4	Mining/Quarrying		93	104	92	103	103	1.9
Sub-Total (Primary)			30095	33859	36625	34376	35884	3.7
5	Manufacturing		7698	6990	7117	7376	7775	0.7
	5.1	Registered	3150	2501	2534	2554	2700	-2.8
	5.2	Un-registered	4548	4489	4583	4822	5075	3.0
6	Construction		18156	19573	19596	22551	24909	8.0
7	Electricity / Water Supply / Gas		1706	1849	1981	2173	2336	8.2
Sub-Total (Secondary)			27560	28412	28694	32100	35020	6.2
8	Transport / Storage / Communication		10512	11967	13493	15097	17032	12.7
	8.1	Railways	2340	2312	2331	2350	2369	0.4
	8.2	Other Transport	3270	3714	4373	4988	5796	15.5
	8.3	Storage	95	106	116	126	138	9.6
	8.4	Communication	4807	5835	6673	7632	8729	15.7
9	Trade / Hotel / Restaurant		27845	31804	37735	42028	46841	14.1
10	Banking / Insurance		6304	7316	8816	10624	12802	19.6
11	Real Estate/ Ownership of Dwelling/Business Services		6834	7517	8302	9208	10242	10.7
12	Public Administration		7492	7743	8100	9731	9884	8.1
13	Other Services		13530	14943	17145	20246	22083	13.7
Sub-Total (Tertiary)			72517	81290	93590	106933	118885	13.5
Total GSDP			130171	143560	158909	173409	189789	9.9
Per Capita GSDP			13393	14574	15925	17163	18560	8.5

Source : Directorate of Economics and Statistics, GOB

Note : Data of 2013-14 is Provisional Estimates and 2014-15 Advance Estimates

Table A 1.5 : Net State Domestic Product (NSDP) of Bihar at Factor Cost (Current Prices)

(Rs. crore)

No.	Sector		2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
1	Agriculture/Animal Husbandry		42365	52480	64764	65792	73508	14.2
2	Forestry / Logging		3457	3708	3913	4141	4373	6.0
3	Fishing		2018	2730	3350	4382	5732	29.2
4	Mining/Quarrying		97	93	91	101	101	1.7
Sub-Total (Primary)			47937	59012	72118	74416	83714	14.4
5	Manufacturing		9506	8971	9528	10351	11228	4.9
	5.1	Registered	3998	3150	3195	3405	3607	-1.3
	5.2	Un-registered	5508	5821	6332	6946	7621	8.6
6	Construction		26148	30366	32799	40820	48765	16.7
7	Electricity / Water Supply / Gas		923	1262	1462	1730	1993	20.4
Sub-Total (Secondary)			36577	40599	43789	52901	61986	14.1
8	Transport / Storage / Communication		8895	10048	12526	15122	18439	20.5
	8.1	Railways	2012	2036	2320	2626	2973	10.9
	8.2	Other Transport	5165	6228	8164	10152	12778	25.9
	8.3	Storage	153	188	224	263	310	19.0
	8.4	Communication	1565	1597	1819	2080	2379	11.7
9	Trade / Hotel / Restaurant		45655	57421	73604	88509	106491	23.7
10	Banking / Insurance		6271	7568	9305	11442	14069	22.5
11	Real Estate/ Ownership of Dwelling/Business Services		8376	10349	12268	14514	17245	19.5
12	Public Administration		10114	11417	12580	16314	17887	16.2
13	Other Services		21920	26028	32713	42007	49744	23.6
Sub-Total (Tertiary)			101231	122831	152996	187907	223876	22.3
Total NSDP			185745	222442	268902	315225	369576	18.8
Per Capita NSDP			19111	22582	26948	31199	36143	17.3

Source : Directorate of Economics and Statistics, GOB

Note : Data of 2013-14 is Provisional Estimates and 2014-15 Advance Estimates

Table A 1.6 : Net State Domestic Product (NSDP) of Bihar at Factor Cost (2004-05 Prices)

(Rs. crore)

No.	Sector		2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
1	Agriculture/Animal Husbandry		23045	26533	28726	26648	27885	3.9
2	Forestry / Logging		2387	2339	2296	2253	2213	-1.9
3	Fishing		957	1096	1294	1398	1510	12.3
4	Mining/Quarrying		76	88	74	83	83	1.3
Sub-Total (Primary)			26465	30055	32390	30382	31692	3.8
5	Manufacturing		6471	5577	5474	5689	5995	-1.3
	5.1	Registered	2567	1768	1581	1593	1684	-9.0
	5.2	Un-registered	3904	3809	3893	4096	4311	2.7
6	Construction		17005	18283	18114	20846	23025	7.7
7	Electricity / Water Supply / Gas		1155	942	994	1090	1172	1.8
Sub-Total (Secondary)			24630	24803	24582	27625	30193	5.3
8	Transport / Storage / Communication		9416	10744	12212	13717	15535	13.3
	8.1	Railways	1728	1727	1708	1722	1736	0.1
	8.2	Other Transport	3113	3497	4182	4771	5543	15.8
	8.3	Storage	92	102	112	123	134	9.8
	8.4	Communication	4484	5418	6209	7102	8122	15.7
9	Trade / Hotel / Restaurant		27390	31294	37060	41276	46003	14.0
10	Banking / Insurance		6231	7236	8721	10510	12665	19.6
11	Real Estate/ Ownership of Dwelling/Business Services		4079	4633	5187	5753	6399	11.8
12	Public Administration		6140	6303	6434	7730	7851	7.2
13	Other Services		13153	14453	16664	19678	21464	13.7
Sub-Total (Tertiary)			66408	74664	86278	98663	109918	13.7
Total NSDP			117503	129521	143250	156671	171802	10.0
Per Capita NSDP			12090	13149	14356	15506	16801	8.6

Source : Directorate of Economics and Statistics, GOB

Note : Data of 2013-14 is Provisional Estimates and 2014-15 Advance Estimates

Table A 1.7 : Yearly Growth Rate of GSDP by Sector (2004-05 Prices)

No.	Sector		2010-11	2011-12	2012-13	2013-14	2014-15
1	Agriculture/Animal Husbandry		19.91	13.53	8.64	-7.23	4.64
2	Forestry / Logging		-1.96	-2.03	-1.90	-1.86	-1.77
3	Fishing		-2.85	19.23	16.19	8.04	8.04
4	Mining/Quarrying		1.17	11.83	-11.54	11.96	0.00
	Sub-Total (Primary)		16.65	12.51	8.17	-6.14	4.39
5	Manufacturing		22.77	-9.20	1.83	3.63	5.41
	5.1	Registered	63.15	-20.62	1.32	0.78	5.73
	5.2	Un-registered	4.81	-1.30	2.09	5.21	5.24
6	Construction		34.38	7.81	0.12	15.08	10.45
7	Electricity / Water Supply / Gas		2.99	8.35	7.14	9.69	7.52
	Sub-Total (Secondary)		28.56	3.09	0.99	11.87	9.10
8	Transport / Storage / Communication		20.30	13.84	12.75	11.89	12.82
	8.1	Railways	6.33	-1.20	0.82	0.82	0.82
	8.2	Other Transport	14.46	13.58	17.74	14.07	16.20
	8.3	Storage	9.33	11.58	9.43	8.62	9.52
	8.4	Communication	33.75	21.38	14.37	14.37	14.37
9	Trade / Hotel / Restaurant		9.59	14.22	18.65	11.38	11.45
10	Banking / Insurance		19.72	16.05	20.51	20.51	20.51
11	Real Estate/ Ownership of Dwelling/Business Services		7.75	9.99	10.44	10.92	11.23
12	Public Administration		9.03	3.35	4.60	20.14	1.58
13	Other Services		1.77	10.45	14.73	18.09	9.08
	Sub-Total (Tertiary)		10.01	12.10	15.13	14.26	11.18
	Total GSDP		15.04	10.29	10.69	9.12	9.45
	Per Capita GSDP		13.45	8.82	9.27	7.77	8.14

Source : Directorate of Economics and Statistics, GOB

Note : Data of 2013-14 is Provisional Estimates and 2014-15 Advance Estimates

Table A 1.8 : District-wise Per Capita Gross District Domestic Product at 2004-05 Prices

(Rupees)

District	2007-08	2008-09	2009-10	2010-11	2011-12
Patna	43448 (1)	48719 (1)	53428 (1)	57823 (1)	63063 (1)
Nalanda	8219 (14)	9152 (11)	9787 (10)	10971 (11)	12561 (8)
Bhojpur	8775 (8)	10146 (8)	10134 (8)	11537 (9)	12459 (10)
Buxar	8368 (12)	8992 (15)	8812 (18)	9732 (20)	11289 (15)
Rohtas	9544 (7)	10950 (6)	10908 (7)	12265 (6)	13909 (6)
Kaimur	7564 (21)	8441 (22)	7785 (27)	9539 (22)	10412 (24)
Gaya	8660 (9)	9135 (12)	9519 (15)	10504 (18)	11897 (13)
Jehanabad	7490 (24)	8588 (19)	8478 (22)	9322 (24)	11182 (17)
Arwal	6475 (33)	7028 (35)	7283 (35)	8133 (35)	9125 (34)
Nawada	6739 (31)	7409 (32)	7602 (30)	8437 (31)	9560 (30)
Aurangabad	7575 (20)	7922 (29)	8189 (23)	9293 (25)	11012 (18)
Saran	7522 (23)	7938 (28)	8559 (20)	9576 (21)	10615 (23)
Siwan	7377 (26)	8864 (16)	8042 (26)	9192 (26)	10685 (22)
Gopalganj	7646 (17)	8059 (26)	8543 (21)	10386 (19)	12129 (12)
W. Champaran	8476 (11)	9484 (10)	9706 (11)	10577 (17)	9971 (27)
E. Champaran	6223 (35)	8457 (21)	7571 (31)	8790 (29)	10735 (21)
Muzaffarpur	9814 (5)	11602 (5)	12159 (5)	14082 (5)	15402 (5)
Sitamarhi	6180 (37)	7301 (33)	7456 (32)	8274 (33)	9538 (31)
Sheohar	5541 (38)	6128 (38)	5438 (38)	6208 (38)	7092 (38)
Vaishali	7728 (16)	9604 (9)	9937 (9)	11591 (8)	12490 (9)
Darbhanga	7614 (18)	8516 (20)	9036 (16)	10798 (12)	10932 (19)
Madhubani	6216 (36)	7643 (30)	7455 (33)	10607 (15)	9241 (33)
Samastipur	7559 (22)	8729 (18)	8843 (17)	10705 (14)	10762 (20)
Begusarai	12419 (3)	15001 (3)	14235 (4)	18433 (3)	17587 (3)
Munger	15791 (2)	17034 (2)	18554 (2)	21011 (2)	22051 (2)
Sheikhpura	7209 (28)	8105 (25)	7775 (28)	8377 (32)	9687 (29)
Lakhisarai	9549 (6)	10209 (7)	10950 (6)	11870 (7)	13073 (7)
Jamui	7584 (19)	8028 (27)	8186 (24)	8944 (28)	10166 (25)
Khagaria	8517 (10)	9111 (13)	9642 (12)	10603 (16)	11515 (14)
Bhagalpur	12097 (4)	13351 (4)	14253 (3)	15870 (4)	17324 (4)
Banka	6882 (30)	7596 (31)	7724 (29)	7756 (37)	9269 (32)
Saharsa	8164 (15)	8744 (17)	9591 (14)	11268 (10)	12197 (11)
Supaul	6382 (34)	6790 (36)	7043 (36)	8193 (34)	8492 (37)
Madhepura	6920 (29)	6602 (37)	6979 (37)	8096 (36)	8609 (36)
Purnea	7419 (25)	8228 (23)	8743 (19)	9357 (23)	10099 (26)
Kishanganj	7312 (27)	8120 (24)	8085 (25)	9126 (27)	9928 (28)
Araria	6635 (32)	7251 (34)	7376 (34)	8534 (30)	8776 (35)
Katihar	8267 (13)	9060 (14)	9594 (13)	10721 (13)	11278 (16)
Bihar	10076	11369	11806	13393	14574

Source : Directorate of Economics and Statistics, GOB

Note : Figures in parentheses denotes rank

Table A 1.9 : District-wise Consumption of Petroleum Products

(Figures in MT)

District	Share of population	Petrol			Diesel			LPG		
		2013-14	2014-15	Average and Share	2013-14	2014-15	Average and Share	2013-14	2014-15	Average and Share
Patna	5.6	55742	61940	58841 (14.6)	207048	200148	203598 (10.2)	92815	105255	99035 (16.3)
Nalanda	2.8	7188	8457	7823 (1.9)	48897	43234	46066 (2.3)	16090	18905	17498 (2.9)
Bhojpur	2.6	8427	9946	9187 (2.3)	49184	50153	49669 (2.5)	18426	21976	20201 (3.3)
Buxar	1.6	5905	6859	6382 (1.6)	35618	35911	35765 (1.8)	8007	10671	9339 (1.5)
Rohtas	2.9	11165	12898	12032 (3)	75852	75672	75762 (3.8)	19283	19423	19353 (3.2)
Kaimur	1.6	4681	5572	5127 (1.3)	33179	31019	32099 (1.6)	2939	6465	4702 (0.8)
Gaya	4.2	13779	15681	14730 (3.6)	79568	69580	74574 (3.7)	18905	23890	21398 (3.5)
Jehanabad	1.1	2580	2922	2751 (0.7)	18200	14506	16353 (0.8)	8982	8241	8612 (1.4)
Arwal	0.7	1590	1872	1731 (0.4)	9866	10110	9988 (0.5)	1048	3413	2231 (0.4)
Nawada	2.1	4158	5011	4585 (1.1)	31883	29218	30551 (1.5)	10321	12424	11373 (1.9)
Aurangabad	2.4	7237	8421	7829 (1.9)	51635	54161	52898 (2.6)	10085	12066	11076 (1.8)
Saran	3.8	14725	16787	15756 (3.9)	88923	89206	89065 (4.4)	23380	26710	25045 (4.1)
Siwan	3.2	15271	17584	16428 (4.1)	52420	52181	52301 (2.6)	19155	24116	21636 (3.6)
Gopalganj	2.5	12166	14109	13138 (3.3)	41644	42814	42229 (2.1)	16015	20669	18342 (3)
W Champaran	3.8	12780	14919	13850 (3.4)	63343	63018	63181 (3.2)	16500	20693	18597 (3.1)
E Champaran	4.9	18521	21609	20065 (5)	108369	103930	106150 (5.3)	22654	28994	25824 (4.2)
Muzaffarpur	4.6	23416	26807	25112 (6.2)	121982	123040	122511 (6.1)	33151	39593	36372 (6)
Sitamarhi	3.3	8321	9845	9083 (2.2)	43676	40441	42059 (2.1)	14109	18374	16242 (2.7)
Sheohar	0.6	1157	1325	1241 (0.3)	4832	4554	4693 (0.2)	2804	3179	2992 (0.5)
Vaishali	3.4	16144	18811	17478 (4.3)	73821	74427	74124 (3.7)	23913	29731	26822 (4.4)
Darbhanga	3.8	12693	14499	13596 (3.4)	54356	53738	54047 (2.7)	22658	26905	24782 (4.1)
Madhubani	4.3	12940	15202	14071 (3.5)	47210	45586	46398 (2.3)	15904	20704	18304 (3)
Samastipur	4.1	13162	15700	14431 (3.6)	76433	73270	74852 (3.7)	16341	20473	18407 (3)
Begusarai	2.8	9721	11049	10385 (2.6)	103781	102133	102957 (5.1)	16572	20517	18545 (3)
Munger	1.3	4328	4602	4465 (1.1)	30209	28876	29543 (1.5)	10907	12340	11624 (1.9)
Sheikhpura	0.6	1539	1757	1648 (0.4)	12668	11320	11994 (0.6)	2036	2870	2453 (0.4)
Lakhisarai	1	1793	2186	1990 (0.5)	18817	18021	18419 (0.9)	3810	5002	4406 (0.7)
Jamui	1.7	3828	4174	4001 (1)	19902	19060	19481 (1)	4944	5593	5269 (0.9)
Khagaria	1.6	3439	4163	3801 (0.9)	29547	30557	30052 (1.5)	4590	6184	5387 (0.9)
Bhagalpur	2.9	10661	12056	11359 (2.8)	69262	63628	66445 (3.3)	18765	21467	20116 (3.3)
Banka	2	3884	4292	4088 (1)	21072	20203	20638 (1)	5429	6510	5970 (1)
Saharsa	1.8	5053	6136	5595 (1.4)	33306	34136	33721 (1.7)	9071	8748	8910 (1.5)
Supaul	2.1	5848	6934	6391 (1.6)	27853	27673	27763 (1.4)	3839	6675	5257 (0.9)
Madhepura	1.9	5928	6880	6404 (1.6)	30288	30377	30333 (1.5)	6771	8113	7442 (1.2)
Purnea	3.2	11744	13844	12794 (3.2)	72290	75481	73886 (3.7)	16151	13231	14691 (2.4)
Kishanganj	1.6	6004	6747	6376 (1.6)	19486	20501	19994 (1)	1211	5033	3122 (0.5)
Araria	2.7	8955	10766	9861 (2.4)	47990	51283	49637 (2.5)	5548	8922	7235 (1.2)
Katihar	3	8668	9956	9312 (2.3)	68878	67434	68156 (3.4)	9837	11809	10823 (1.8)
Total	100	375141	432319	403730 (100)	2023288	1980597	2001943 (100)	552966	665884	609425 (100)

Source : Indian Oil Corporation

Note : Figures in parentheses denotes share from total

Table A 1.10 : District-wise Small Savings in Post Offices and Public Provident Fund

(Rs. crore)

District	Share of population	2012-13		2013-14		2014-15		Trienium Average of Achievements (2012-15)	Share of Achievements (%)
		Target	Achive-ment	Target	Achive-ment	Target	Achive-ment		
Patna	5.6	144	65	96	210	175	301	192	12.2
Nalanda	2.8	98	67	66	126	115	152	115	7.3
Bhojpur	2.6	78	98	73	156	140	153	136	8.6
Buxar	1.6	34	31	20	37	30	51	40	2.5
Rohtas	2.9	47	17	23	32	34	47	32	2.0
Kaimur	1.6	20	8	10	15	15	20	14	0.9
Total	17.1	421	286	288	576	509	725	529	33.6
Gaya	4.2	64	23	30	29	25	41	31	2.0
Jehanabad	1.1	15	12	10	18	15	17	16	1.0
Arwal	0.7	11	8	8	12	10	11	10	0.7
Nawada	2.1	72	65	48	70	67	93	76	4.8
Aurangabad	2.4	44	7	15	12	10	19	13	0.8
Total	10.5	206	115	111	141	127	181	146	9.3
Saran	3.8	129	117	84	147	140	170	145	9.2
Siwan	3.2	74	38	50	59	50	71	56	3.6
Gopalganj	2.5	45	45	40	69	62	76	63	4.0
Total	9.5	248	200	174	275	252	317	264	16.8
E. Champaran	3.8	30	29	23	30	25	39	33	2.1
W. Champaran	4.9	44	14	20	27	25	27	23	1.4
Muzaffarpur	4.6	72	36	47	54	48	65	52	3.3
Sitamarhi	3.3	20	8	8	15	12	19	14	0.9
Sheohar	0.6	4	2	2	4	3	5	4	0.2
Vaishali	3.4	57	58	40	78	65	72	69	4.4
Total	20.6	227	147	140	208	178	227	194	12.3
Darbhangha	3.8	59	42	39	62	58	65	56	3.6
Madhubai	4.3	38	17	26	42	39	52	37	2.4
Samastipur	4.1	34	32	23	58	50	47	46	2.9
Total	12.2	131	91	88	162	147	165	139	8.9
Begusarai	2.8	40	31	26	39	35	40	37	2.3
Munger	1.3	29	18	18	31	27	26	25	1.6
Sheikhpura	0.6	8	5	6	10	9	7	7	0.5
Lakhisarai	1.0	9	6	6	10	9	7	8	0.5
Jamui	1.7	14	11	10	22	15	21	18	1.1
Khagaria	1.6	8	8	6	9	7	9	9	0.5
Total	9.0	108	79	72	121	102	110	103	6.6
Bhagalpur	2.9	42	63	49	75	70	67	68	4.3
Banka	2.0	5	3	3	10	5	9	7	0.5
Total	4.9	47	65	52	85	75	76	75	4.8
Saharsa	1.8	22	20	14	29	23	36	28	1.8
Supaul	2.1	16	15	11	21	17	27	21	1.3
Madhepura	1.9	16	15	11	22	17	27	21	1.4
Total	5.8	54	50	36	72	57	89	70	4.5
Purnea	3.2	22	10	16	23	20	16	16	1.0
Kishanganj	1.6	6	5	4	8	6	7	7	0.4
Araria	2.7	9	4	6	9	7	6	6	0.4
Katihar	3.0	21	18	13	27	20	23	23	1.4
Total	10.5	58	37	39	67	53	52	52	3.3
Grand Total	100.1	1500	1070	1000	1707	1500	1941	1573	100.0

Source : Department of Finance, GOB

CHAPTER II

STATE FINANCES

The fiscal year 2015-16 was marked by two important developments: first, the state elections which was won comprehensively by a coalition which comprised a political party which was already a part of the outgoing coalition as well as two new political parties and second, the submission of the Report of the Fourteenth Finance Commission which periodically alters the landscape of federal fiscal relations in the country. Parallely, with the winding up of the Planning Commission, and the Fourteenth Finance Commission recommendations for increased transfer to states (untied to specific plan schemes), coupled with the reduction in the number of Centrally Sponsored Schemes, the framework for federal financial relation is now poised for substantial change.

Development effort in an economically backward state like Bihar hinges greatly on the management of its finances through proper analysis and policy intervention. Such management generates future optimism by strengthening the government's capacity for policy implementation. Allocation of resources to different activities strictly according to economic and social priorities and monitoring the outcome of all public expenditure are essential functions of any government. In this direction, the state government has already made some significant progress by improving the quality of expenditure and increasing the revenue, including the revenues from its own sources. The capital outlay has continuously been increased for the much-needed investments in infrastructure. Delivery of public services and goods have significantly improved, and the economic growth rate in Bihar has surpassed the national growth rate and has been sustained during the last several years. Significant increases in social sector spending had led to improvement in the quality of life, as reflected by most socio-economic indicators. The poverty scenario has also been improving, especially in the rural areas.

2.1 Overview of Financial Position

The financial and fiscal performance of the state government have been analysed in the following sections, first by summarizing its receipts and expenditures (Table 2.1), and then by comparing the trends in eight major performance indicators relating to Bihar and other major Indian states (Table 2.2). The actual figures have been used for the period 2010-11 to 2014-15, taken from the Finance Accounts of the state, prepared by the Accountant General (A&E) of the state. For 2015-16, the budget estimates of the state government have been used. For other states, however, actual figures have been used only for 2013-14, while Revised Estimates (RE) and Budget Estimates (BE) have been used for 2014-15 and 2015-16 respectively. The finances of the state government have been later analysed with reference to — (i) Fiscal Performance, (ii) Deficit Management, (iii) Debt Management, (iv) Resource Management, (v) Expenditure Management, (vi) State Budget, and (vii) Performance of State Public Sector Undertakings.

The state government had passed the Bihar Fiscal Responsibility and Budget Management (FRBM) Act in February 2006, committing itself to : (a) eliminate the revenue deficit by 2008-09 and build up adequate revenue surpluses thereafter; (b) bring down the Gross Fiscal Deficit (GFD) to a level of less than 3 percent of GSDP by 2008-09; (c) raise non-tax revenue with due regard to cost and equity; and (d) lay down norms for prioritization of capital expenditure and pursue expenditure policies that would provide impetus for economic growth, poverty reduction and human development. These resolutions have largely been adhered to. However, capping the GFD at 3 percent of GSDP, as prescribed in the Act, has in general limited the scope to borrow more and invest in capital assets.

The revenue surplus of Bihar had slumped to its lowest level of Rs 2943 crore in 2009-10, but 2010-11 was a year of recovery, when the revenue surplus climbed to its hitherto highest level of Rs 6316 crore. However, 2011-12 had witnessed the beginning of the slowing down of national economy and, in that year, the revenue surplus again decreased to Rs 4820 crore, leading to a steep rise in the Gross Fiscal Deficit (GFD) by nearly Rs 2000 crore. The revenue surplus had since increased to Rs 6441 crore in 2013-14 before decreasing again to Rs 5848 crore in 2014-15. However, the fiscal deficit has increased continuously from Rs 3970 crore in 2010-11 to Rs 11,178 crore during this period due to substantial increases (Rs. 8954 crore) in capital investments. In spite of this, the GFD of the state government is still comfortably within the FRBM Act limit of 3 percent. In the budget estimates for 2015-16, it was projected to reach Rs 13,584 crore, or 2.9 percent of GFD, due to much higher capital investments, estimated to rise to an unprecedented high level of Rs 24,853 crore. The revenue surplus, estimated at Rs 11,981 crore during the current fiscal, will substantially finance the higher capital outlay.

The primary surplus of Rs 349 crore in 2010-11 was reversed in 2011-12, recording a primary deficit of Rs 1611 crore, and this deficit has since been rising continuously, reaching a high of Rs 5050 crore in 2014-15. It is projected to rise steeply to Rs 6364 crore, as per the budget estimates of 2015-16. While the revenue receipts increased by Rs 9499 crore during 2014-15 over the previous year to reach at Rs 78,418 crore, the revenue expenditure went up by Rs 10,093 crore to Rs 72,570 crore, 57 percent of it due to increases in the development expenditure (Rs 5703 crore).

The 14 percent growth in the revenue receipts witnessed during 2014-15 was less than nearly 16 percent growth seen during the preceding three years. The low growth in 2014-15 was mostly due to the stagnation in the growth in tax receipts which registered a growth of only 5 percent over the previous year (by Rs 2924 crore), compared to a growth of 14 percent seen in the previous year, and far less than the 19 percent growth in tax receipts registered during 2012-13. The growth in revenue receipts during 2014-15 was mainly due to the 52 percent increase in central grants from Rs 12,584 crore to Rs 19,146 crore during 2014-15. The central grants in fact will get reduced to Rs 18,171 crore in the current fiscal which is the first year of implementation of the Fourteenth Finance Commission recommendations. While Bihar's tax revenues will increase to Rs 81,623 crore as a result of the increased share of states in the divisible pool of central taxes arising from the recommendations of the Commission, Bihar will actually suffer a cut in its plan grants, a point that had repeatedly been stressed by the state government.

Table 2.1 : Receipts and Expenditure

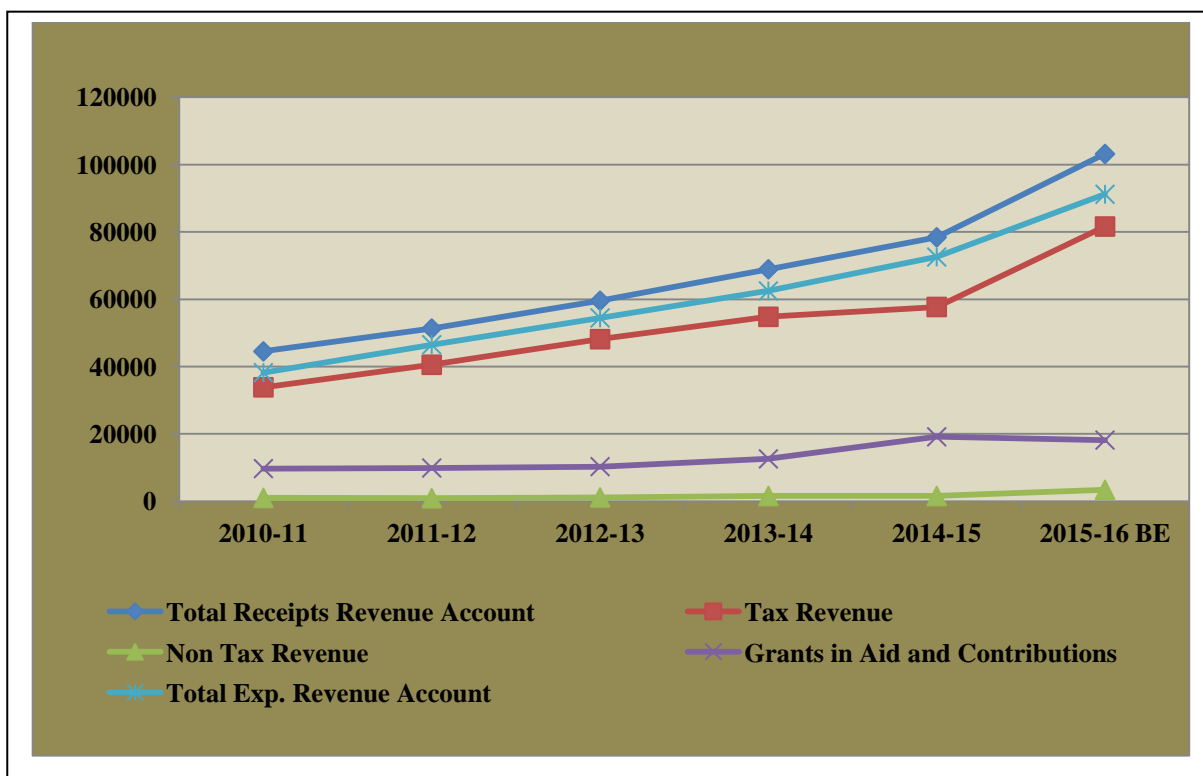
(Rs. crore)

Sl. No.	Item	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 BE
1	Total Receipts Revenue Account	44532	51320	59567	68919	78418	103189
a	Tax Revenue	33848	40547	48153	54790	57713	81623
b	Non Tax Revenue	986	890	1135	1545	1558	3396
c	Grants in Aid and Contributions	9699	9883	10278	12584	19146	18171
2	Total Exp. Revenue Account	38216	46500	54466	62477	72570	91208
a	General Services, of which	15287	17730	18645	22018	26408	30259
	Interest Payments	4319	4304	4428	5459	6129	7221
b	Social Services	15089	18729	23107	26395	31713	38084
c	Economic Services	7836	10038	12710	14060	14445	22861
d	Grants-in-aid	3	3	4	4	4	5
3	Revenue Deficit	-6316	-4820	-5101	-6441	-5848	-11981
4	Capital Receipts	6044	6650	9579	9922	15411	17725
a	Public Debt etc.	6032	6628	9554	9907	13918	17709
b	Recovery of Loan and Advances	12	23	25	15	1493	17
5	Capital Expenditure, of which	12489	13682	14740	17928	22128	29477
a	Capital Outlay	9196	8852	9585	14001	18150	24853
b	Loans and Advances	1103	1906	2086	807	369	729
c	Public Debt.	2190	2922	3070	3120	3609	3895
6	Total Expenditure	50705	60182	69207	80405	94698	120685
a	Plan Expenditure	20911	23008	28381	33678	43939	57426
b	Non Plan Expenditure	29794	37174	40825	46728	50759	63260
7	Gross Fiscal Deficit	3970	5915	6545	8352	11178	13584
8	Primary Deficit	-349	1611	2117	2893	5050	6364
9	Total Borrowings	6032	6628	9554	9907	13918	17709
a	Internal Debt Receipt	5251	5801	9046	9357	13199	14920
b	Loans from Central Government	782	827	508	550	718	2789
10	Repayment of Public Debt	2190	2922	3070	3120	3609	3895
11	Public Debt Outstanding	47285	50990	57474	64262	74570	88384
12	GSDP	203555	243269	293616	343663	402283	474130
As percentage of GSDP							
1	Total Receipts Revenue Account	21.9	21.1	20.3	20.1	19.5	21.8
a	Tax Revenue	16.6	16.7	16.4	15.9	14.3	17.2
b	Non Tax Revenue	0.5	0.4	0.4	0.4	0.4	0.7
c	Grants in aid and contr.	4.8	4.1	3.5	3.7	4.8	3.8
2	Total Exp. Revenue Account	18.8	19.1	18.6	18.2	18.0	19.2
a	General Services, of which	7.5	7.3	6.4	6.4	6.6	6.4
	Interest payments	2.1	1.8	1.5	1.6	1.5	1.5
b	Social Services	7.4	7.7	7.9	7.7	7.9	8.0
c	Economic Services	3.8	4.1	4.3	4.1	3.6	4.8
d	Grants-in-aid	0.0	0.0	0.0	0.0	0.0	0.0
3	Revenue Deficit	-3.1	-2.0	-1.7	-1.9	-1.5	-2.5
4	Capital Receipts	3.0	2.7	3.3	2.9	3.8	3.7
a	Public Debt etc.	3.0	2.7	3.3	2.9	3.5	3.7
b	Recovery of Loan and Advances	0.0	0.0	0.0	0.0	0.4	0.0
5	Capital Expenditure, of which	6.1	5.6	5.0	5.2	5.5	6.2
a	Capital Outlay	4.5	3.6	3.3	4.1	4.5	5.2
b	Loans and Advances	0.5	0.8	0.7	0.2	0.1	0.2
c	Public Debt.	1.1	1.2	1.0	0.9	0.9	0.8
6	Total Expenditure	24.9	24.7	23.6	23.4	23.5	25.5
a	Plan Expenditure	10.3	9.5	9.7	9.8	10.9	12.1
b	Non Plan Expenditure	14.6	15.3	13.9	13.6	12.6	13.3
7	Gross Fiscal Deficit	2.0	2.4	2.2	2.4	2.8	2.9
8	Primary Deficit	-0.2	0.7	0.7	0.8	1.3	1.3
9	Total Borrowing	3.0	2.7	3.3	2.9	3.5	3.7
a	Internal Debt Receipt	2.6	2.4	3.1	2.7	3.3	3.1
b	Loans from Central Government	0.4	0.3	0.2	0.2	0.2	0.6
10	Repayment of Public Debt	1.1	1.2	1.0	0.9	0.9	0.8
11	Debt Outstanding	23.2	21.0	19.6	18.7	18.5	18.6

Source : State Government Budgets

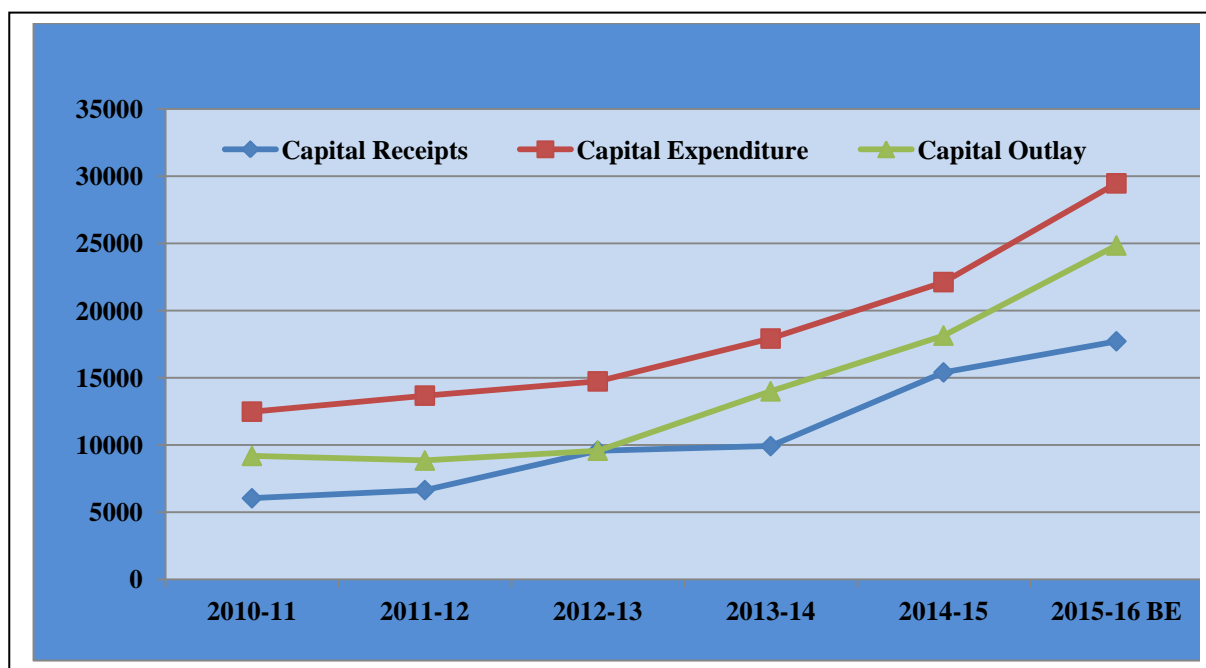
The increase in the grant during 2014-15 was mainly due to the abolition of direct transfers of central grants in respect of Centrally Sponsored Schemes which hitherto were not being routed through the state budget. While the non-plan grants under Article 275 (1) of the Constitution, as per recommendations of the Thirteenth Finance Commission, remained nearly the same as last year (increase of only Rs 69 crore), block grants has been reduced by half. In reality, there has been hardly any additional resources coming to the state government from the central government in respect of grants. The grants were also much lower than the budget estimates of Rs 31,420 crore made for 2014-15.

Chart 2.1 : Revenue Accounts of Bihar Government (Rs. crore)



The tax receipts constituted about 74 percent of the total revenue of the state government. The non-tax receipts registered practically no increase (only Rs 13 crore) during the year, and remained at Rs 1558 crore. While the growth of revenue receipts was 14 percent during 2014-15, the revenue expenditure grew at 16 percent, resulting in the decrease in the revenue surplus from Rs 6441 crore in 2013-14 to Rs 5848 crore during 2014-15. The revenue surplus was projected to increase substantially to nearly Rs 12,000 crore in the budget estimates of 2015-16. The capital outlay during 2014-15 increased substantially by 30 percent, but much less than 46 percent growth registered in the previous year. As per budget estimates, it is projected to rise by 37 percent in 2015-16 to Rs 24,853 crore. The trend and summary of state finances during the six-year period (2010-16) is shown in Table 2.1.

Chart 2.2 : Capital Accounts of Bihar Government (Rs. crore)



Revenue Account

Starting with a revenue surplus of Rs 1076 crore for the first time in 2004-05, Bihar has been showing a continuous revenue surplus ever since. This surplus had increased to the highest level of Rs 6441 crore in 2013-14, before reducing to Rs 5848 crore during 2014-15. In 2015-16 budgets estimates, however, it is projected to increase to Rs 11,981 crore. As pointed out already, the revenue receipts increased by Rs 9499 crore from increases in tax revenues (Rs 2923 crore) and central grants (Rs 6562 crore). Within the broad heads of tax revenue, 73 percent of the increase came from increase in the state's share of central taxes (Rs 2133 crore) and only Rs 790 crore from the state's own revenues. In the previous year, these contributions stood at 44 percent and 56 percent, respectively. Thus, in 2014-15, contribution of the state's own revenues to the growth of overall revenues was much less compared to the previous year. This was also a break from the positive trend observed during the past few years. The growth rate of the own revenues of the state government, tax plus non-tax, also declined to a meagre 4 percent during 2014-15, from more than 24 percent the year before. The share of central taxes increased by 6 percent during the year.

The revenue expenditure in 2014-15 increased by Rs 10,093 crore over that in 2013-14, of which social services accounted for Rs 5318 crore (53 percent), and economic services for Rs 385 crore (4 percent), the rest 43 of the increase being on account of general services. The corresponding figures in the previous year stood at 41 percent, 17 percent and 42 percent respectively. The general services accounted for an increase of more than Rs 4390 crore in 2014-15, compared to Rs 3373 crore during the previous year, of which pension payments alone accounted for an additional expenditure of Rs 1863 crore, compared to an increase of Rs 1118 crore in 2013-14. The pension liability of the state government has been increasing rapidly over the years, from

only Rs 6144 crore in 2010-11 to Rs 11,345 crore in 2014-15, increasing annually at about 17 percent. The total pension payment in 2015-16 is estimated to be Rs 12,980 crore. The interest payment showed an increase of Rs 670 crore during 2014-15, compared to Rs 1031 crore in the previous year.

The salary payments to the state government employees also accounted for increases in revenue expenditure by Rs 570 crore in 2014-15, compared to an increase of Rs 479 crore in 2013-14. During 2014-15, salary payments amounted to Rs 14,607 crore. The salary and pension expenditure of the state government will be discussed in details later in this chapter. The budget estimates of 2015-16 aims at substantially higher levels of revenue expenditure as well as capital outlay, to be financed by much higher revenue collection as well as substantially higher devolution of central taxes consequent to Fourteenth Finance Commission recommendations. The total expenditure, revenue plus capital, is budgeted to be about Rs 1,20,685 crore, compared to actual expenditure of Rs 94,698 crore in 2014-15, an increase of 27 percent; last year, the actual increase in total expenditure was about 18 percent.

Developmental Revenue Expenditure and Capital Outlay

The developmental revenue expenditure on social and economic services increased by Rs 5703 crore in 2014-15, over that in the last fiscal. Between 2010-11 and 2014-15, the developmental revenue expenditure increased more than two-fold from Rs. 22,926 crore to Rs. 46,158 crore, while the non-developmental revenue expenditure grew at a little slower rate, rising from Rs. 15,287 crore to Rs. 26,408 crore, bulk of it owing to pension as well as interest payments. Of the total capital outlay of Rs 18,150 crore in 2014-15, as much as Rs 14,728 crore was spent on economic services, almost 28 percent of it (Rs 4177 crore) on creating the infrastructure of roads and bridges. The capital outlay on social services amounted to Rs 1674 crore; out of this, 19 percent (Rs 315 crore) was spent on creating and improving health infrastructure, 53 percent (Rs. 885 crore) on improving the water supply and sanitation, and 16 percent (Rs 263 crore) on creating educational infrastructure in the state.

The surplus in the revenue account has all along played a substantial role in the growth story of Bihar. The revenue surplus was achieved primarily due to increase in revenue receipts, supplemented by the containment of revenue expenditure. Between 2010-11 and 2014-15, the total revenue receipts of the state government increased at an annual rate of 15 percent, while its revenue expenditure increased at a slightly higher annual rate of 17 percent. The sustained phenomenon of revenue surplus seen earlier had enabled the state government to increase its capital outlay continuously till 2010-11; however, in 2011-12, due to the decrease in revenue surplus, the capital outlay was also reduced by Rs 344 crore. But the capital outlay was substantially increased again from the next year and stood at Rs 18,150 crore in 2014-15. The total development expenditure stood at Rs 64,308 crore in 2014-15, about 68 percent of the total expenditure, compared to 63 percent in the 2010-11. The state government is committed to maintain a high growth rate in development expenditure, both in revenue and capital account, and this is also reflected in the budget estimates of 2015-16, where it has been projected to rise to Rs 85,798 crore, from Rs 64,308 crore in the previous year. The expenditure on non-

developmental general services also increased in 2014-15 by Rs 4390 crore, compared to Rs 3373 crore in 2013-14 and only Rs 915 crore in 2012-13 and, at Rs 26,408 crore, it was 20 percent higher than the last year. The rise in non-developmental expenditure was due to the increases in pension payments (Rs 1863 crore), interest payments (Rs 660 crore) and expenditure on police administration (Rs 815 crore).

The beginning of the reform process in public finances in Bihar had started in 2006-07, when capital outlay was increased substantially to Rs 5211 crore from a meagre Rs 2084 crore in the previous year. The state government has kept its focus on investing in capital assets in every budget since 2006-07, which translated into a higher growth for the state's economy because of its multiplier effect. During the Eleventh Plan period, the GSDP of Bihar at current prices had grown annually at 20.7 percent, compared to the nation's GDP growth rate at 15.6 percent, making the state one of the fastest growing ones in the country. This growth rate was also much higher than that during the Tenth Plan period (12.0 percent). During the last five years, 2010-11 to 2014-15, capital outlay grew annually at 18 percent and the total developmental expenditure, grew at 25 percent. The capital outlay of Bihar constituted 4.5 percent of its GSDP in 2014-15, compared to 4.1 percent in 2013-14. It accounted for 19 percent of total expenditure made by the state government in 2014-15, compared to 17 percent in the previous year. In 2010-11, this share was 18 percent. The state government is aware that there is an urgent need to increase the pace of capital expenditure further. Thus, in the budget estimates of 2015-16, capital outlay has been projected to rise by nearly 37 percent, when it would account for 5.2 percent of the GSDP.

Plan and Non-Plan Expenditure

The gap between plan and non-plan expenditure had started closing in 2007-08, the first year of the Eleventh Plan. In that year, non-plan expenditure was 1.9 times the plan expenditure, compared to 3.6 times in 2005-06. During 2014-15, the non-plan expenditure was only 1.2 times the plan expenditure, compared to 1.4 times the year before. During 2014-15, the total plan and non-plan expenditure was Rs 43,939 crore and Rs. 50,759 crore, respectively. In 2011, Rangarajan Committee on Efficient Management of Public Expenditure had submitted its report, recommending the removal of distinction between plan and non-plan expenditure. The report was not acted upon, but the newly elected government at the centre had announced the disbanding of the Planning Commission and replacing it by Niti Aayog, with a different set of objectives. It was also decided that the existing distinction of expenditure between plan and non-plan will continue at least till the end of the Twelfth Plan, that is, till 2016-17. The state government is of the view that non-plan expenditure is as important as plan expenditure and there exists no rationale for any distinction between the two.

Resource Mobilisation

The total tax revenue of the state government has increased from Rs. 33,848 crore in 2010-11 to Rs 57,713 crore in 2014-15, growing annually at 14 percent. The own tax revenue of the state government grew from Rs 9870 crore to Rs 20,751 crore during this period, at a much higher annual rate of 22 percent. The growth in own tax revenues has picked up in recent years and,

during the three years from 2011-12 to 2013-14, it grew by 28, 29 and 23 percent, respectively. This growth has been rather dismal (4 percent) during 2014-15, but is expected to rise by nearly 50 percent to Rs 30,875 crore as per the budget estimates of 2015-16. The total tax revenue of the state government also registered an increase of only 5 percent in 2014-15 over the previous year. During the five-year period from 2010-11 to 2014-15, the transfers to the state government from the divisible pool of central taxes grew annually at 11 percent, while central grants recorded an annual growth rate of 19 percent.

In contrast to the growth in tax revenue, the non-tax revenue seemed to have reached a plateau in Bihar, and has actually been on the decline since 2009-10 when it was Rs 1670 crore. Till that year, it was boosted by the debt relief available to the state government from the central government, as recommended by the Twelfth Finance Commission; but it was not available since 2010-11. In 2012-13, it was only Rs. 1135 crore and increased to Rs 1545 crore in 2013-14 after which it increased only to Rs 1558 crore in 2014-15. In the budget estimates for 2015-16, however, a substantial increase was projected in the non-tax revenue at Rs 3396 crore, because of expected transfer from the Government of Jharkhand as Contributions and Recoveries for Pension etc. (Rs 1600 crore in 2015-16 compared to only Rs. 2 crore in 2014-15), and additional receipts from non-ferrous mining and metallurgical industries (Rs 120 crore). The Contributions and Recoveries for Pension etc. was a legacy of the division of the erstwhile composite state of Bihar.

The Own Tax: GSDP ratio in Bihar has been much below than that of other states, although during the five-year period 2010-11 to 2014-15, it had improved from 5.0 percent to 5.8 percent before decreasing again to 5.2 percent during 2014-15. But, there still remains a large untapped potential for further increasing the state government's own tax revenue. In the budget estimates of 2015-16, state's own tax revenue receipts are estimated to be Rs 30,875 crore, an increase of 49 percent over the level achieved in 2014-15. Of the total revenue to be realized in 2015-16, state's own revenues are projected to constitute nearly 30 percent, higher than the corresponding figure of 26 percent in 2014-15.

Outstanding Public Debt

The public debt of the state government comprises only two elements — internal debt raised by the state government from the market (including financial institutions) and the loans taken from the central government. The second component has been falling as a consequence of the recommendations made by the Twelfth Finance Commission. The state also acts as a trustee in respect of certain items in the public account which constitute the other liabilities that will be discussed later.

The state government had an outstanding public debt of Rs. 47,285 crore in 2010-11, equaling 23.2 percent of its GSDP. In 2014-15, the outstanding debt had increased to Rs. 74,570 crore, and the Debt: GSDP ratio had declined substantially to 18.5 percent, well below the limit of 28 percent, specified by the Twelfth Finance Commission. The ratio of interest payment to revenue receipts was at 9.7 percent in 2010-11, which got reduced to 7.8 percent in 2014-15, much below

the upper limit of 15 percent, recommended by the Twelfth Finance Commission. This clearly indicates that the debt problem is well under the control of the state government. The debt servicing payments rose from Rs 6509 crore to Rs 9738 crore between 2010-11 and 2014-15. The interest payments accounted for Rs 4319 crore (66 percent of debt service payments) and Rs 6129 crore (63 percent of debt service payments) in these two years, respectively, while repayment of principal increased from Rs 2190 crore to Rs 3609 crore during the same period. In 2015-16, the outstanding public debt liabilities are projected to rise to Rs 88,384 crore (18.6 percent of GSDP) and debt servicing payments are expected to rise to Rs 11,116 crore as per the budget estimates.

The structure of debt has undergone a significant change since 2002-03. This occurred first by swapping of the high-cost central government loans with low-cost market loans and then, as a result of the recommendations of the Twelfth Finance Commission, by consolidation and rescheduling of all central government loans for payment over a 20-year period at 7.5 percent rate of interest. The Commission also recommended that if the state governments want to raise loans, they should get it from the market and the central government's help should be limited to only grants. As a result, the proportion of central government loans diminished substantially since then. During the period 2010-11 to 2013-14, the central loans declined from Rs 782 crore to Rs 550 crore, but increased to Rs 718 crore during 2014-15. Its share in the total public debt receipts had declined from 12.9 percent to 5.1 percent between 2010-11 and 2014-15. The central loans are now being availed only for state's plan schemes.

For the treatment of debt liabilities, a new approach was adopted in 2012-13 which was a departure from the way it was treated earlier, when the net receipts from Small Savings, Provident Fund and other accounts were included in the total debt liabilities of the state government. However, a new Indian Government Accounting Standard (IGAS) 10, proposed by the Government Accounting Standards Advisory Board (GASAB), has introduced a distinction between the receipts of debt into the Consolidated Fund and the liabilities that accrue to the state government automatically by virtue of its Public Account. Though the standard has not yet been formally adopted and is not free from contradictions, it has redefined the outstanding liabilities of the state government. Earlier, the total debt of the state government comprised its internal debt, loans from the central government, and loans from small savings and provident fund account. While the first two are part of the borrowings against the Consolidated Fund, the small savings and provident fund account share is maintained in its Public Account.

The Small Saving schemes have always been an important source of household savings in India. The small savings instruments can be classified under three heads — (i) postal deposits comprising savings account, recurring deposits, time deposits of varying maturities and monthly income scheme; (ii) savings certificates (National Small Savings Certificate VIII and Kisan Vikas Patra); and (iii) social security schemes like Public Provident Fund (PPF) and Senior Citizens' Savings Scheme.

Following the Report of the Committee on Small Savings in February 1999, a 'National Small Savings Fund' (NSSF) was established in the Public Account of India with effect from April, 1999. All deposits under small savings schemes are credited to NSSF and all withdrawals by the depositors are made out of accumulations in the Fund. The collections under the small saving schemes, net of the withdrawals, are the sources of funds for the NSSF. The NSSF invests the net collections of small savings in the Special State Government Securities (SSGS), as per the sharing formula decided by the central government. As per the current formula, states have to borrow 80 percent of the accumulated balances under this fund mandatorily (and, hence, pay interest to the central government), with the option to go up to 100 percent. Since 2002-03, the net collections are being invested only in state government securities and, thus, the state governments are forced to borrow the entire proceeds. They carry interest rates higher than the market rates and these rates are administered by the central government. These borrowings are internal debt, a part of the overall public debt of the state government and are used partly to finance the fiscal deficit of the state. The remaining amount is invested in Special Central Government Securities (SCGS) with the same terms as that for the state governments. These securities are issued for a period of 25 years, including a moratorium of five years on the principal amount. The special securities carry a rate of interest fixed by the central government from time to time. The rate of interest has remained unchanged at 9.5 percent per annum since April 1, 2003. The income of NSSF comprises the interest receipts on the investments in central government, state governments and other securities. While the interest rate on the investments in the central and state government securities is fixed from time to time, the interest rate on the reinvestment of redeemed amounts is equal to the market rate for 20-year Government Securities. The expenditure of NSSF comprises interest payments to the subscribers of Small Savings and PPF Schemes and the management cost of operating the schemes. The loans from NSSF outstanding against the state government at the end of 2014-15 amounted to Rs 22,907 crore, as against Rs 19,756 crore in 2013-14. During 2014-15, the state government had availed loans against special securities issued to NSSF, amounting to Rs 3945 crore, as compared to Rs. 1386 crore in 2013-14.

As per the new accounting standard, public debt now comprises the borrowings from the Consolidated Fund only, while the three major public account balances constitute the 'Other Liabilities' of the state government, since they all stand merged into the cash balance of the state government. The 'Other Liabilities' include Provident Fund and Other Accounts, Reserve Funds, and Deposits and Advances. The accounts of the state government are already reflecting this new classification of public debt and other liabilities, and the same classification will be followed in the Economic Surveys from now on. It may be mentioned that public accounts create a lot of distortions in the government financial system and there is a need to deal with it at a structural level.

The year 2006-07, being the year of the enactment of FRBM legislation, also marked the beginning of fiscal discipline in Bihar, as seen in the containment of its Gross Fiscal Deficit (GFD) within the FRBM Act limits of 3 percent of GSDP. The GFD: GSDP ratio of Bihar was brought down to 2.92 percent in 2006-07 from 4.43 percent in the previous year. It was,

thereafter, kept well within the 3 percent limit in all the subsequent years, barring 2009-10 when it was just marginally higher at 3.2 percent of GSDP, necessitating an amendment to the FRBM Act that was reversed the very next year. This was basically a consequence of the economic meltdown in 2008-09. In 2014-15, the ratio of GFD to GSDP stood at 2.8 percent and is estimated to increase marginally to only 2.9 percent as per budget estimates of 2015-16. In absolute terms, the GFD increased from Rs 3970 crore in 2010-11 to Rs 11,178 crore in 2014-15. It is estimated to rise substantially to Rs 13,584 crore as per the budget estimates of 2015-16. Summing up, it can be said that the financial consolidation process was slow in 2014-15, but it was a basically a consequence of the adverse macroeconomic situation prevailing in the country since 2010-11 that affected all states' receipts and liabilities. But the public finances of the state government are still being managed prudently and are in a healthy shape now.

2.2 Fiscal Performance

The revenue and capital deficits represent the excess of expenditure over receipts under those accounts. The conventional deficit is the algebraic sum of the revenue and capital deficits of the Consolidated Fund of the state government. This, however, does not actually show the total resource gap, as it includes the borrowings under the capital receipts. The overall resource gap is reflected by the Gross Fiscal Deficit (GFD) which is bridged by borrowings of one sort or another. For analyzing the fiscal performance of the state government during three years (2013-14 to 2015-16), the present analysis has used the following 8 indicators — (i) Ratio of Revenue Deficit to GFD, (ii) Ratio of Capital Outlay to GFD, (iii) Ratio of Non-Development Revenue Expenditure to Aggregate Disbursement, (iv) Ratio of Non-Development Revenue Expenditure to Revenue Receipt, (v) Ratio of Interest Payment to Revenue Expenditure, (vi) Ratio of State's Own Revenue to Revenue Expenditure, (vii) Ratio of Gross Transfer from Central Government to Aggregate Disbursement, and (viii) Ratio of Debt Servicing Expenditure to Gross Transfers from Central Government.

- (i) Ratio of Revenue Deficit to GFD : This ratio indicates the extent to which revenue deficit contributes to GFD. Ideally, the revenue account should leave a surplus for the creation of capital assets. As noted already, there were substantial surpluses in the revenue account of state government for the last few years, enabling it to increase its capital expenditure continuously. The revenue surplus decreased to Rs 5848 crore in 2014-15 from Rs. 6441 crore in 2013-14, and it constituted 52 percent of GFD in 2014-15, a steep decline from 77 percent in 2013-14. Thanks to the recommendations of the Twelfth Finance Commission, most major states in the country today are 'revenue surplus' states. During the last three years, among 17 major states, other than Bihar, 10 other states (Jharkhand, Odisha, Uttar Pradesh, Madhya Pradesh, Rajasthan, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Chhattisgarh) have consistently maintained reasonable surpluses in their revenue accounts. Among the states that failed to achieve consistent surpluses in their revenue accounts are included — Maharashtra, West Bengal, Punjab, Haryana, Kerala and Himachal Pradesh.

- (ii) Ratio of Capital Outlay to GFD : As an obvious consequence of the improvements in its revenue accounts, Bihar has had a high capital outlay during the last three years. In 2013-14 the capital outlay was nearly 1.7 times its GFD; this decreased to 1.6 in 2014-15. In 2015-16, the ratio is expected to increase to 1.8. Among the major states, those which could register a similar high level of capital outlay are — Jharkhand, Odisha, Uttar Pradesh, Madhya Pradesh, Rajasthan, Karnataka, Gujarat and Chhattisgarh.
- (iii) Ratio of Non-Development Revenue Expenditure to Aggregate Disbursements: The non-development expenditure, incurred mainly for administrative or general services, should preferably be a small part of the total expenditure. In Bihar, non-developmental revenue expenditure constituted 28 percent of the total expenditure in 2014-15, little more than 27 percent recorded in 2013-14. This was comparable to most states which have managed to curtail their non-developmental revenue expenditure. Some states like Uttar Pradesh, Punjab, Kerala, Tamil Nadu and Maharashtra had this ratio above 30 percent. Only Chhattisgarh could curtail its non-developmental revenue expenditure to a level below 20 percent of their total expenditure during 2014-15 and also in 2013-14.
- (iv) Ratio of Non-Development Revenue Expenditure to Revenue Receipts : This ratio indicates the extent to which the state government's revenue receipts could not be utilized for developmental purposes. In Bihar, the non-developmental revenue expenditure consumed 32 percent of total revenue receipts in 2013-14 and, in 2014-15, this ratio increased marginally to 34 percent. In 2015-16, this ratio is projected to decrease significantly to 29 percent. While many states like West Bengal, Punjab or Tamil Nadu, had ratios higher than 40 percent, Kerala had a very high ratio of 62 percent in 2014-15. The ratio was less than 30 percent for Jharkhand, Odisha, Madhya Pradesh, Rajasthan and Chhattisgarh in 2014-15.
- (v) Ratio of Interest Payment to Revenue Expenditure: Interest payments constitute a perennial burden on governments' finances in most of the states, because of their high indebtedness. For Bihar, however, interest payments have been consuming progressively lesser proportion of the revenue expenditure since 2004-05. In 2013-14, it was 9 percent. It increased marginally to 10 percent in 2014-15, but is expected to come down to 8 percent in the current fiscal. Except Jharkhand, Odisha, Madhya Pradesh, Karnataka and Chhattisgarh, all other states had this ratio above 10 percent in 2014-15, the highest being 21 percent for West Bengal.
- (vi) Ratios of State's Own Revenue to Revenue Expenditure : The ratio of the state's own revenue to its total revenue expenditure indicates the self-sufficiency of the state

government vis-à-vis its revenue expenditure needs. In 2007-08, own tax and non-tax revenue receipts of Bihar together covered barely 24 percent of its total revenue expenditure. The ratio has improved since then, reaching the peak of nearly 31 percent in 2014-15. But it is still a long way from attaining the desired level of financial self-sufficiency. The position of all other major states is far better on this count. There are ten states whose own revenue meets more than 50 percent of their total revenue expenditure. The level of self-sufficiency was even higher for Maharashtra, Gujarat, Karnataka and Tamil Nadu, for each of which its own revenue met more than 70 percent of the total revenue expenditure.

- (vii) Ratio of Gross Transfers from Central Government to Aggregate Disbursements: This ratio brings out the state governments' dependence on central resources. For Bihar, such dependence has always been very high. The central transfers always accounted for more than 60 percent of Bihar's total expenditure. However, from the peak of almost 72 percent in 2007-08, this ratio had decreased to 60 percent in 2014-15. In the budget estimates of 2015-16, it was projected to be lowered to 59 percent. No other major state has had such a high dependence on the central government transfers. Among other major states, only Jharkhand, Odisha, Uttar Pradesh, Madhya Pradesh and Chhattisgarh had more than 40 percent of their total expenditure financed by the central transfers. Even if only central grants are considered, since states in any case have a statutory right to the share of central taxes, it accounted for about 16 and 20 percent of Bihar's aggregate disbursements in 2013-14 and 2014-15 respectively. This is a more appropriate indicator of state government's dependence on central government.
- (viii) Ratio of Debt Servicing to Gross Transfers from Central Government : Till 2003-04, debt servicing used to consume a very substantial portion of the gross transfers from the central government to Bihar. However, due to the recommendations of the Twelfth Finance Commission and better financial management, this ratio has been successfully brought down from more than 100 percent in 2003-04 to only about 27 percent in 2007-08. It has declined further and stood at 19 percent in both 2013-14 and 2014-15; as per the budget estimates of 2015-16 it is 16 percent. The performance of Bihar in this respect is significantly better than many of the major Indian states. In case of West Bengal, Punjab, Haryana, Kerala and Himachal Pradesh, the situation was alarming in 2014-15, since this ratio exceeded 100 percent for these five states, indicating that the entire central transfers was not sufficient to discharge their existing debt servicing obligations. Additional resources were, therefore, needed to pay for debt-servicing, seriously jeopardizing their ability to undertake development expenditure.

Table 2.2 : Major Fiscal Indicators

State	A. Revenue Deficit : GFD (%)			B. Capital Outlay : GFD (%)		
	2013-14	2014-15 (RE)	2015-16 (BE)	2013-14	2014-15 (RE)	2015-16 (BE)
Bihar	-77.1	-52.3	-88.2	167.6	162.4	183.0
Jharkhand	-119.1	-78.0	-90.8	208.1	156.6	168.2
West Bengal	74.6	43.4	0.0	27.3	56.0	97.8
Odisha	127.8	140.8	125.9	-17.8	-20.8	-14.6
Uttar Pradesh	-42.6	-115.2	-108.6	138.9	210.1	201.1
Madhya Pradesh	-59.3	-47.0	-33.4	109.0	105.0	108.3
Rajasthan	6.8	18.2	-2.7	89.9	82.7	100.7
Maharashtra	20.6	37.3	12.2	81.0	62.7	88.2
Gujarat	-25.6	-30.7	-33.1	123.1	129.5	131.3
Punjab	74.4	60.0	53.8	25.0	38.0	40.8
Haryana	46.6	60.7	58.1	47.3	35.6	35.9
Karnataka	-2.1	-0.8	-4.5	98.6	98.8	101.3
Andhra Pradesh	-1.9	70.1	41.5	84.7	35.2	55.8
Kerala	72.0	66.2	45.5	27.3	32.7	53.5
Tamil Nadu	-10.7	-1.1	-1.1	88.2	91.3	92.1
Himachal Pradesh	40.4	14.8	-1.4	46.9	74.7	90.0
Chhatisgarh	126.5	118.9	105.4	206.1	-22.5	-7.1

State	C. Non-Dev. Exp: Agg. Disbursements (%)			D. Non-Dev. Exp: Revenue Receipts (%)		
	2013-14	2014-15 (RE)	2015-16 (BE)	2013-14	2014-15 (RE)	2015-16 (BE)
Bihar	27.4	27.9	25.1	32.0	33.7	29.3
Jharkhand	32.7	23.3	24.0	38.1	27.0	27.7
West Bengal	32.3	27.5	28.2	56.9	45.4	42.0
Odisha	26.0	24.0	24.6	29.8	29.3	29.2
Uttar Pradesh	35.7	30.1	30.1	42.6	35.4	36.5
Madhya Pradesh	28.0	23.1	27.5	33.2	27.2	33.6
Rajasthan	25.1	22.6	22.7	31.7	29.5	28.1
Maharashtra	30.0	28.7	31.4	37.4	36.7	38.4
Gujarat	25.9	25.0	26.5	33.9	31.7	33.3
Punjab	34.1	31.0	31.9	59.0	54.4	54.7
Haryana	25.1	25.5	25.6	36.1	40.5	38.8
Karnataka	27.1	26.0	26.3	33.5	31.7	32.3
Andhra Pradesh	27.2	27.3	28.0	33.5	36.3	35.1
Kerala	46.3	39.2	39.0	62.1	62.5	63.8
Tamil Nadu	33.6	32.7	33.6	41.3	40.7	42.5
Himachal Pradesh	29.6	23.7	29.0	44.9	40.2	37.9
Chhatisgarh	22.4	17.4	17.7	27.5	19.9	20.2

State	E. Interest Payments: Revenue Exp (%)			F. State Own Revenue: Revenue Exp. (%)		
	2013-14	2014-15 (RE)	2015-16 (BE)	2013-14	2014-15 (RE)	2015-16 (BE)
Bihar	9.4	9.8	8.5	34.4	30.7	37.6
Jharkhand	11.2	6.9	8.0	56.0	47.4	48.5
West Bengal	22.7	20.6	21.3	41.2	39.6	43.2
Odisha	6.3	7.0	7.4	55.4	44.6	46.0
Uttar Pradesh	16.3	13.2	13.3	52.5	51.6	52.6
Madhya Pradesh	9.1	7.0	7.4	59.0	49.7	49.2
Rajasthan	12.0	10.4	10.8	62.3	52.8	56.5
Maharashtra	13.7	12.5	13.7	77.4	68.0	74.9
Gujarat	17.7	16.8	16.5	84.2	77.3	77.9
Punjab	18.8	18.1	18.8	65.5	64.4	63.0
Haryana	14.0	14.4	14.7	72.9	64.2	64.9
Karnataka	8.8	8.8	9.7	74.7	67.1	70.7
Andhra Pradesh	12.4	10.4	12.0	71.6	47.9	50.8
Kerala	13.7	12.9	12.8	62.1	62.5	63.8
Tamil Nadu	11.3	10.9	11.9	81.0	78.9	79.3
Himachal Pradesh	14.3	13.9	12.6	39.8	36.6	33.4
Chhatisgarh	4.4	4.2	4.2	59.2	52.4	53.5

State	G. Gross Transfers: Aggregate Disbursements (%)			H. Debt Servicing: Gross Transfers (%)		
	2013-14	2014-15 (RE)	2015-16 (BE)	2013-14	2014-15 (RE)	2015-16 (BE)
Bihar	59.7	60.0	59.4	18.8	18.9	16.2
Jharkhand	43.1	49.4	49.6	35.2	18.9	20.7
West Bengal	27.8	34.9	38.2	139.8	109.4	97.8
Odisha	43.2	50.1	50.0	51.3	52.2	52.5
Uttar Pradesh	42.7	47.7	45.3	39.7	28.4	36.3
Madhya Pradesh	39.8	47.4	45.0	29.1	20.6	26.7
Rajasthan	29.4	35.4	37.2	47.6	34.7	32.8
Maharashtra	16.5	22.3	21.2	105.8	70.3	78.8
Gujarat	16.0	22.3	22.2	116.7	74.9	74.6
Punjab	13.5	15.8	17.4	298.4	257.4	224.6
Haryana	14.3	14.2	16.1	178.3	181.1	149.7
Karnataka	21.7	28.0	25.6	48.4	38.5	46.6
Andhra Pradesh	24.1	33.8	37.1	63.6	42.1	40.1
Kerala	17.6	19.9	22.4	95.9	127.8	105.6
Tamil Nadu	17.8	18.2	17.6	74.1	70.8	80.0
Himachal Pradesh	37.2	37.3	51.2	73.7	103.4	43.4
Chhatisgarh	32.0	43.8	44.3	52.0	44.5	48.6

Source : State Governments' Budgets

Sustainability, Flexibility and Vulnerability of State Finances

The preceding analysis can be extended further to identify the factors that make a state financially healthy, allowing for more development activities. It would then be necessary to know whether the means of financing these activities are sustainable, i.e., they meet the increased expenditure needs of the state government without substantially adding to its debt burden. Secondly, it would also be pertinent to examine the flexibility of the means of financing, either by increasing the revenue or by borrowing. Finally, one should also examine whether increased expenditure exposes the government to more risks and makes it vulnerable to the sources of funding. Some of the indicators which measure the sustainability, flexibility and vulnerability of the state government finances are presented in Table 2.3 and they are discussed below.

- (i) Balance of Current Revenue (BCR) : This is calculated as state government's own revenue receipts, plus share of central taxes, plus non-plan grants, minus non-plan revenue expenditure. A positive BCR shows that the state government has surplus funds from its revenues to meet the plan expenditure. Bihar has a substantial positive BCR that has been increasing for the last six years. It increased from Rs 9442 crore in 2010-11 to Rs 15,484 crore in 2014-15. This is projected to become Rs 28,912 crore in 2015-16, as per the budget estimate.
- (ii) Interest Ratio : This is calculated as $(\text{Interest Payment} - \text{Interest Receipt}) / (\text{Total Revenue} - \text{Interest Receipt})$. A higher ratio indicates a reduced ability of the state government to service any fresh debt and meet its revenue expenditure from its revenue receipts. For Bihar, the ratio has been falling continuously. This ratio was 12 percent in 2010-11. As per the budget estimate of 2015-16, it is expected to decrease to 8 percent.
- (iii) Capital Outlay/Capital Receipts : This ratio indicates the extent to which capital receipts are utilised for capital formation. A ratio of less than 100 percent would not be sustainable in the long run, as that would indicate that capital receipts are being utilized for revenue expenditure. This ratio was at a healthy level of 220 percent in 2006-07, and 373 percent in 2007-08. Thereafter, it declined during the next two years, before rising again to 152 percent in 2010-11. At the end of 2014-15, however, the ratio stood at 118 percent, poised to rise to 140 percent in the current fiscal. Thus, the entire capital receipt of the state government is presently being used for capital outlay, a part of the latter being financed by the surplus in the revenue account. It must be mentioned that, prior to 2005-06, this ratio used to remain below 20 percent, mostly due to the high debt service payments.
- (iv) State's Own Tax Receipts/ GSDP : This is an important indicator of the gap between the tax receipts of the state government and tax potential. A low ratio also indicates low tax compliance. For Bihar, the ratio of its own tax receipts to GSDP has stagnated at around

4 percent till 2008-09 and, since then, has grown just above 5 percent in 2011-12. In 2013-14, the ratio improved to 6 percent, before falling to 5 percent in 2014-15 . Since this ratio is much lower compared to other states, there is further scope for tapping the entire tax potential of the state. In the current fiscal, it is expected to rise above 6 percent.

- (v) Debt Outstanding/ GSDP : This ratio indicates whether the state government has fallen into a debt trap from which it may not be able to come out on its own. A high ratio leaves little room for the state government for financial leverage and indicates a lack of flexibility. It can be noted here that the total debt which constituted 23 percent of the GSDP in 2010-11 has been brought down to only 19 percent in 2014-15. As this debt burden is clearly sustainable, Bihar is safely positioned on this account.
- (vi) Capital Repayment / Capital Borrowings : This ratio indicates the extent to which the capital borrowings could not be utilized for asset creation. A high ratio indicates that capital receipts are being utilized more for capital repayment, depriving the economy of additional asset creation. For Bihar, this ratio has decreased from 55 percent in 2010-11 to 29 percent in 2014-15. As per the budget estimates, it is projected to decrease further to 26 percent in 2015-16.
- (vii) Primary Deficit : This is the GFD minus interest payments. It measures the impact of the current policies of the state government without considering the liabilities created in the past, for which interest has to be paid now. A necessary condition for long term sustainability of debt is that the primary account should not be in deficit. In 2008-09, Bihar had a primary surplus of Rs 1246 crore, but since then, except in 2010-11 when there was a modest primary surplus of Rs 349 crore, Bihar could not generate any surplus in its primary account. In 2014-15, it had a primary deficit of Rs 5050 crore (1.26 percent of GSDP) which is estimated to increase further to Rs 6364 crore (1.34 percent of GSDP) in 2015-16. This remains a matter of concern.
- (viii) Buoyancy of State's Tax and Non-Tax Revenues : The buoyancy of own tax receipts of the state government shows considerable variation — ranging from 0.2 in 2014-15 to 1.4 in 2011-12 and 2012-13. In case of non-tax revenue, the buoyancy had varied from (-) 1.6 to 2.3 during the period 2010-15. The negative buoyancy in non-tax revenues in 2010-11 was due to the withdrawal of debt relief as available under the period covered by the Twelfth Finance Commission. In 2011-12, this buoyancy was again negative due to the recovery of a part of debt relief that was given to the state in 2010-11, amounting to Rs 384 crore. Such buoyancy ratios for non-tax revenue are not very meaningful, as some one-time transfers from the central government are treated as non-tax revenue.

Table 2.3 : Fiscal and Financial Performance Indicators

Indicators	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
A. Sustainability						
Balance from Current Revenue (Rs. crore)	9442	9987	14128	16242	15484	28912
Interest Ratio (%)	11.80	9.13	8.67	9.26	9.82	8.16
Buoyancy of Own Tax Receipts w.r.t. GSDP	0.9	1.4	1.4	1.3	0.2	2.7
Buoyancy of Non-Tax Receipts w.r.t. GSDP	-1.6	-0.5	1.3	2.1	0.1	6.6
Growth in outstanding debt (%)	8.8	7.8	12.7	11.8	16.0	18.5
Growth in total revenue receipts (%)	25.3	15.2	16.1	15.7	13.8	31.6
Growth in state's own revenue receipts (%)	11.2	24.4	28.8	23.7	3.7	53.6
Growth in GSDP (%)	24.9	19.5	20.7	17.0	17.1	17.9
B. Flexibility						
Capital Repayment / Capital Borrowings (%)	54.6	72.9	54.0	39.6	28.6	26.1
Total Tax Receipts / GSDP (%)	16.6	16.7	16.4	15.9	14.3	17.2
Capital Outlay / Capital Receipts (%)	152.1	133.1	100.1	141.1	117.8	140.2
State's Own Tax Receipts / GSDP (%)	4.8	5.2	5.5	5.8	5.2	6.5
State's Own Non-Tax Receipts / GSDP(%)	0.5	0.4	0.4	0.4	0.4	0.7
Debt Outstanding / GSDP (%)	23.23	20.96	19.57	18.70	18.54	18.64
C. Vulnerability						
Revenue Deficit (Rs. crore)	-6316	-4820	-5101	-6441	-5848	-11981
Fiscal Deficit (Rs. crore)	3970	5915	6545	8352	11178	13584
Primary Deficit (Rs. crore)	-349	1611	2117	2893	5050	6364
Primary Deficit / Fiscal Deficit (%)	-8.8	27.2	32.3	34.6	45.2	46.8
Revenue Deficit / Fiscal Deficit (%)	-159.1	-81.5	-77.9	-77.1	-52.3	-88.2

Summing up, it is noted that while the key fiscal indicators point to improvements in the fiscal position of the state government over the recent years, there still remain some concerns. For example, the revenue receipts of the state government have been increasing much faster than the outstanding debt, but the primary account of the state government is still showing deficit. It is noted that 2014-15 has been a particularly bad year in respect of various parameters spanning growth of revenue, payment of committed expenditure, and management of debt and deficits.

With a better debt management over the years, the state government has gained increased flexibility and was in a better position to direct its resources for development expenditure. In terms of vulnerability, however, the state government still remains overwhelmingly dependent on the central transfers for meeting its own expenditure needs. This dependence can be lessened

as there still remains untapped potential for increasing its own tax revenues. It is also important to recognize that the public finances of the state are inextricably linked to the health of the national economy and the management of national public finances, which continue to suffer from internal structural deficiencies as well as externalities of the global economy which are beyond its control.

2.3 Deficit Management

The position in the revenue account as well as the combined position of the revenue and capital accounts of the major Indian states for the years 2013-14 to 2015-16 (BE) are presented in Table 2.4. Bihar attained its highest surplus of Rs 6441 crore in the revenue account in 2013-14, recovering from the economic downturn which had caused a decline in its revenue surplus after 2010-11. This satisfactory position in terms of revenue surplus in 2013-14 was expected to improve substantially in the next fiscal, when the state government was expected to generate a record level of revenue surplus of Rs 11,981 crore. In reality, however, there was a revenue surplus of only Rs 5848 crore. The GFD position, that has been worsening since 2010-11 due to high capital outlay, has shown no improvement in 2014-15; in fact, in 2014-15, the GFD of Bihar has increased to Rs 11,178 crore from Rs 8352 crore in 2013-14, i.e. by nearly 34 percent.

Table 2.4 : Deficit/Surplus position of States

(Rs. crore)

State	Revenue Deficit (+)/ Surplus(-)			Conventional Deficit (+)/ Surplus(-)		
	2013-14 (Actuals)	2014-15 (RE)	2015-16 (BE)	2013-14 (Actuals)	2014-15 (RE)	2015-16 (BE)
Bihar	-6441	-5848	-11981	1564	870	-229
Jharkhand	-2705	-3830	-4684	-434	NA	NA
West Bengal	18915	10362	NA	7218	3166	-4950
Odisha	-3329	-3377	-5102	4637	2057	1307
Uttar Pradesh	-10067	-32407	-34124	16922	4345	5813
Madhya Pradesh	-5879	-6371	-5588	4379	2560	3118
Rajasthan	1039	4220	-557	4813	10003	3283
Maharashtra	5081	13883	3757	8229	9980	4645
Gujarat	-4717	-6387	-7308	5284	2143	3125
Punjab	6537	6240	6394	1333	2335	1229
Haryana	3875	9500	9558	-1322	5342	154
Karnataka	-353	-160	-911	3710	1638	3133
Andhra Pradesh	-344	14243	7300	43	2575	945
Kerala	11309	10264	7832	4471	1747	688
Tamil Nadu	-1760	-244	-289	314	2879	2213
Himachal Pradesh	1641	505	-47	4062	2774	3325
Chhatisgarh	809	-2376	-4227	1823	557	578

Source : State Governments' Budgets

The GFD is likely to increase further in the current fiscal to Rs 13,584 crore (22 percent), due to an increase in capital outlay. This is in keeping with the avowed policy of the state government to continuously increase investments in social and physical infrastructure. All states have been facing nearly the same problem, arising from the phenomenon of economic downturn. Andhra Pradesh leads the states having deficits in their revenue accounts, with a deficit of more than Rs 14,000 crore. Other revenue deficit states are West Bengal, Punjab, Haryana, Maharashtra, Rajasthan, Kerala and Himachal Pradesh. Most states showed a conventional deficit in their budget, necessitating borrowings during 2014-15.

The GFD of a state government is a sensitive indicator of its financial performance, as it reflects the total resource gap. Table 2.5 presents the GFD of the major states in India. As noted earlier, Bihar's GFD had sharply increased in last three years, due to higher capital investments and is estimated to touch the all-time high level of Rs 13,584 crore in 2015-16 (BE). As a percentage of GSDP, however, the GFD has remained well below 3 percent of the GSDP, as mandated by the FRBM Act, during all these three years. As regards other major states, West Bengal, Uttar Pradesh, Madhya Pradesh, Rajasthan, Maharashtra, Gujarat, Punjab, Haryana, Karnataka, Andhra Pradesh, Kerala and Tamil Nadu — all had very high fiscal deficits in 2014-15, exceeding Rs. 10,000 crore.

Table 2.5 : Gross Fiscal Deficit

State	Gross Fiscal Deficit (Rs. crore)			State	Gross Fiscal Deficit (Rs. crore)		
	2013-14 (Actuals)	2014-15 (RE)	2015-16 (BE)		2013-14 (Actuals)	2014-15 (RE)	2015-16 (BE)
Bihar	8352	11178	13584	Punjab	8791	10397	11895
Jharkhand	2272	4911	5157	Haryana	8323	15641	16436
West Bengal	25348	23882	15982	Karnataka	17180	19110	20295
Odisha	-2605	-2398	-4052	Andhra Pradesh	18050	20320	17584
Uttar Pradesh	23655	28125	31409	Kerala	15707	15494	17223
Madhya Pradesh	9917	13569	16745	Tamil Nadu	16519	21643	25714
Rajasthan	15200	23172	20618	Himachal Pradesh	4062	3424	3325
Maharashtra	24702	37245	30733	Chhatisgarh	640	-1999	-4009
Gujarat	18423	20777	22059				

Source : State Governments' Budgets

Table 2.6 shows the decomposition of the GFD of Bihar, from which one can find that capital outlay accounted for most of GFD, as it rightly should. This was true throughout the period from 2010-11 to 2014-15, and more so during the recent years. The fact that the capital outlay now accounts for almost the entire GFD, after exhausting the revenue surplus, indicates that it is now being utilised for building the much-needed social and physical infrastructure in Bihar. Net lending has always constituted a small part of the GFD of the state government. The capital outlay has increased in Bihar at an annual rate of 22 percent during the last six years.

Table 2.6 : Decomposition of Gross Fiscal Deficit of Bihar

(Rs. crore)

Amount	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Revenue Deficit	-6316	-4820	-5101	-6441	-5848	-11981
Capital Outlay	9196	8852	9585	14001	18150	24853
Net Lending	1091	1884	2061	792	-1124	712
GFD	3970	5915	6545	8352	11178	13584
GSDP	203555	243269	293616	343663	402283	474130
GFD: GSDP ratio (%)	2.0	2.4	2.2	2.4	2.8	2.9

Source : State Government Budgets

Chart 2.3 : GFD: GSDP Ratio (Percentage)

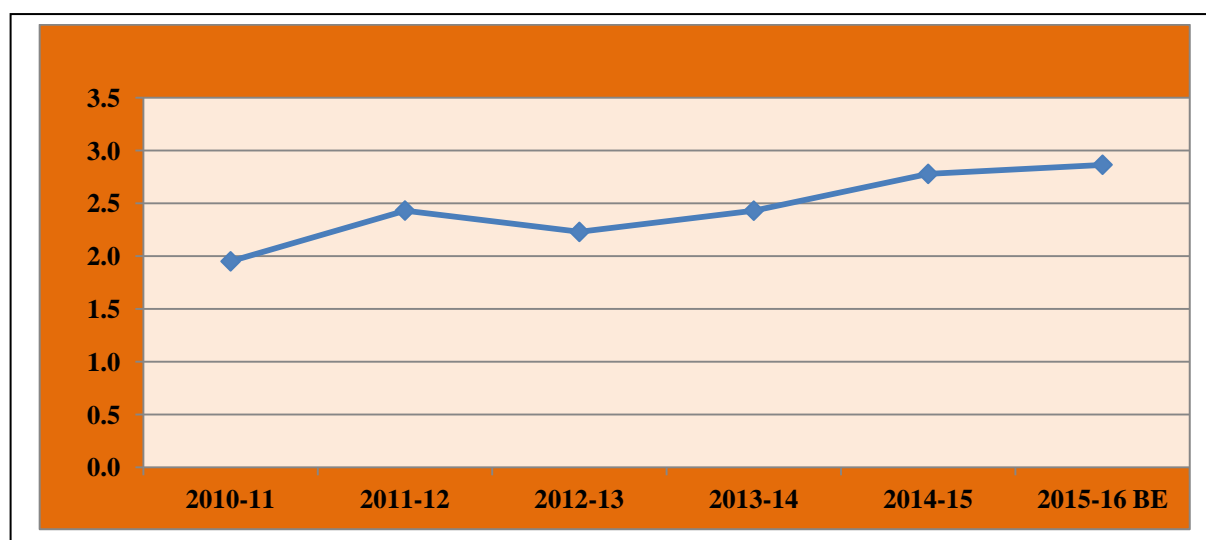


Chart 2.4 : Decomposition of GFD (Rs. crore)

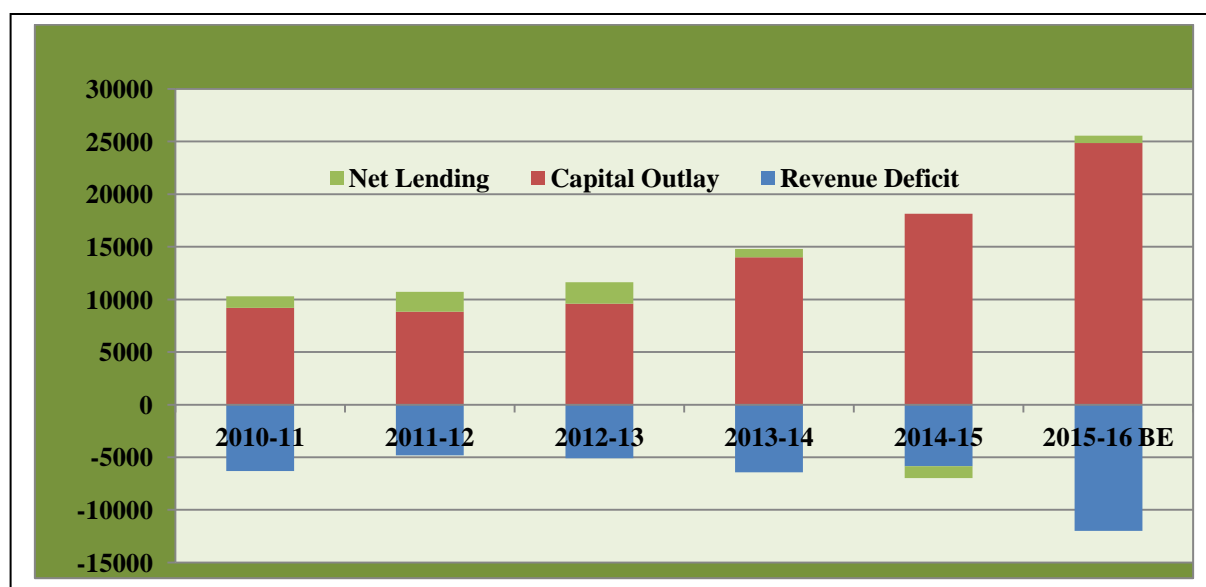


Table 2.7 shows how the GFD was financed during the recent years. The net borrowing consisted of mainly internal market borrowings, the central loans being a very small portion of the total borrowing. In 2014-15, the net borrowings financed as much as 92 percent of the GFD. The net accruals from the Public Account, which constitutes a part of the cash balances of the state government, amounted to 5 percent of the GFD, leaving the rest 3 percent to be drawn from the cash balance of the state government.

Table 2.7 : Financing of Gross Fiscal Deficit

(Rs crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Net Borrowing	3842	3706	6484	6788	10309	13814
Net Public Account	2238	2469	343	1606	551	-181
Net Decrease in Cash Balance (Opening - Closing Balance)	-2110	-333	-281	-42	319	-48
GFD	3970	5915	6545	8352	11178	13584
Percentage Composition						
Net Borrowing	96.8	62.6	99.1	81.3	92.2	101.7
Net Public Account	56.4	41.7	5.2	19.2	4.9	-1.3
Net Decrease in Cash Balance	-53.1	-5.6	-4.3	-0.5	2.9	-0.4

Source : State Government Budgets

Cash Management

As of March 31, 2015, the state government had a cash balance of Rs 6337 crore, compared to Rs 6156 crore on March 31, 2014. Out of this, Rs 3528 crore were invested in Cash Balance investment account, Rs 211 crore as cash with departmental officers from Public Works and Forest Departments, Rs 344 crore as permanent advances for contingent expenditure with various departments, and Rs 2343 crore were invested in earmarked funds like the Sinking Fund, leaving a net credit cash balance of Rs 89 crore with the RBI. An amount of Rs 312 crore was realised as interest on the state government's investments during the year, compared to Rs 233 crore during the last year.

Guarantees by State Government

The outstanding guarantees of the state government at the end of 2014-15 stood at Rs 2001 crore (2.6 percent of total revenue receipts) compared to Rs 1961 crore at the end of 2013-14. Out of this, Rs 734 crore were against the loans to the Bihar State Electricity Board (BSEB), Rs 193 crore against the Bihar State Road Transport Corporation, and Rs 127 crore against the Bihar State Financial Corporation. Further, Credit Cooperative Societies and Housing Cooperatives accounted for Rs. 349 crore. Due to increase in investment in the electricity sector, the state is yet to establish any Guarantee Redemption Fund, as suggested by the Twelfth Finance Commission, to discharge any possible future liabilities. The outstanding guarantees remained

nearly the same during the last two years. The interest on outstanding guarantees amounted to Rs 148 crore during the year.

2.4 Debt Management

Table 2.8 shows the outstanding debt liabilities of the state government (excluding guarantees) from 2010-11 to 2014-15. The outstanding liability as a percentage of GSDP had decreased consistently from 31 percent in 2010-11 to 25 percent in 2014-15.

Table 2.8 : Outstanding Liabilities

Amounts	(Rs crore)					
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Public Debt						
Internal Debt	39020	42365	48826	55624	65848	77592
Central Loans	8264	8626	8649	8638	8722	10792
Total	47285	50990	57474	64262	74570	88384
Other Liabilities						
Small Savings, PF etc.	9563	9561	9346	9048	8865	8503
Reserve Funds	1207	1543	1819	2121	1884	1884
Deposits and Advances	4803	5718	7865	11507	13730	13917
Total	15573	16822	19029	22677	24485	24305
Total (Public Debt + Other Liabilities)	62858	67812	76504	86939	99055	112689
Outstanding Liability as % of GSDP	30.9	27.9	26.1	25.3	24.6	23.8

Source : State Government Budgets

The total outstanding liabilities of the state government, as can be seen from Table 2.8, had accumulated to Rs. 99,001 crore at the end of 2014-15, of which the public debt liability on account of borrowings on the Consolidated Fund accounts for 75 percent. This figure is the accumulated effect of past borrowings, growing at an annual rate of 12 percent since 2010-11. The liability on account of public debt has also been growing at an annual rate of 12 percent since 2010-11. Table 2.8 also shows that 88 percent of this outstanding public debt is due to the internal loans raised by the state government, remaining 12 percent being loans from the central government. The composition of outstanding debt has undergone a structural change over the years, with the share of central loans decreasing gradually, because of the recommendations of the Twelfth Finance Commission. In the coming years, the central government loans will probably no longer be a part of the loan portfolio of the state government.

Liability from Public Account constitutes a significant part of the total liability of the state government, though it is not a debt in the strict sense of the term. But the resources are indeed used by the state government, and there is a liability to pay back the outstanding balances in these accounts, which form a part of the cash balance of the state. It may be noted that some of

these liabilities under the Reserve Funds and Deposits and Advances will be non-interest bearing, since the state government only holds these funds in trust. As explained earlier, National Small Savings Fund (NSSF) contributes significantly to the internal borrowings of the state government. During 2014-15, the state government had raised Rs 13,199 crore (Rs 9357 crore in 2013-14) through internal borrowings, of which Rs 3945 crore came from NSSF, Rs 8100 crore were raised from the market, and Rs 1154 crore were borrowed from financial institutions. The state government did not avail any ways and means advances from the RBI during 2014-15. The central loans borrowed for state plan schemes amounted to Rs 631 crore. The composition of outstanding liabilities in the Consolidated Fund of the state government as on March 31, 2015 is shown in Table 2.9. It is seen from the table that NSSF accounts for 35 percent and market loans 58 percent of the total outstanding internal debt of the state government. The outstanding central loans are almost entirely on account of loans for state plan schemes.

Table 2.9 : Composition of Outstanding Liabilities in the Consolidated Fund

Nature of Borrowings	Outstanding Balance as on		Percentage Increase	Percentage Composition (31.03.15)
	31.03.2014 (Rs crore)	31.03.2015 (Rs crore)		
A. Internal Debt, of which	55,624	65,848	18.4	88.3
Market Loans	31,285	37,951	21.3	50.9
WMA from the RBI	0	0	0.0	0.0
Bonds	434	227	-47.9	0.3
Loans from Financial Institutions	4,141	4,756	14.9	6.4
Special Securities Issued to NSSF	19,756	22,907	15.9	30.7
Others	7	7	0.0	0.0
B. Loans and Advances from Central Government, of which	8,638	8,722	1.0	11.7
Non plan loans	59	56	-5.0	0.1
Loans for State Plan Schemes	8,531	8,618	1.0	11.6
Loans for Central Plan Schemes	1	1	0.0	0.0
Loans for Centrally Sponsored Plan Schemes	1	1	0.0	0.0
Other Loans	47	47	0.0	0.1
Total (A+B)	64,262	74,570	16.0	100.0

Source : Finance Accounts, GOB

Table 2.10 shows the repayment liabilities of the state government. In 2014-15, the total repayment of principal by the state government amounted to Rs. 4895 crore, while the interest payment was higher at Rs 6129 crore. The annual interest burden has increased by Rs 1810 crore over the past five years, due to substantial past borrowings. The total annual debt service burden has increased from Rs. 7095 crore in 2010-11 to Rs. 11,024 crore in 2014-15, growing at an

annual rate of 12 percent. In the budget estimates for 2015-16, it is expected to increase by nearly 16 percent to Rs 12,775 crore.

Table 2.10 : Public Debt Repayment Liabilities

(Rs. crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Discharge of internal debt	1725	2457	2585	2559	2975	3177
Repayment of loans to Centre	466	465	485	561	634	719
Discharge of other liabilities	586	1034	1512	1370	1287	1659
Total Repayment	2776	3956	4582	4490	4895	5554
Total Interest Payment	4319	4304	4428	5459	6129	7221
Total Debt Service Burden	7095	8260	9010	9949	11024	12775

Note : Liabilities include receipts and payments of Small Saving and Provident Fund under Public Accounts of the Government of Bihar.

Public debt can be a powerful agent of economic growth, if it is utilised for the creation of productive assets. As can be seen from Table 2.11, the debt resources could not be utilised much by the state government for creating productive assets till 2011-12, when they were mostly used to discharge the existing debt obligations. During the next three years, however, there was a net accrual to the state exchequer out of the total borrowing. In 2014-15, out of the total borrowed amount of Rs. 13,918 crore, Rs 3609 crore were used for repayment of the principal amounts of the existing public debt, and Rs. 6129 crore for payment of interest. Taking into account the

Table 2.11 : Net Public Debt Received

(Rs. crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Gross Central Loans Received	782	827	508	550	718	2789
Internal Debt Recd	5251	5801	9046	9357	13199	14920
Total Debt Received	6032	6628	9554	9907	13918	17709
Recoveries of Loans and Advances	12	23	25	15	1493	17
Interest payments	4319	4304	4428	5459	6129	7221
Interest Received	238	574	167	269	345	312
Repayment of Debt	2190	2922	3070	3120	3609	3895
Net Debt Received	-227	-2	2248	1613	6018	6921
Net Debt Received as percentage of total borrowing	-3.8	0.0	23.5	16.3	43.2	39.1

Source : State Government Budgets

nominal receipts on account of recoveries of loans and advances given by the state government as well as interest receipts on such loans, it resulted in net inflow of Rs 6018 crore as resources for the state government, which was 43 percent of the net debt received. In 2013-14, this was only Rs 1613 core or 16 percent of the total borrowings. As per the budget estimates of 2015-16, this situation is likely to be improved further and the state government should be in a position to utilize Rs 6921 crore for its own developmental requirements, equivalent to 39 percent of net borrowings. Though the overall situation has now improved vastly, it still implies a limited space available to the state government for fiscal maneuverability.

2.5 Tax : GSDP Ratio

Table 2.12 shows a comparison among different states with respect to their Tax : GSDP ratios in 2013-14. It is seen that, for Bihar, this ratio at only 5.8 percent was the third lowest among all major states, above Jharkhand and West Bengal. Except Odisha, Rajasthan and Himachal Pradesh, all other states had their Tax : GSDP ratios above 7 percent, while Karnataka and Andhra Pradesh had the ratio exceeding 10 percent, the highest being 14 percent for Andhra Pradesh (composite state). Bihar's Own Tax: GSDP ratio of only 5.8 percent indicates that its tax potential remains largely untapped. If its own tax: GSDP ratio improves, the ratio between its total revenue and GSDP that currently stands at only 20 percent (2014-15) would also improve automatically. As regards the total Revenue: GSDP ratio, which includes the central transfers and grants, Bihar records the highest ratio of 20 percent, followed closely by Uttar Pradesh (20 percent), the composite state of Andhra Pradesh (19 percent) and Chattisgarh (19 percent).

Chart 2.5 : State Own Tax : GSDP Ratio (Percentage)

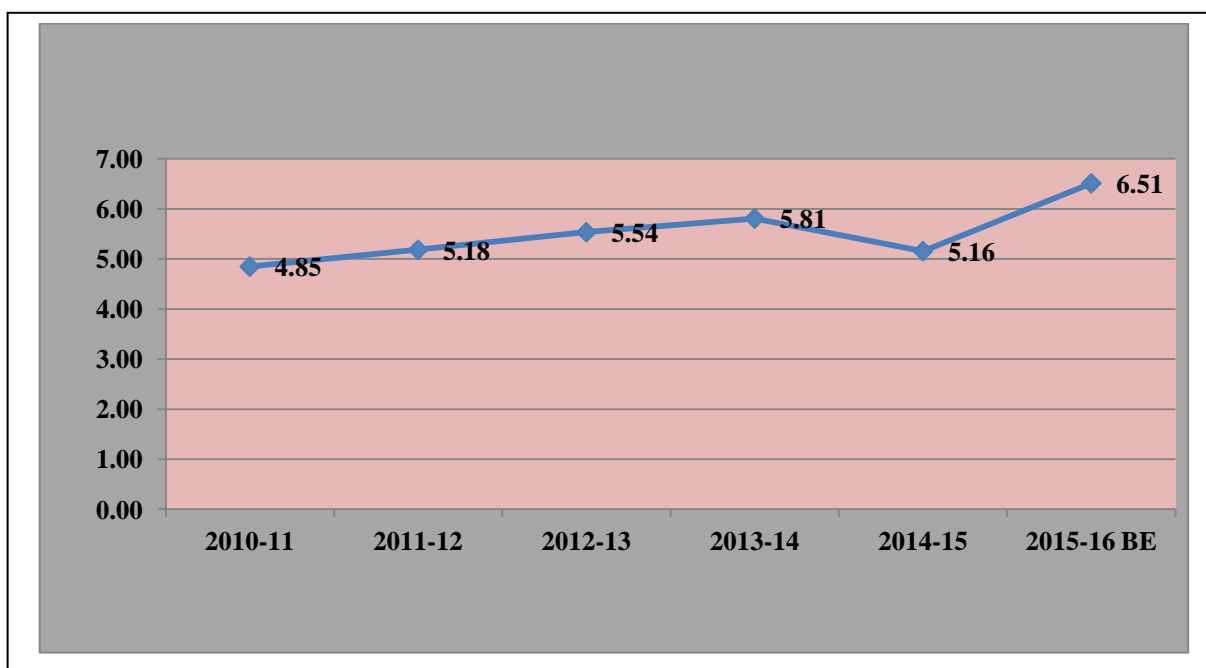


Table 2.12 : Tax : GSDP Ratio of States (2013-14)

State	Revenue Receipts (Rs. crore)	State's Own Tax (Rs. crore)	GSDP (Rs. crore)	State's Own Tax: Revenue Receipts	State's Own Tax: GSDP	Total Revenue: GSDP
Bihar	68919	19961	343663	29.0	5.8	20.1
Jharkhand	26137	9380	172773	35.9	5.4	15.1
West Bengal	72882	35831	706561	49.2	5.1	10.3
Odisha	48947	16892	272980	34.5	6.2	17.9
Uttar Pradesh	168214	66582	862746	39.6	7.7	19.5
Madhya Pradesh	75749	33552	434730	44.3	7.7	17.4
Rajasthan	74470	33478	517615	45.0	6.5	14.4
Maharashtra	149822	108598	1510132	72.5	7.2	9.9
Gujarat	79976	56372	765638	70.5	7.4	10.4
Punjab	35104	24079	317556	68.6	7.6	11.1
Haryana	38012	25567	388917	67.3	6.6	9.8
Karnataka	89543	62604	614607	69.9	10.2	14.6
Andhra Pradesh	90125	63604	464184	70.6	13.7	19.4
Kerala	49177	31995	396282	65.1	8.1	12.4
Tamil Nadu	98828	72027	854238	72.9	8.4	11.6
Himachal Pradesh	15711	5121	82585	32.6	6.2	19.0
Chhatisgarh	32050	14343	185682	44.8	7.7	17.3

Source : State Governments' Budgets

2.6 Revenue Account: Receipt and Expenditure

The summary of revenue receipts and expenditure of the state government is shown in Table 2.13. During 2010-11 to 2014-15, the revenue receipts grew at an annual rate of 15 percent, while revenue expenditure grew at a higher rate of 17 percent. Thus, though there was a revenue surplus in each of these five years, the surplus shriveled over the years. The total revenue receipts increased 1.76 times during the five-year period from Rs. 44,532 crore (2010-11) to Rs. 78,418 crore (2014-15). Simultaneously, its own revenue, tax and non-tax combined, have grown at a faster rate of 20 percent during this period, increasing from Rs. 10,855 crore (2010-11) to Rs. 22,309 crore (2014-15). In the budget estimates of 2015-16, both the revenue receipts and revenue expenditure are projected to increase steeply, leading to a more than double the surplus of Rs 5848 crore recorded in 2014-15. The state government's own revenue, tax and non-tax combined, met only 28 percent of its revenue expenditure in 2010-11, but it increased to 31 percent in 2014-15.

Table 2.13 : Revenue Account

(Rs. crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Revenue Receipt	44532	51320	59567	68919	78418	103189
Revenue Expenditure	38216	46500	54466	62477	72570	91208
Revenue Surplus	-6316	-4820	-5101	-6441	-5848	-11981
State's own tax + non-tax revenue	10855	13502	17388	21505	22309	34271
State's own revenue as % of total revenue	24.4	26.3	29.2	31.2	28.4	33.2
State's share of Central tax as % of total revenue	53.8	54.4	53.6	50.5	47.1	49.2
Central Grants as % of its total revenue	21.8	19.3	17.3	18.3	24.4	17.6
State's own revenue as % of revenue expenditure	28.4	29.0	31.9	34.4	30.7	37.6

Source : State Government Budgets

In Table 2.13, some more parameters of the state government finances have been presented, comparing its own tax and non-tax revenues with its total tax and non-tax revenues. The tax revenues of the state government consist of its own revenues as well as its share from the divisible pool of central taxes. The share of state government's own tax revenue in total tax revenue, which was stagnating at about 20 percent earlier, had started increasing from 2010-11 onwards and stood at 28 percent in 2014-15. It has financed about 30 percent of its total revenue expenditure during those years, except in 2013-14 when this share rose to 34 percent; as such, the state government still remains overwhelmingly dependent on the central resources. Till 2013-14, more than 50 percent of the total revenues of Bihar came from the divisible pool of central taxes alone; however, in 2014-15, it came down to 47 percent. The central grants, both plan and non-plan, together accounted for 24 percent of the total revenue in 2014-15. From 2013-14, the practice of direct transfers by the central government to implementing agencies in respect of Centrally Sponsored Schemes had been abolished and such transfers are now routed through the state budget. In consequence, share of central grants in total revenues of the state government increased in 2014-15.

Table 2.14 shows the break-up of the total expenditure of the state government between developmental and non-developmental purposes, as well as between plan and non-plan expenditures. The plan expenditure is mostly developmental, while non-plan expenditure may be either developmental or non-developmental. In the absence of any clear guideline for the classification of expenditure between plan and non-plan on a rational basis, the distinction is ambiguous. Further, with the abolition of Planning Commission, it is quite likely that the classification in terms of plan and non-plan expenditure may disappear in future. Consequently, there is not much significance in analyzing the expenditure in terms of plan and non-plan heads. The share of development expenditure, on revenue and capital accounts combined, in the total

expenditure of the state government had increased substantially from less than 50 percent in 2005-06 to 63 percent in 2010-11 and, after that, it has remained nearly unchanged with some minor variations from year to year. In 2014-15, the ratio was 68 percent. In absolute terms, the development expenditure has doubled during the five years, 2010-11 to 2014-15, indicating its remarkable growth.

Table 2.14 : Expenditure Pattern

(Rs crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Non-Developmental Expenditure	18583	22563	23805	25949	30390	34887
Developmental Expenditure	32122	37619	45402	54456	64308	85798
Total Expenditure	50705	60182	69207	80405	94698	120685
Development Expenditure as % of Total Expenditure	63.4	62.5	65.6	67.7	67.9	71.1
Plan Expenditure	20911	23008	28381	33678	43939	57426
Non Plan Expenditure	29794	37174	40825	46728	50759	63260
Plan Expenditure as % of Total Expenditure	41.2	38.2	41.0	41.9	46.4	47.6
Interest Payments	4319	4304	4428	5459	6129	7221

Source : State Government Budgets

As regards the crucial element of interest payment, it is seen from Table 2.15 that the difference between the gross and net interest payments is only marginal, due to the poor recovery of interest on the loans and advances given by the state government to its mostly loss-making public sector enterprises and autonomous bodies. For most of these public enterprises, their accumulated losses have wiped out their equity bases several times over. As already emphasised before, Table 2.16 indicates that the capital outlay has substantially increased from Rs. 9196 crore in 2010-11 to Rs. 18,150 crore in 2014-15, drawing from the substantial surplus in the revenue account and reinforcing the state government's commitment to development. In the budget estimates of 2015-16, it is projected to rise further to Rs. 24,853 crore.

Table 2.15 : Interest Payment and Receipt

(Rs. crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Gross Interest Payment	4319	4304	4428	5459	6129	7221
Net Interest Payment	4081	3730	4261	5190	5784	6909

Source : State Government Budgets

Table 2.16 : Parameters of Expenditure

(Rs. crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Total Tax Revenue	33848	40547	48153	54790	57713	81623
Own Tax Revenue	9870	12612	16253	19961	20751	30875
Own Non-tax Revenue	986	890	1135	1545	1558	3396
Own Tax + Non-tax Revenue	10855	13502	17388	21505	22309	34271
Capital Outlay	9196	8852	9585	14001	18150	24853
Capital Outlay as % of Total Expenditure	18.14	14.71	13.85	17.41	19.17	20.59

Source : State Government Budgets

The extent of the state government's dependence on central resources can be seen from Table 2.17, showing the gross transfer of resources to Bihar during 2010-11 to 2015-16. The gross transfer of resources includes the state government's share in central taxes, grants-in-aid from the central government, as well as central loans. The net transfer of resources from the central to state government constituted 59 percent of its total expenditure in 2014-15; in 2010-11, such transfers had met 67 percent of the total expenditure; in 2015-16, this share is estimated at 59 percent. As already noted, the contribution of state government's own resources to total expenditure increased from 21 percent to 27 percent during 2010-11 to 2014-15, the rest being covered by central transfers and borrowings. In 2014-15, 24 percent of its disbursements came from its own tax and non-tax revenues, 39 percent of the total disbursements came from its share of central taxes and 20 percent from the central grants, with the share of loans from the central government being 8 percent. The rest had to be raised from the market as loans.

Table 2.17 : Transfer of Resources from Central Government

(Rs crore)

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Aggregate Disbursements	50705	60182	69207	80405	94698	120685
Share in Central Tax	23978	27935	31900	34829	36963	50748
Grants-in-Aid from Centre	9699	9883	10278	12584	19146	18171
Gross Loans from Centre	782	827	508	550	718	2789
Gross transfer of Resources	34458	38645	42686	47963	56827	71707
Net Loans from Centre	316	361	23	-11	85	2070
Net Transfer of Resources	33993	38179	42202	47402	56194	70988
Own Tax + Non-tax Revenue	10855	13502	17388	21505	22309	34271

Source : State Government Budgets

2.7 Resource Management

The revenue receipts of the state government come from both tax and non-tax sources. The tax revenue consists of its own tax revenues and its share in the divisible pool of taxes and duties of the central government. Similarly, the non-tax revenues consist of the state government's own non-tax revenue, as well as central grants for plan and non-plan purposes. The own tax revenues of the state government include taxes on property and capital transactions, taxes on commodities and services, and taxes on agricultural income, the second component being by far the most important source. The non-tax revenues of the state government are collected under general, social and economic services. These include interest receipts from loans and advances to various government companies, public sector and quasi-commercial undertakings and other bodies, dividends and profit from them, interest earned on the investment of cash balances of the state government, and receipts from various services classified under general, social and economic services. Economic services contribute more significantly to the non-tax revenues than the other services.

The share of central taxes consists mainly of the shares of income tax, union excise duty, customs duty, service tax and wealth tax, which are collected by the central government, but the proceeds of which are shared with the state governments, under recommendations of the Finance Commissions, constituted every five years. The grants from the central government are for both plan and non-plan purposes. Within the plan grants, there are separate grants for the state government's own plan schemes, Central Plan Schemes and also for Centrally Sponsored Schemes. The non-plan grants include the statutory grants as well as relief on natural calamities and other public purpose grants.

Table 2.18 shows the revenue receipts of the state government from 2010-11 to 2015-16. From this table, it can be seen that, during all these years, more than 70 percent of the total revenue receipts of the state government came from the central government by way of state's share of divisible pool of central taxes and grants-in-aid. In 2010-11, this constituted as much as 75 percent of total revenue of the state government, which marginally decreased to 72 percent in 2014-15. Of this 72 percent, 48 percent was state's share of central taxes and 24 percent was central grants. State government's own resources contributed only 28 percent of total revenue – 26 percent from tax revenues and only 2 percent from non-tax revenues.

The state government's own tax revenues have grown from Rs. 9870 crore in 2010-11 to Rs. 20,751 crore in 2014-15, while the non-tax revenues have grown from Rs. 986 crore to Rs. 1558 crore during the same period. However, it should be remembered that the non-tax revenue includes some special transfers. For example, in 2011-12, the non-tax revenue was decreased, due to recovery of Rs 385 crore excess debt relief paid by the central government during 2010-11. In 2012-13, the non-tax revenue increased by Rs 151 crore due to receipts pertaining to 'Contributions and Recoveries from Pension etc.', as transfer from the Government of Jharkhand. This transfer was on account of the reimbursement of pension dues pertaining to the period prior to division of the erstwhile composite state of Bihar. In 2013-14 again, the non-tax revenue

increased by Rs 400 crore on this account. There was no recovery on this account in 2014-15, hence non-tax revenue could not register any growth.

The total revenue of the state government increased from Rs. 44,532 crore in 2010-11 to Rs 78,418 crore in 2014-15, growing annually at 15 percent. Compared to this, state government's own revenue receipts increased during the period at a higher annual rate of almost 20 percent and its tax revenues also grew at a slightly higher annual rate of above 20 percent. During this period, the grants from the central government increased at a rate of 17 percent only. However, consequent upon the abolition of direct transfers of grants by the central government to the state implementing agencies in respect of the Centrally Sponsored Schemes from the current fiscal, all these grants are now routed through the state government budget. This change has significantly increased the volume of central grants received by the state government. In 2014-15, such grants amounted to Rs. 19,146 crore, compared to Rs 12,584 during 2013-14. In 2015-16, however, it is expected to dip to Rs. 18,171 crore as per the budget estimates. Due to the higher growth of state government's own revenues compared to the growth of all other components of state government revenues, the share of the state government's own revenue in total revenues has also increased from 24 percent in 2010-11 to 28 percent in 2014-15. This share is further expected to improve to 33 percent in 2015-16.

Table 2.18 : Revenue Receipts

(Rs. crore)

Sources of Revenue	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
I. State's Own Revenue	10855	13502	17388	21505	22309	34271
a) Tax Revenue	9870	12612	16253	19961	20751	30875
b) Non-Tax Revenue	986	890	1135	1545	1558	3396
II. Receipts from Centre	33677	37818	42178	47413	56109	68918
a) Share of Divisible Taxes	23978	27935	31900	34829	36963	50748
b) Grants-in-aid	9699	9883	10278	12584	19146	18171
III. Total Revenue Receipts	44532	51320	59567	68919	78418	103189
State's Own Revenue as % of Total Receipts	24.4	26.3	29.2	31.2	28.4	33.2

Source : State Government Budgets

Among the direct taxes of the state government are included Stamp and Registration Fees, Taxes on Vehicles, Taxes and Duties on Electricity, Land Revenue, and Taxes on Agricultural Income, the last one being rather insignificant. Among the indirect taxes, which are far more important than the direct taxes, there are Taxes on Sales/Trade, State Excise, Taxes on Goods and Passengers, and Other Taxes and Duties on Commodities and Services. The details of receipts from these tax heads from 2010-11 to 2015-16 are shown in Table 2.19.

Table 2.19 : Tax Revenues under Different Heads

(Rs. crore)

Sources of Revenue	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Taxes on Sales/ Trade	4557	7476	8671	8453	8607	16025
Taxes on Goods and Passengers	2006	828	1932	4349	4451	5147
State Excise	1523	1981	2430	3168	3217	4000
Stamp and Registration Fees	1099	1480	2173	2712	2699	4000
Taxes on Vehicles	455	569	673	837	964	1200
Land Revenue	139	167	205	202	277	300
Taxes & Duties on Electricity	65	55	103	141	375	103
Other Taxes/ Duties on Commodities and Services	25	26	29	50	105	45
Others	0	30	37	47	54	55
Total	9870	12612	16253	19961	20750	30875

Source : State Government Budgets

An analysis of the tax receipts of the state government reveals that its major sources are Sales Tax (VAT), Stamp and Registration Fees, State Excise Duty, Taxes on Goods and Passengers and Taxes on Vehicles. These five taxes together account for 93 percent of the state government's total tax receipts. In 2014-15, Sales Tax alone (Rs. 8607 crore) comprised 42 percent of the total tax receipts. This was followed by Taxes on Goods and Passengers (22 percent), State Excise Duty (16 percent), Stamp and Registration Fees (13 percent) and Taxes on Vehicles (5 percent). These taxes are highly buoyant, their yields increasing steadily with the increase in GSDP. There has not been any significant change in the composition of tax revenues of the state government over the past few years. The composition of the state government's tax revenue is shown in Table 2.20 and their growth rates in Table 2.21.

Table 2.20 : Composition of Tax Revenues

Sources of Revenue	2010-11	2011-12	2012-13	2014-15	2015-16	2015-16 (BE)
Taxes on Sales/ Trade	46.2	59.4	53.5	42.4	41.6	52.0
Taxes on Goods and Passengers	20.3	6.6	11.9	21.8	21.5	16.7
State Excise	15.4	15.7	15.0	15.9	15.5	13.0
Stamp and Registration Fees	11.1	11.8	13.4	13.6	13.0	13.0
Taxes on Vehicles	4.6	4.5	4.2	4.2	4.7	3.9
Land Revenue	1.4	1.3	1.3	1.0	1.3	1.0
Taxes & Duties on Electricity	0.7	0.4	0.6	0.7	1.8	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source : State Government Budgets

During the period 2010-11 to 2015-16, the maximum annual growth rate has been registered by Taxes on Goods and Passengers (35 percent), followed by Stamp and Registration Fees (27 percent), Sales Tax (21 percent), Taxes on Vehicles (21 percent) and State Excise (21 percent). In 2014-15, Sales Tax has shown a low growth of 1.8 percent over the previous year; but in the current fiscal (2015-16), it is estimated to make up for this low growth and grow by nearly 86 percent. It should be noted here that the yearly growth rates of most of the taxes show wide variation.

Table 2.21 : Growth Rates of Tax Revenue

Sources of Revenue	Percentage Growth over Previous Year					CAGR (2010-16)
	2011-12	2012-13	2013-14	2014-15	2015-16 BE	
Taxes on Sales, Trade etc.	64.1	16.0	-2.5	1.8	86.2	21.0
Taxes on Goods and Passengers	-58.7	133.3	125.1	2.4	15.6	35.2
State Excise	30.0	22.7	30.4	1.5	24.4	20.6
Stamp and Registration Fees	34.7	46.8	24.8	-0.5	48.2	27.4
Taxes on Vehicles	25.0	18.3	24.4	15.1	24.5	20.9
Land Revenue	20.5	22.7	-1.8	37.4	8.3	16.5
Taxes & Duties on Electricity	-16.1	87.5	37.8	165.2	-72.6	27.0
Other Taxes and Duties	3.6	13.6	73.9	108.9	-56.9	25.2
Total	27.8	28.9	22.8	4.0	48.8	23.5

From Table 2.22, one can see that the direct taxes contributed only 18 percent of the total own tax revenue of the state government, indirect taxes contributing the rest 82 percent in 2014-15. This distribution was 80:20 in the previous years. This indicates that the process of fiscal reforms of the state government is yet to be reflected in the structure of its tax administration. It also defies the trend noticed in the structure of central tax receipts, which has shifted very significantly in favour of direct taxes after the economic reforms were introduced. But all the states show this skewed structure, as the high yielding direct taxes like income tax or corporation tax are administered by the central government.

Table 2.22 : Share of Direct and Indirect Taxes

Source	2010-11	2010-11	2011-12	2012-13	2014-15	2015-16 (BE)
Share of Indirect Taxes in State's Own Tax Revenue (%)	82	82	80	80	78	82
Share of Direct Taxes in State's Own Tax Revenue (%)	18	18	20	20	22	18
Total	100	100	100	100	100	100

Table 2.23 shows the major non-tax revenues of the state government, while its composition and growth rates are presented in Tables 2.24 and 2.25, respectively. The most important source of non-tax revenues has always been the royalty from mines and minerals, classified as receipts from ‘Non-Ferrous Mining and Metallurgical Industries’, followed by interest receipts. The minor minerals available in the state are brick earth, stones, limestone, sand, etc. The receipts against this element of non-tax revenues have always been more than budget estimates and it has grown annually at 21 percent, during the period 2010-11 to 2014-15. In comparison, the growth of interest receipts, the second most important element of its non-tax revenues, has shown wide fluctuations during the period. These fluctuations arise from the nature of the interest receipts. Till 2007-08, these two heads together had accounted for more than 60 percent of the total non-tax revenues of the state government; but due to the receipts of substantial debt relief from the central government, which is included under the head ‘Miscellaneous General Services’, the combined share of these two sources came down to 40 percent in 2009-10. However, it rose to 65 percent after the withdrawal of the debt relief from the next year. In 2011-12, the share of these two heads was abnormally high due to the recovery of the excess amount of debt-relief Rs 385 crore paid in 2010-11. In 2013-14, the total receipts from these two sources of non-tax revenues increased to Rs. 838 crore, 24 percent higher than in the previous year. In 2014-15, there was hardly any receipt (Rs 1.58 crore) on this account, and the combined share of the above two heads had fallen to 54 percent of total non-tax revenues. The budget estimates for 2015-16 also includes Rs 1600 crore against ‘Contributions and Recoveries on account of Pension’ due from the Government of Jharkhand. This amount relates to the pensioners-on-roll from the pre-reorganisation period, which was budgeted but never realized till 2012-13.

Table 2.23 : Major Non-Tax Revenues

(Rs. crore)

Sources of Revenue	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Non-Ferrous Mining and Metallurgical Industries	406	443	511	569	880	1000
Interest Receipts	238	574	167	269	345	312
Miscellaneous General Services	0	-384	22	0	2	0
Other Administrative Services	20	11	10	10	22	51
Police	12	9	25	27	30	29
Major Irrigation	5	3	3	1	1	30
Education, Sports, Arts and Culture	34	7	8	14	11	15
Roads and Bridges	40	60	33	41	55	64
Medical and Public Health	15	24	41	30	30	32
Other Rural Development Programmes	22	30	21	28	29	29
Social Security and Welfare	2	1	1	-1	0	1
Others	192	111	294	555	154	1832
Total	986	890	1135	1545	1558	3396

Source : State Government Budgets

As regards the share of interest receipts, the second largest contributor to non-tax revenue, it had increased to 24 percent in 2010-11 from 21 in 2009-10. In 2011-12, there was substantially higher collections under this head, due to contra-adjustment of Rs 268 crore on account of interest on loans given to the Bihar State Electricity Board, against its outstanding dues payable by the Department of Water Resources. The interest receipts had registered a sharp decline in 2012-13 due to less interest received from the investment of surplus cash balances of the state government. However, receipts on this account had increased from Rs 128 crore in 2012-13 to Rs 312 crore in 2014-15; consequently, the total interest receipts had also increased to Rs 345 crore in 2014-15. The non-tax revenues of the state government have been growing at an annual rate of 12 percent during 2010-11 to 2014-15, with considerable year-to-year variations.

Table 2.24 : Composition of Non-Tax Revenues

(Percentages)

Revenue Sources	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Non-Ferrous Mining and Metallurgical Industries	41.2	49.8	45.0	36.8	56.5	29.4
Interest Receipts	24.1	64.5	14.7	17.4	22.1	9.2
Miscellaneous General Services	0.0	-43.1	1.9	0.0	0.1	0.0
Other Administrative Services	2.0	1.3	0.9	0.7	1.4	1.5
Other non-Tax Revenues	32.6	27.6	37.4	45.0	19.9	59.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source : State Government Budgets

Table 2.25 : Growth Rates of Non-Tax Revenues

Revenue Sources	Yearly Growth Rates						CAGR (2010-16)
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)	
Non-Ferrous Mining and Metallurgical Industries	26.8	9.2	15.3	11.4	54.6	13.7	21.0
Interest Receipts	-32.6	141.1	-70.9	61.2	27.9	-9.5	0.9
Miscellaneous General Services	-100	-	-106	-99	611	-85	-
Other Administrative Services	112.1	-42.5	-12.9	1.7	113.9	135.4	20.9
Other non-Tax Revenues	71.1	-42.3	164.7	89.0	-72.3	1089.8	25.8
Total	-41.0	-9.7	27.6	36.1	0.9	118.0	16.6

Note : A dash indicates that the growth rate is not computed, because of very old amount.

Source : State Government Budgets

Comparing the budget estimates of revenues with the actual collections for 2014-15 (Table 2.26), it is seen that there was a shortfall by about Rs 1524 crore (49 percent), against the budget estimates in respect of non-tax revenues, while in respect of tax revenues there was a shortfall of only Rs 4912 crore (19 percent). The shortfall in non-tax revenue was almost entirely due to the

non-realisation of dues from the Government of Jharkhand (classified among 'Others'). The major shortfalls in tax revenues were in respect of Taxes on Sales and Trade (Rs 4213 crore), Stamp and Registration duty (Rs 901 crore) and State Excise (Rs 483 crore). There was a surplus collection of Rs 334 crore against Taxes on Goods and Passengers. Thus, the overall realisation of revenues, tax and non-tax, fall short of the target by a huge amount of Rs 6436 crore (28 percent).

Table 2.26 : Variation between the Estimated and Actual Realisation of Tax and Non-Tax Revenue (2014-15)

(Rs. crore)

Revenue Sources	Budget Estimate	Actual Receipts	Variance (Excess+/ Shortfall -)	% Variation Excess (+), Shortfall (-)
Own Tax Revenue				
Taxes on Sales, Trade	12820	8607	(-) 4213	(-) 32.9
Taxes on Goods and Passengers	4118	4451	(+) 334	(+) -8.1
State Excise	3700	3217	(-) 483	(-) 13.1
Stamp and Registration Fees	3600	2699	(-) 901	(-) 25.0
Taxes on Vehicles	1000	964	(-) 36	(-) 3.6
Land Revenue	250	277	(+) 27	(+) 10.9
Taxes & Duties on Electricity	83	375	(+) 292	(+) 353.2
Other Taxes and Duties on Commodities and Services	49	105	(+) 57	(+) 116.8
Total	25663	20751	(-) 4912	(-) 19.1
Own Non Tax Revenue				
Non-Ferrous Mining and Metallurgical Industries	750	880	(+) 130	(+) 17.3
Interest Receipts	202	345	(+) 143	(+) 70.5
Miscellaneous General Services	1	2	(+) 1	(+) 118.8
Other Administrative Services	252	22	(-) 230	(-) 91.3
Police	70	30	(-) 40	(-) 57.7
Major Irrigation	26	1	(-) 25	(-) 95.3
Education, Sports, Arts and Culture	8	11	(+) 3	(+) 33.2
Roads and Bridges	64	55	(-) 10	(-) 14.9
Medical and Public Health	43	30	(-) 13	(-) 30.1
Other Rural Development Programmes	22	29	(+) 7	(+) 32.5
Social Security and Welfare	1	0	(-) 1	(-) 97.8
Others	1643	154	(-) 1489	(-) 90.6
Total	3082	1558	(-) 1524	(-) 49.4
Grant Total (Tax + Non-Tax)	28745	22309	(-) 6436	(-) 22.4

Source : State Government Budgets

The cost of collection of major taxes is shown in Table 2.27. It can be seen from the table that this cost is relatively higher for taxes on vehicles. Secondly, except for taxes on vehicles, the cost of collection of all major taxes as a percentage of total taxes collected has been decreasing in recent years, as a result of the modernization of infrastructure and introduction of technology.

Table 2.27 : Cost of Collection of Taxes

Year	Collection (Rs. crore)	Expenditure on collection (Rs. crore)	Cost as Percentage of Collection	Collection (Rs. crore)	Expenditure on collection (Rs. crore)	Cost as Percentage of Collection
	Taxes on sales / trade, etc			State excise		
2010-11	4557	56	1.2	1523	38	2.5
2011-12	7476	65	0.9	1981	41	2.1
2012-13	8671	78	0.9	2430	43	1.8
2013-14	8453	70	0.8	3168	45	1.4
2014-15	8607	96	1.1	3217	50	1.6
2015-16 BE	16025	131	0.8	4000	72	1.8
	Stamp duty and registration fee			Taxes on Vehicles		
2010-11	1099	47	4.2	455	17	3.7
2011-12	1480	43	2.9	569	22	3.9
2012-13	2173	45	2.1	673	25	3.8
2013-14	2712	55	2.0	837	30	3.6
2014-15	2699	52	1.9	964	38	4.0
2015-16 BE	4000	73	1.8	1200	53	4.4

Source : State Government Budgets

Table 2.28 shows the state government's own tax and non-tax revenues as percentage of GSDP, which is a measure of its capacity to raise resources. The ratio of own tax revenues to the GSDP has risen slowly from 4.8 percent in 2010-11 to 6.5 percent in the budget estimates of 2015-16. This ratio is rather low, compared to other states. There has been some improvement in this ratio till 2013-14 when it rose to 5.8 percent before declining to only 5.2 percent in 2014-15. The total tax and non-tax revenues, as percentage of the GSDP, which was just 5.3 percent in 2010-11, is estimated to rise to 7.2 percent in 2015-16. The total revenue, including central transfers and grants, constituted 21.9 percent of the GSDP in 2010-11 which fell to 19.5 percent in 2014-15. It has been projected to rise again to 21.8 percent in 2015-16. While the ratio of own tax to GSDP in Bihar is one of the lowest in the country, the ratio between the total revenues and GSDP is quite high, due to the high volumes of central transfers to the state government.

Table 2.28 : Tax and Non-tax Revenue as Percentage of GSDP

Indicators	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Own Tax Revenue as % of GSDP	4.8	5.2	5.5	5.8	5.2	6.5
Own Non-Tax Revenue as % of GSDP	0.5	0.4	0.4	0.4	0.4	0.7
Total Revenue as % of GSDP	21.9	21.1	20.3	20.1	19.5	21.8
Buoyancy of Total Revenue w.r.t. GSDP (Ratio)	1.0	0.8	0.8	0.9	0.8	1.8
Buoyancy of State's Own Taxes w.r.t. GSDP(Ratio)	0.9	1.4	1.4	1.3	0.2	2.7

Source : State Government Budgets

Table 2.29 gives the buoyancy ratios in respect of the state government's major tax and non-tax revenues with respect to GSDP. From this table, it is noted that, in 2015-16, the Sales Tax and Stamp and Registration Fees are likely to be more buoyant than other tax heads of the state government, as in other years. Given the significant growth rate of GSDP in recent years, these taxes have a huge potential for resource mobilisation. None of the major taxes remained buoyant in 2014-15, which explains why there was a shortfall in the collection of tax revenues. Among the major sources of non-tax revenues, interest receipt shows negative buoyancy in 2015-16, while receipts from non-ferrous metals etc. was buoyant in 2014-15, but not so in 2015-16.

Table 2.29 : Buoyancy of Important Tax and Non-Tax Revenue Sources

Revenue Sources	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Taxes on Sales, Trade	0.7	3.3	0.8	-0.1	0.1	4.8
Stamp and Registration Fees	0.4	1.8	2.3	1.5	0.0	2.7
Taxes on Goods and Passengers	1.0	-3.0	6.4	7.3	0.1	0.9
State Excise	1.6	1.5	1.1	1.8	0.1	1.4
Taxes on Vehicles	1.3	1.3	0.9	1.4	0.9	1.4
Land Revenue	0.5	1.0	1.1	-0.1	2.2	0.5
Taxes & Duties on Electricity	-0.1	-0.8	4.2	2.2	9.7	-4.1
Total Tax Revenue	1.2	1.0	0.9	0.8	0.3	2.3
Non Ferrous Minerals	1.1	0.5	0.7	0.7	3.2	0.8
Interest Receipts	-1.3	7.2	-3.4	3.6	1.6	-0.5
Total Non Tax Revenue	-1.6	-0.5	1.3	2.1	0.1	6.6

Source : State Government Budgets

Table 2.30 shows the trend of revenues from grants from the central government. The total grants received by the state government was Rs 19,146 crore in 2014-15, as against Rs 9699 crore received in 2010-11. The total grants have increased twice during the five years 2010-11 to 2014-15. In 2014-15, 78 percent of total grants (50 percent in 2013-14) were received in respect of State Plan Schemes, after abolition of the direct off-budget transfers in respect of Centrally Sponsored Schemes which are now entirely routed through the budget. Other Centrally Sponsored Schemes accounted for only 4 percent of the total grants. The non-plan grants, however, would get reduced to Rs 323 crore in 2015-16.

Table 2.30 : Grants and Contributions from Central Government

(Rs. crore)

Sources	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Grants for State Plan Schemes	5457	5065	5052	6238	14936	15086
Grants for Central Plan Schemes	176	96	36	137	117	136
Grants for Centrally Sponsored Schemes	2141	2159	2778	2921	822	0
Non-plan Grants	1925	2563	2413	3288	3271	2948
Total Grants	9699	9883	10278	12584	19146	18171

Source : State Government Budgets

2.8 Performance of Tax Departments

Commercial Taxes Department

The Commercial Taxes Department collects taxes under eight acts — (i) Bihar Value Added Tax Act, 2005 (VAT); (ii) Bihar Tax on Entry of Goods into Local Area for Consumption, Use or Sale therein Act, 1993 (ET); (iii) Central Sales Tax Act, 1956 (CST); (iv) Bihar Electricity Duty Act, 1948 (ED); (v) Bihar Entertainment Tax Act, 1948 (ENT); (vi) Bihar Taxation On Luxuries in Hotel Tax Act, 1988 (HLT); (vii) Bihar Advertisement Tax Act, 1981 (ADV) and (viii) Bihar Tax on Professions, Trades, Calling and Employment Act, 2011 (PT).

Table 2.31 shows the taxes collected during 2010-11 to 2014-15 and till September for the current fiscal (2015-16). The VAT that had replaced the Sales Tax is the major contributor and accounts for about 64 percent of the total commercial tax collections by the state government in 2014-15, compared to 65 percent in the previous year. Besides VAT, Entry Tax is the only other major source of revenue for the Commercial Tax Department and contributed 32 percent to its total collections in 2014-15. These two taxes together, thus, accounted for 96 percent of the Department's total collections. The trend of collections tax-act-wise and tax-circle-wise is presented in Table A2.1 (Appendix) for 2013-14 and 2014-15, and Table A 2.2 (Appendix) for 2015-16 (up to September). Table 2.32 shows the year-wise shares of commercial taxes in the state government's revenue. The ratio was 16 percent in 2010-11, but had since increased significantly to 19 percent in 2013-14 before declining to 18 percent in 2014-15. However, their share in the total own taxes came down marginally from 68 percent in 2010-11 to 66 percent in 2014-15.

Table 2.31 : Act-wise Commercial Tax Collection

(Rs. crore)

Year	BST/ VAT	CST	ENT	ED	ADV	HLT	ET	PT	Total
2010-11	4532	59	16	65	1	5	2008	0	6685
2011-12	5668	75	25	55	0	7	2591	36	8458
2012-13	7391	74	28	102	1	8	3268	40	10911
2013-14	8546	83	39	141	1	10	4283	53	13156
2014-15	8796	71	46	373	1	11	4406	55	13758
2015-16 (Up to Sep., 15)	4362	25	23	81	0	3	2930	4	7429

Source : Department of Commercial Taxes, GOB

Table 2.32 : Share of Commercial Taxes in Total Revenue

Amounts	2010-11	2011-12	2012-13	2013-14	2014-15
Total Revenue of State (Rs. crore)	44532	51320	59567	68919	78418
State's Own Tax Revenues (Rs. crore)	9870	12612	16253	19961	20751
Revenue from Commercial Taxes (Rs. crore)	6685	8458	10911	13156	13758
Percentage Share of Commercial Taxes in Total Revenue (%)	15.0	16.5	18.3	19.1	17.5
Percentage Share of Commercial Taxes in State's Own Taxes (%)	67.7	67.1	67.1	65.9	66.3

Source : Department of Commercial Taxes, GOB

The commodity-wise collection of sales tax is depicted in Table 2.33, from which it can be seen that Petro-products have always been the single largest contributor to sales tax; it contributed Rs. 3284 crore in 2014-15, which was around 37 percent of the total collection of sales tax compared to 24 percent a year ago. Its contribution is more than three times that of the second major contributor, viz., Cement (Rs 920 crore) which yielded nearly the same amount as in last year (Rs 929 crore). Other important contributors, in the order of their contributions, are —Electrical Goods, Indian Made Foreign Liquor (IMFL), Unregistered Dealers & Works Contracts, Crude Oil, Automobiles, FMCG, Drugs and Medicines, Two/Three-Wheelers, Iron and Steel, Country Liquor, Works Contracts, Coal, Fertiliser and Insecticides, Consumer Durables, etc. While some of these, like Electrical Goods, Country Liquor, Two/Three Wheelers have registered substantial growth in 2014-15, others have registered only modest growth below 10 percent. Coal and Crude Oil have registered substantial negative growth during the year. Collections from Petroleum Products grew by only 4 percent.

Table 2.33 : Comparative Commodity-wise Collection of Sales Tax

(Rs. crore)

Sl. No.	Name of commodity	Collection (in crore)					Rate of Growth (%)				
		2010-11	2011-12	2012-13	2013-14	2014-15	2010-11	2011-12	2012-13	2013-14	2014-15
1	Advertisement Tax	0	0	1	0	1	-	-	84.0	-20.0	9.4
2	Asbestos	16	20	28	27	32	16.2	25.1	36.0	-4.0	21.8
3	Auto parts	29	46	57	72	74	10.7	60.9	22.7	26.4	3.0
4	Battery	50	57	73	102	96	21.2	15.4	26.5	40.3	-5.4
5	Beverages	32	41	72	72	129	47.4	27.1	75.4	-0.7	80.1
6	Bhujia	1	2	5	8	9	-	95.7	207.3	64.2	12.6
7	Bicycle	14	18	23	27	23	44.8	23.7	28.5	17.9	-14.7
8	Biscuits	58	82	112	140	126	-15.8	41.2	35.9	25.7	-10.2
9	Bricks	11	17	29	34	36	8.7	56.5	72.9	14.5	7.8
10	Cement	477	556	800	929	920	13.6	16.6	43.8	16.1	-0.9
11	Coal	141	195	282	378	223	27.2	38.1	44.8	33.8	-40.9
12	Computer	25	44	64	60	68	31.4	75.6	46.4	-7.1	13.5
13	Consumer Durables	77	94	124	145	173	53.1	22.9	31.3	17.1	19.6
14	Country Liquor	125	143	158	203	266	26.5	14.3	10.2	28.8	31.0
15	Crockery, Cutlery, Glassware & Ceramic ware	1	1	2	3	3	29.5	7.8	46.9	38.5	23.0
16	Crude Oil	213	249	315	817	635	28.3	16.8	26.7	159.4	-22.2
17	Diesel Oil	4	4	1	0	2	-	21.1	-68.9	-69.8	367.9
18	Drugs and Medicines	208	295	357	408	459	17.0	41.7	21.1	14.1	12.7
19	Dry Fruits	0	0	2	3	3	-	-	261.0	94.2	-5.4
20	Edible Oil	22	35	66	95	107	37.2	60.9	86.9	43.6	12.7
21	Electrical Goods	166	205	341	546	787	7.9	23.1	66.4	60.5	44.0
22	Electricity Duty	2	1	0	1	1	-13.1	-18.9	-66.6	85.8	-30.6
23	Electronic Goods	35	50	80	100	106	-18.9	44.5	59.6	24.7	5.8
24	Engine & Motors	14	19	24	25	24	81.2	32.0	27.7	2.7	-5.4
25	Entertainment Tax	11	17	16	18	10	-12.9	46.0	-5.0	14.1	-41.8
26	Ethanol	17	5	9	7	7	-	-69.5	71.6	-15.4	-10.9
27	Fast Food & Cooked Food	63	90	120	139	138	126.0	41.8	33.9	15.3	-0.3
28	Fertiliser& Insecticides	90	144	198	171	186	10.2	59.4	37.2	-13.4	8.9
29	Fire Work	1	1	2	4	6	-	-	117.2	149.0	48.2
30	FMCG	237	324	414	492	523	12.7	36.8	27.9	18.9	6.2
31	Foodgrains	78	90	93	174	89	28.1	15.6	3.5	85.9	-48.8
32	Footwear	13	18	27	37	42	31.3	35.1	54.3	33.7	13.8
33	Four-Wheelers & Chassis of Automobile	304	423	515	491	528	22.5	39.1	21.8	-4.7	7.5
34	Furniture	15	21	32	41	42	16.4	38.0	51.5	28.9	2.7
35	Ghee & Vanaspati	47	74	100	99	100	52.3	57.3	34.2	-0.5	1.1
36	Glasses	5	7	9	10	11	53.4	42.2	30.5	19.8	11.4
37	Gun & Rifles	1	1	1	1	1	-	13.6	12.6	13.7	2.3
38	Hardware	10	15	20	29	34	28.2	44.0	32.1	48.3	16.7
39	Hawai Chappals	0	0	0	0	1	-	-	47.6	67.2	138.0
40	Hide & Skin	1	1	1	1	2	-	-22.7	77.5	25.9	31.4
41	Hosiery And Readymade	35	41	59	73	80	28.1	19.4	41.7	25.0	9.8
42	IMFL	340	416	585	747	780	33.9	22.1	40.8	27.7	4.4
43	Iron & Steel	126	144	237	281	293	35.6	13.9	65.2	18.3	4.3
44	Jewellery	5	10	15	13	14	55.1	105.9	52.4	-14.3	8.2
45	Kerosene	3	2	2	2	2	-35.3	-23.5	10.3	7.0	4.7

Sl. No.	Name of commodity	Collection (in crore)					Rate of Growth (%)				
		2010-11	2011-12	2012-13	2013-14	2014-15	2010-11	2011-12	2012-13	2013-14	2014-15
46	Kirana	14	19	31	50	52	10.6	35.5	60.2	59.7	4.2
47	LPG	2	5	5	6	7	23.5	97.5	-0.2	20.3	21.8
48	Lubricants	35	42	47	55	56	10.8	19.1	10.6	16.7	3.4
49	Luxury and Hotel	5	7	8	9	9	35.6	24.4	11.4	16.7	2.5
50	Marble and Granites	6	9	18	27	35	57.5	43.8	103.2	45.8	30.6
51	Matches	1	0	0	1	1	-	-27.6	-7.9	151.6	-7.9
52	Moulded Luggage	4	6	7	9	9	45.3	41.3	15.0	22.3	-1.0
53	Not Available	0	0	0	0	0	0	0	0	0	0
54	Not Tagged	0	0	0	1	3	-	-	183.3	1888.0	213.0
55	Not Tagged with Any Commodity	0	1	8	20	15	-97.1	137.1	1133.7	139.1	-22.8
56	Others @ 12.5%	18	27	29	35	14	9.8	54.0	6.0	21.4	-58.9
57	Others @ 13.5%			16	44	85					
58	Others @ 4%	6	8	7	7	7	88.9	39.3	-9.2	1.0	0.0
59	Others @ 5%			8	35	51					
60	Others (Tax Free)	6	9	13	17	15	50.6	45.6	53.9	24.0	-12.2
61	Paints	34	46	61	83	89	41.0	37.0	30.8	36.6	6.9
62	Pan Masala	24	29	57	91	76	8.0	23.0	94.3	59.9	-16.8
63	Paper	18	19	23	38	39	9.5	11.1	20.3	61.9	2.9
64	Petro Products	2008	2528	2912	3152	3284	21.2	25.9	15.2	8.3	4.2
65	Petrol	0	0	1	1	2	-	-	296.1	101.2	23.8
66	Plastic Goods	16	22	35	49	51	48.6	33.0	60.1	42.1	3.5
67	Plyboard	2	3	5	11	14	-3.2	78.8	57.3	103.4	23.7
68	Plywood	4	5	8	9	12	20.2	45.6	55.5	12.7	29.4
69	Processed Vegetable & Food	1	2	4	6	7	-1.1	66.5	160.2	42.6	21.9
70	Professional Tax	0	22	37	51	52	-	-	70.0	37.8	3.0
71	Sand	1	1	8	10	26	-	-	605.4	31.6	154.6
72	Sanitary Fittings & Tiles	20	24	34	46	50	18.1	19.4	40.1	35.7	8.8
73	Sewing Machine	0	0	0	0	1	-	-	42.2	70.6	21.8
74	Spectacles	0	0	0	1	1	-	-	15.5	61.5	36.4
75	Sport Goods	1	1	1	1	1	-	-31.8	32.3	23.1	7.8
76	Staple Yarn	1	2	2	3	3	21.8	38.6	24.3	26.0	-4.0
77	Stationery	4	6	8	10	11	2.8	39.2	34.8	31.6	9.8
78	Stone Chips & Ballast	4	9	7	10	14	-1.3	135.5	-27.6	42.2	42.1
79	Tea & Coffee	5	7	8	12	13	6.6	33.2	12.2	47.9	12.0
80	Telephone	111	105	100	113	141	-25.7	-5.4	-4.9	12.8	24.6
81	Timber	4	4	11	17	22	20.5	19.5	150.0	58.7	27.0
82	Tobacco	78	88	151	158	167	36.9	12.6	72.3	4.7	5.7
83	Tools	5	6	10	12	10	-4.2	26.8	58.0	22.9	-19.0
84	Tractors	55	79	106	126	125	3.6	43.4	34.9	18.5	-0.7
85	Transporter	0	0	0	0	0	-	-	1728.8	-26.7	152.4
86	Two & Three-Wheelers	173	218	272	336	378	23.7	25.6	25.1	23.4	12.5
87	Tyres & Tubes	64	84	114	114	120	13.1	30.0	35.8	0.1	5.4
88	Unregistered Dealer Others	188	235	392	344	476	7.7	24.5	67.1	-12.1	38.1
89	Unregistered Dealer Works Contractor	392	413	490	659	750	21.3	5.4	18.5	34.7	13.8
90	Utensils	2	3	4	7	4	13.0	18.1	37.6	89.4	-37.9
91	Watch & Clock	7	9	11	13	12	37.0	30.4	21.4	15.6	-4.1
92	Works Contract & TDS	200	324	369	334	248	33.5	62.0	13.8	-9.5	-25.6
Total		6645	8446	10907	13156	13750	20.1	27.1	29.1	20.6	4.5

Source : Department of Commercial Taxes, GOB

Department of Registration, Excise and Prohibition

The Department of Registration, Excise and Prohibition is responsible for the collection of excise duty as well as the Stamp Duty and Registration Fees. In terms of revenue collection, it is now second only to the Commercial Taxes Department. Table 2.34 shows the collections of State Excise Duty during the last five years. More than 96 percent of total state excise duty collections were contributed by country spirit and foreign liquors/spirits during 2014-15; these two together yielded Rs 3102 crore, out of the total excise collections of Rs 3216 crore. During 2015-16, these two are again budgeted to yield Rs 3981 crore, out of the total excise duty collection of Rs. 4001 crore.

Table 2.34 : Collections of State Excise Duty

(Rs. crore)

Sources of Revenue	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Country Spirits	489	624	777	1223	1325	2159
Country Fermented Liquors	0	0	0	5	24	0
Malt Liquor	4	5	6	9	8	0
Liquor	0	0	0	0	0	0
Foreign Liquors and Spirits	990	1294	1579	1854	1777	1837
Commercial & denatured Spirit & Medicated wines	1	0	0	0	1	0
Medicinal and toilet preparations containing alcohol, opium etc.	1	1	1	1	4	1
Opium, Hemp & other drugs	5	6	7	6	2	0
Fines and confiscations	17	19	14	17	27	4
Other Receipts	22	32	47	52	47	0
Deduct-Refunds	-5	-1	0	0	0	0
Total	1523	1981	2430	3168	3216	4001

Source : Department of Registration, Excise and Prohibition, GOB

Table 2.35 shows the details of revenue from Stamp Duties and Registration Fees during the period 2010-11 to 2014-15. The trend of the data reveals that there has been a steady increase in the collection of Stamp Duty from Rs. 956 crore in 2010-11 to Rs. 2167 crore in 2014-15, at an annual growth rate of 23 percent. But the total collections in 2014-15 had fallen by 4 percent compared to 2013-14, on account of a fall in respect of the the most important component – non-judicial stamp duty.

Table 2.35 : Revenue from Stamp Duty and Registration Fees

(Rs. crore)

Source of Revenue	2010-11	2011-12	2012-13	2013-14	2014-15
From Printed Non-judicial stamps	334	356	369	320	330
From Non-judicial stamp duty deposited through Bank challan	571	809	1340	1856	1750
Non-Judicial adhesive stamps	15	17	13	28	30
Non Judicial special adhesive stamp – through Franking machines	2	8	24	16	18
Revenue Stamps	2	2	3	2	2
Judicial Stamps	32	32	12	36	37
Sub-Total	956	1224	1761	2257	2167
Fees on registration of instruments	265	356	522	668	646
Landlord's Registration fee	18	21	27	32	31
Landlord's Process fee	3	3	4	4	4
Fee from searches of records & Non-Encumbrances	2	2	2	4	5
Fee from certified copies	2	2	3	2	2
Sub-Total	290	384	558	711	688
Total	1246	1608	2319	2968	2855

Source : Department of Registration, Excise and Prohibition, GOB

Table 2.36 shows the district-wise collection of revenue from Stamp Duties and Registration Fees till September, 2015 for the year 2015-16. Patna district expectedly contributes the maximum revenue (about 19 percent) from this source, more than three times the collection from Muzaffarpur, the next highest contributor. The pattern of contributions of the districts remains more or less the same as the last year. The details for the years 2013-14 and 2014-15 are shown in Table A 2.3 (Appendix).

Table 2.36 : District-wise Revenue from Stamp Duty and Registration Fees, 2015-16 (Upto Sept., 2015)

(Rs. crore)

District	No. of Documents	Registration Fees	Stamp Fee	Total Receipt	Target	% receipt against target	Receipt per Document (Rs.)
Patna	39797	66.71	227.19	293.9	401.34	0.73	73850
Nalanda	15583	9.57	29.09	38.66	52.67	0.73	24809
Bhojpur	14890	9.68	30.29	39.97	53.69	0.74	26844
Buxar	7817	5.84	17	22.84	31.19	0.73	29218
Rohtas	14545	11.07	32.66	43.73	51.64	0.85	30065
Kaimur	7887	4.1	12.02	16.12	23.02	0.70	20439
Gaya	20268	17.32	52.42	69.74	87.43	0.80	34409
Jehanabad	5111	3.28	12.03	15.31	18.92	0.81	29955
Arwal	3084	1.76	5.2	6.96	8.69	0.80	22568
Nawada	10202	5.41	16.17	21.58	26.59	0.81	21153
Aurangabad	13342	7.86	23.5	31.36	44.49	0.70	23505
Saran	19816	12.3	34.85	47.15	56.23	0.84	23794
Siwan	18580	11.85	33.94	45.79	57.26	0.80	24645
Gopalganj	16290	10.44	30.47	40.91	51.13	0.80	25114
West Champaran	24867	10.59	30.44	41.03	51.13	0.80	16500
East Champaran	33939	20.3	57.72	78.02	92.03	0.85	22988
Muzaffarpur	30080	22.71	65.13	87.84	120.66	0.73	29202
Sitamarhi	21810	12.32	34.7	47.02	59.82	0.79	21559
Sheohar	4194	1.76	5.18	6.94	9.72	0.71	16547
Vaishali	19232	13.95	40.61	54.56	68	0.80	28369
Darbhanga	19810	12.53	37.03	49.56	65.44	0.76	25018
Madhubani	26798	12.51	34.94	47.45	58.77	0.81	17707
Samastipur	27441	13.21	36.62	49.83	63.92	0.78	18159
Begusarai	15037	11.69	35.46	47.15	60.32	0.78	31356
Munger	4572	4.07	12.7	16.77	19.32	0.87	36680
Sheikhpura	4448	1.66	5.26	6.92	8.68	0.80	15558
Lakhisarai	5193	3.17	9.41	12.58	16.36	0.77	24225
Jamui	8209	3.5	10.23	13.73	17.86	0.77	16726
Khagaria	7335	4.07	11.24	15.31	19.42	0.79	20873
Bhagalpur	13255	11.83	35.22	47.05	64.91	0.72	35496
Banka	8848	4.96	12.31	17.27	23.52	0.73	19519
Saharsha	10216	5.92	18.29	24.21	33.24	0.73	23698
Supaul	12882	5.69	16.13	21.82	24.52	0.89	16938
Madhepura	10345	5.89	16.8	22.69	26.57	0.85	21933
Purnea	18046	11.59	35.17	46.76	59.31	0.79	25912
Kishanganj	14356	4.32	15.1	19.42	26.59	0.73	13527
Araria	18777	7.63	21.54	29.17	39.37	0.74	15535
Katihar	21012	9.12	26.77	35.89	50.62	0.71	17081
Total	587914	392.18	1180.83	1573	2044.39	0.77	26756

Source : Department of Registration, Excise and Prohibition, GOB

2.9 Expenditure Management

The expenditure of the state government is classified under three major functional categories — General Services, Social Services and Economic Services. Apart from revenue expenditure and capital outlay on these services, the other areas of spending are repayment of loans and advances on the capital account, and grants to local bodies and autonomous institutions. The state government also gives loans for various purposes to its Public Sector Undertakings, Urban Local Bodies, Panchayati Raj Institutions, and to its own employees for various purposes. It is to be noted that while the repayments of principal amounts of loans are made from the capital account, interest payment is made from the revenue account, under the General Services.

Table 2.37 presents the expenditure of the state government under various heads for the period 2010-11 to 2015-16 (BE). Tables 2.38 and 2.39 present the structure of the expenditure during this period. Finally, Table 2.40 presents the annual growth rates of various expenditure items. These four tables together give us an insight into the expenditure pattern of the state government.

Table 2.37 : Expenditure from Consolidated Fund

(Rs. crore)

Expenditure Heads	2010-11	2011-12	2012-13	2014-15	2015-16	2015-16 (BE)
General Services	15287	17730	18645	22018	26408	30259
Social Services	15089	18729	23107	26395	31713	38084
Economic Services	7836	10038	12710	14060	14445	22861
Grants in Aid	3	3	4	4	4	5
Capital Outlay	9196	8852	9585	14001	18150	24853
Discharge of Public Debt	2190	2922	3070	3120	3609	3895
Loans and Advances by State	1103	1906	2086	807	369	729
Total	50705	60180	69207	80405	94698	120685

Source : State Government Budgets

Between 2005-06 and 2009-10, the share of capital outlay in the total expenditure of the state government had increased from 9 to 17 percent; thereafter, it has generally remained around that level. In 2015-16, it is projected to increase to more than 20 percent (Table 2.38). For the future growth of the state economy, the increase in capital outlay was a very positive development. The revenue expenditure on general services is of non-developmental nature and its share in total expenditure was 28 percent in 2014-15. In that year, the shares of other components were — social services (34 percent), economic services (15 percent), capital outlay (19 percent), discharge of public debt (4 percent) and loans and advances (0.4 percent). The sustained capital outlay at a high level over the entire period from 2010-11 to 2014-15 translated into an increase of nearly Rs 9000 crore over the period. Growing annually at 20 percent, it increased from Rs 9196 crore in 2010-11 to Rs. 18,150 crore in 2014-15. The increase in capital outlay has catapulted the economy of the state to one of the fastest growing among all major states in India.

The overall pattern shows some structural changes in the expenditure pattern over the years. While the share of expenditure on social services remains nearly the same, the expenditure pattern has shifted in favour of economic services and capital outlay at the expense of expenditure on general services, which is a welcome feature. It shows that funds used earlier for running the administration are now being released increasingly for expenditure on development and asset creation in the economy.

Table 2.38 : Composition of Government Expenditure

(Percentage)

Expenditure Heads	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
General Services	30.1	29.5	26.9	27.4	27.9	25.1
Social Services	29.8	31.1	33.4	32.8	33.5	31.6
Economic Services	15.5	16.7	18.4	17.5	15.3	18.9
Capital Outlay	18.1	14.7	13.8	17.4	19.2	20.6
Discharge of Public Debt	4.3	4.9	4.4	3.9	3.8	3.2
Loans and Advances	2.2	3.2	3.0	1.0	0.4	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source : State Government Budgets

Table 2.39 : Percentage Composition of Total Expenditure

Expenditure Heads	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Revenue Account	75.4	77.3	78.7	77.7	76.6	75.6
Non-Developmental Revenue Expenditure	30.1	29.5	26.9	27.4	27.9	25.1
Developmental Revenue Expenditure	45.2	47.8	51.8	50.3	48.7	50.5
Social Services	29.8	31.1	33.4	32.8	33.5	31.6
Economic Services	15.5	16.7	18.4	17.5	15.3	18.9
Capital Account	24.6	22.7	21.3	22.3	23.4	24.4
Non-Developmental Capital Expenditure	6.5	8.0	7.5	4.9	4.2	3.8
Discharge of Public Debt	4.3	4.9	4.4	3.9	3.8	3.2
Loans and Advances by State	2.2	3.2	3.0	1.0	0.4	0.6
Developmental Capital Expenditure	18.1	14.7	13.8	17.4	19.2	20.6
Capital Outlay	18.1	14.7	13.8	17.4	19.2	20.6
Total Non- Developmental Expenditure	36.6	37.5	34.4	32.3	32.1	28.9
Total Developmental Expenditure	63.4	62.5	65.6	67.7	67.9	71.1
Total Expenditure	100.0	100.0	100.0	100.0	100.0	100.0

Source : State Government Budgets

Table 2.39 presents the composition of total expenditure of the state government in more detail. From this table, it is seen that social and economic services, essential for the development of the state, now account for the bulk of the expenditure, reflecting the state government's commitment to improve the social sectors. The revenue and capital accounts claimed 76 and 24 percent of the total expenditure (2014-15). About 68 percent of the total expenditure was of developmental nature and 32 percent non-developmental in 2014-15. In 2010-11, these shares were 63 and 37 percent respectively.

As observed earlier, the state government has been able to manage its debt problem quite well in recent years by consistently generating substantial surpluses in its revenue account. The servicing of debt now accounts for around 3 percent of the total expenditure and interest payment consumes another 1 percent. Containing the debt burden within manageable limits has enabled the state government to launch ambitious programmes for infrastructure, essential for economic growth of the state. From Table 2.40, it is seen that the annual growth rate of capital outlay is as high as 24 percent during the recent period. The expenditure on social and economic services has also been growing at equally high rates of 20 and 21 percent, respectively. On the whole, the total expenditure of the state government has been growing annually at 18 percent.

Table 2.40 : Growth Rates of Expenditure

Expenditure Heads	Annual Growth Rates						CAGR (2010-16)
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)	
General Services	25.3	16.0	5.2	18.1	19.9	14.6	14.6
Social Services	14.4	24.1	23.4	14.2	20.1	20.1	19.9
Economic Services	10.6	28.1	26.6	10.6	2.7	58.3	20.6
Capital Outlay	25.4	-3.7	8.3	46.1	29.6	36.9	23.9
Discharge of Public Debt	10.4	33.4	5.0	1.6	15.7	7.9	10.6
Loans and Advances	23.0	72.9	9.4	-61.3	-54.3	97.7	-20.3
Total	18.5	18.7	15.0	16.2	17.8	27.4	18.2

Source : State Government Budgets

Within general services, expenditure on certain items cannot be much controlled. These are mostly items of charged expenditure, like pension and interest payment, expenditure in respect of judiciary, jails, police and the like, which can be curtailed only at a great peril to the state government. For all these items, the expenditure has been rising steadily. Even though the share of general services in the total expenditure of the state government has been going down, in absolute terms, it has grown steadily at an annual rate of around 15 percent during the period 2010-16. Besides steep increases in interest payments and pension charges, this increase has also been due to increased expenditure on police administration, district administration, judiciary, legislature, tax departments, and public works. In 2014-15, expenditure on general services increased by 20 percent over the previous year.

2.10 Revenue Expenditure

Table 2.41 depicts the details of revenue expenditure of the state government, which is incurred to maintain the present level of activities. The share of revenue expenditure in total expenditure has remained almost unchanged between 75-80 percent during the period 2010-11 to 2015-16. The non-plan component of revenue expenditure consumes the bulk of it. In 2014-15, it constituted 65 percent of the total revenue expenditure, compare to 71 percent in 2010-11. The shares of plan and non-plan expenditure in total expenditure had also undergone gradual shifts over the past five years, with the share of non-plan expenditure decreasing from 59 percent in 2010-11 to 54 percent in 2014-15. With the winding up of the Planning Commission, this discussion about plan and non-plan expenditure, however, may lose relevance in the coming years.

Table 2.41 : Details of Revenue Expenditure

(Rs. crore)

Expenditure Heads	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Revenue Expenditure (RE)	38216	46500	54466	62477	72570	91208
Capital Expenditure (CE)	12489	13682	14740	17928	22128	29477
Total Expenditure (TE)	50705	60182	69207	80405	94698	120685
Non Plan Expenditure	29794	37174	40825	46728	50759	63260
Revenue A/c (NPRE)	27316	34013	37574	43381	47059	59055
Capital A/c	2478	3161	3252	3347	3700	4205
Plan Expenditure	20911	23008	28381	33678	43939	57426
Revenue A/c (PRE)	10900	12487	16892	19096	25511	32154
Capital A/c	10011	10521	11489	14581	18428	25272
Rate of growth of NPRE (%)	13.14	24.51	10.47	15.46	8.48	25.49
Rate of growth of PRE (%)	29.16	14.56	35.28	13.05	33.59	26.04
RE/TE(%)	75.37	77.27	78.70	77.70	76.63	75.58
NPRE/TE (%)	53.87	56.52	54.29	53.95	49.69	48.93
TE/GSDP(%)	24.91	24.74	23.57	23.40	23.54	25.45
RE/GSDP(%)	18.77	19.11	18.55	18.18	18.04	19.24
Revenue Receipt (RR)/TE (%)	87.83	85.28	86.07	85.71	82.81	85.50
NPRE/RR(%)	61.34	66.28	63.08	62.95	60.01	57.23
Buoyancy of RE w.r.t. GSDP	0.69	1.11	0.83	0.86	0.95	1.44
Buoyancy of RE w.r.t. RR	0.68	1.42	1.07	0.94	1.17	0.81

Source : State Government Budgets

The total government expenditure and revenue expenditure was 24 percent and 18 percent, respectively of the GSDP of Bihar in 2014-15. From the buoyancy ratios, it is seen that, during 2010-11 to 2014-15, the revenue expenditure increased at a slower rate than the GSDP, except in 2011-12. However, in the budget estimates of 2015-16, revenue expenditure has been projected to grow at a higher rate than the GSDP, because of much higher projected expenditure in economic services and capital outlay.

2.11 Expenditure on Salary and Pension

The salary and pension constitute the two most important items of expenditure for all governments. The trends in expenditure on salaries as well as pension are presented in Table 2.42. The pension and salary payments together constituted 36 percent of the state government's revenue expenditure in 2014-15 (38 percent in 2013-14); down from 44 percent five years ago.

Table 2.42 : Expenditure on Salaries and Pensions

(Rs. crore)

Heads	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 BE
Expenditure on Salaries	10550	12194	13558	14037	14607	18535
Non-Plan Head	9953	11495	12865	13315	13910	17758
Plan Head	596	699	693	721	697	777
Salary as percentage of GSDP	5.2	5.0	4.6	4.1	3.6	3.9
Salary as percentage of RR	23.7	23.8	22.8	20.4	18.6	18.0
Salary as percentage of RE	27.6	26.2	24.9	22.5	20.1	20.3
Expenditure on Pensions	6144	7808	8364	9482	11345	12980
Rate of Growth	42.3	27.1	7.1	13.4	19.6	14.4
Pension as percentage of GSDP	3.0	3.2	2.8	2.8	2.8	2.7
Pension as percentage of RR	13.8	15.2	14.0	13.8	14.5	12.6
Pension as percentage of RE	16.1	16.8	15.4	15.2	15.6	14.2
Total expenditure on Salary & Pension	16694	20002	21921	23518	25952	31514
Total as percentage of GSDP	8.2	8.2	7.5	6.8	6.5	6.6
Total as percentage of RR	37.5	39.0	36.8	34.1	33.1	30.5
Total as percentage of RE	43.7	43.0	40.2	37.6	35.8	34.6

Source : State Government Budgets

The salary of the state government employees alone accounted for 20 percent of the total revenue expenditure in 2014-15, gradually coming down from 28 percent in 2010-11. In the current fiscal, it is likely to remain unchanged to 20 percent. Similarly, pension constituted 16 percent of the revenue expenditure in 2014-15. During 2010-11 to 2014-15, there had been major increases in expenditure on these two accounts by almost Rs. 9258 crore (Rs 4057 crore for salary and Rs. 5201 crore for pension). The expenditure on salary and pension is projected to increase by about

Rs 5562 crore in the budget estimates of 2015-16. However, the salary expenses lie within the norm of 35 percent of revenue expenditure, as recommended by the Twelfth Finance Commission. The salary and pension payments had increased annually at the rate of 8 percent and 17 percent, respectively during the period 2010-11 to 2014-15. The total expenditure on these two accounts registered an annual growth rate of nearly 12 percent during this period.

2.12 Quality of Expenditure

The quality of expenditure can be judged by the proportion of expenditure devoted to the creation of social and physical infrastructure, proportion of developmental expenditure on social and economic services as opposed to the non-developmental expenditure on general services, and the proportion of plan expenditure as opposed to non-plan expenditure. Thus, the important parameters of quality in expenditure are : (i) ratio of capital outlay to total expenditure; (ii) ratio of capital outlay to GSDP; (iii) proportion of revenue expenditure on social and economic services; (iv) proportion of non-salary expenditure incurred in these services; and (v) ratio of plan to non-plan expenditure. The higher these ratios, the better the quality of expenditure would become. Table 2.43 shows these ratios during the five-year period from 2010-11 to 2014-15 and also for the budget estimates of 2015-16.

Table 2.43 : Quality Parameters of Expenditure

Expenditure Heads	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Capital Outlay (Rs. crore)	9196	8852	9585	14001	18150	24853
Revenue Expenditure (Rs. crore)	38216	46500	54466	62477	72570	91208
Expenditure on Social/ Economic Services (Rs. crore)	22926	28767	35817	40455	46158	60945
(i) Salary Component (Rs. crore)	7027	8171	9033	8482	9051	11660
Salary component (%)	30.7	28.4	25.2	21.0	21.0	19.1
(ii) Non salary component (Rs. crore)	15899	20596	26784	31973	37107	49285
Non-salary component (%)	69.3	71.6	74.8	79.0	80.4	80.9
Capital Outlay/ Total Expenditure (%)	18.1	14.7	13.8	17.4	19.2	20.6
Revenue Expenditure / Total Expenditure (%)	75.4	77.3	78.7	77.7	76.6	75.6
Revenue Expenditure /GSDP (%)	18.8	19.1	18.6	18.2	18.0	19.2
Capital Outlay /GSDP (%)	4.5	3.6	3.3	4.1	4.5	5.2
Plan Expenditure / Non-Plan Expenditure (%)	70.2	61.9	69.5	72.1	86.6	90.8
Plan Expenditure / Total Expenditure (%)	41.2	38.2	41.0	41.9	46.4	47.6

Source : State Government Budgets

Judged by all the parameters, the quality of expenditure in Bihar has significantly improved over the recent years. The non-salary component of developmental revenue expenditure had increased from 69 to 80 percent during 2010-15, while the share of plan expenditure in total expenditure had increased from 41 to 46 percent. The ratio of plan to non-plan expenditure has also systematically increased from 70 percent to nearly 87 percent over this period. All these ratios reflect that the public finances in Bihar are being managed prudently. These improvements have

led to higher growth of GSDP of Bihar and improvement in socio-economic conditions of its people.

2.13 Sectoral Expenditure

Expenditure on Social Services

Providing better education and health services, safe drinking water, sanitation, housing etc. is very important to establish the linkage between economic growth and welfare of citizens. This desired linkage can be established through adequate expenditure on social services. Table 2.44 presents such expenditures by the state government during 2010-11 to 2014-15 and also the budget estimates of 2015-16.

Table 2.44 : Expenditure on Social Services

Expenditure Heads	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Education, Sports, Arts & Culture						
Total Expenditure (Rs. crore)	8244	10214	14445	15047	16531	22459
Revenue Expenditure (Rs. crore)	8101	10157	14080	14344	16267	21167
(a) Salary component (%)	45.0	43.5	44.5	33.7	28.7	28.6
(b) Non-salary component (%)	55.0	56.5	55.5	66.3	71.3	71.4
Capital Outlay (Rs. crore)	144	56	364	704	263	1292
Capital Outlay (%)	1.7	0.6	2.5	4.7	1.6	5.8
Health and Family Welfare						
Total Expenditure (Rs. crore)	1667	2125	2398	2574	3604	4949
Revenue Expenditure (Rs. crore)	1502	1804	1836	2113	3288	3478
(a) Salary component (%)	73.0	72.9	79.6	74.8	51.0	57.6
(b) Non-salary component (%)	27.0	27.1	20.4	25.2	49.0	42.4
Capital Outlay (Rs. crore)	165	321	563	460	316	1471
Capital Outlay (%)	9.9	15.1	23.5	17.9	8.8	29.7
Water Supply, Sanitation, Housing and Urban Development						
Total Expenditure (Rs. crore)	2327	2045	2587	3605	4542	5544
Revenue Expenditure (Rs. crore)	1698	1713	2304	2967	3639	4425
(a) Salary component (%)	10.0	11.6	8.9	8.0	7.6	8.4
(b) Non-salary component (%)	90.0	88.4	91.1	92.0	92.4	91.6
Capital Outlay (Rs. crore)	630	332	282	638	903	1119
Capital Outlay (%)	27.1	16.2	10.9	17.7	19.9	20.2
Total (Social Services)						
Total Expenditure (Rs. crore)	16161	19536	24438	28253	33386	42128
Revenue Expenditure (Rs. crore)	15089	18729	23107	26395	31713	38084
(a) Salary component (%)	34.0	33.6	30.7	26.6	22.0	23.3
(b) Non-salary component (%)	66.0	66.4	69.3	73.4	28.0	76.7
Capital Outlay (Rs. crore)	1072	807	1331	1858	1674	4044
Capital Outlay (%)	6.6	4.1	5.4	6.6	5.0	9.6

Source : State Government Budgets

The state government's concern for social development is amply reflected in the increased allocation for this sector from Rs. 16,161 crore in 2010-11 to Rs. 33,386 crore in 2014-15. In the budget estimates of 2015-16, social services expenditure is projected to increase further by more than Rs. 8742 crore. The share of capital outlay in social services sector, however, decreased during this period, from 7 percent in 2010-11 to only 5 percent in 2014-15, through it has been projected to rise to 9.6 percent in the budget of 2015-16.

The non-salary component of the revenue expenditure on social services (the amount spent actually on the maintenance of assets already created) was 78 percent in 2014-15, as against 66 percent in 2010-11. The salary component of revenue expenditure in respect of water supply, sanitation, housing and urban development has in fact been very small (8 percent in 2014-15), but it accounted for a large share of total revenue expenditure in respect of health and family welfare (51 percent in 2014-15), though it has been reducing over the years. The total revenue expenditure on social services had increased from Rs 15,089 crore (2010-11) to Rs 31,713 crore (2014-15) growing at an annual rate of 20 percent. In 2015-16, it is estimated to rise to Rs 38,084 crore. The total capital outlay on social services increased from Rs. 1072 crore in 2010-11 to Rs. 1674 crore in 2014-15. In 2015-16 budget, it has been given a quantum jump to Rs 4044 crore, mostly due to increases of over Rs 1000 crore each in capital outlay on education and health/family welfare.

Expenditure on Economic Services

Table 2.45 shows the expenditure on economic services, which creates additional productive capacity in the economy. Agriculture and allied activities, irrigation and flood control, energy and power, industry and minerals and transport together accounted for nearly 68 percent of the total expenditure on economic services in 2014-15, considering both revenue and capital accounts. About 51 percent of the total expenditure on economic services was made on capital account in 2014-15 (44 percent in 2013-14). The capital outlay in respect of economic services increased substantially from Rs 7728 crore (2010-11) to Rs 14,728 crore (2015-16). It had increased steadily during the last few years and was nearly 81 percent of the total capital outlay of Rs 18,150 crore in 2014-15. Out of the total capital outlay on economic services, energy and power had taken the largest share (Rs 7948 crore), followed by transport (Rs 5194 crore) and agriculture and allied activities (Rs 3615 crore) in 2014-15. The non-salary component of the revenue expenditure in economic services, as in the case of social services, also remained high throughout the period and was 87 percent during 2014-15. The salary component was high only in respect of irrigation and flood control, accounting for nearly 65 percent of the total expenditure in 2014-15 (63 percent in 2013-14).

Table 2.45 : Expenditure on Economic Services

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Agriculture and Allied Activities						
Total Expenditure (Rs. crore)	2035	2032	3262	3670	3615	4562
Revenue Expenditure (Rs. crore)	2018	1914	3170	3193	3431	3998
(a) Salary component (%)	20.0	23.8	14.8	14.7	14.1	16.5
(b) Non-salary component (%)	80.0	76.2	85.2	85.3	85.9	83.5
Capital Outlay (Rs. crore)	17	117	92	477	185	565
Capital Outlay (%)	0.8	5.8	2.8	13.0	5.1	12.4
Irrigation and Flood Control						
Total Expenditure (Rs. crore)	2678	3275	2854	2838	2444	3173
Revenue Expenditure (Rs. crore)	1311	1311	914	1039	1020	1525
(a) Salary component (%)	53.0	47.2	65.9	63.1	64.8	52.0
(b) Non-salary component (%)	47.0	52.8	34.1	36.9	35.2	48.0
Capital Outlay (Rs. crore)	1367	1964	1940	1799	1424	1647
Capital Outlay (%)	51.0	60.0	68.0	63.4	58.3	51.9
Energy and Power						
Total Expenditure (Rs. crore)	2223	2270	3374	5133	7948	7867
Revenue Expenditure (Rs. crore)	1216	2168	3200	3236	3773	4291
(a) Salary component (%)	0.0	0.0	0.0	0.0	0.0	0.0
(b) Non-salary component (%)	100.0	100.0	100.0	100.0	100.0	100.0
Capital Outlay (Rs. crore)	1007	102	174	1897	4175	3575
Capital Outlay (%)	45.3	4.5	5.1	37.0	52.5	45.4
Transport						
Total Expenditure (Rs. crore)	4706	4852	4138	5471	5194	6921
Revenue Expenditure (Rs. crore)	634	789	826	1381	996	2044
(a) Salary component (%)	26.0	23.3	24.6	15.4	22.8	14.1
(b) Non-salary component (%)	74.0	76.7	75.4	84.6	77.2	85.9
Capital Outlay (Rs. crore)	4072	4064	3313	4090	4198	4878
Capital Outlay (%)	86.5	83.7	80.1	74.8	80.8	70.5
Industry and Minerals						
Total Expenditure (Rs. crore)	335	429	583	1115	564	1013
Revenue Expenditure (Rs. crore)	326	363	534	580	561	983
(a) Salary component (%)	34.0	11.2	15.6	11.0	11.1	8.8
(b) Non-salary component (%)	66.0	88.8	84.4	89.0	88.9	91.2
Capital Outlay (Rs. crore)	9	66	49	535	3	30
Capital Outlay (%)	2.6	15.4	8.4	48.0	0.5	3.0
Total (Economic Services)						
Total Expenditure (Rs. crore)	15564	17475	20246	24871	29173	39554
Revenue Expenditure (Rs. crore)	7836	10038	12710	14060	14445	22861
(a) Salary component (%)	20.0	18.7	15.2	11.1	15.1	12.4
(b) Non-salary component (%)	80.0	81.3	84.8	88.9	84.9	87.6
Capital Outlay (Rs. crore)	7728	7437	7536	10811	14728	16694
Capital Outlay (%)	49.7	42.6	37.2	43.5	50.5	42.2

Source : State Government Budgets

2.14 Per Capita Expenditure on Social and Economic Services

Tables 2.46 shows the per capita expenditure on social and economic services for the years 2010-11 to 2014-15 and also for the budget estimates of 2015-16. During the period 2010-15, the growth in per capita expenditure on social services was nearly two fold , as it increased from Rs 1479 to Rs 2849, and the growth in economic services was also high (from Rs 768 to Rs 1298). The per capita capital outlay increased from Rs 902 to Rs 1631.

Table 2.46 : Per Capita Expenditure on Social and Economic Services

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (BE)
Estimated Population (crore)	10.2	10.4	10.6	10.9	11.1	11.4
Total Expenditure (Rs. crore)						
Education, Sports & Culture	8101	10157	14080	14344	16267	21167
Medical and Public Health	1502	1804	1836	2113	3288	3478
Water Supply and Sanitation	1698	1713	2304	2967	3639	4425
Social Services	15089	18729	23107	26395	31713	38084
Economic Services	7836	10038	12710	14060	14445	22861
Capital Outlay	9196	8852	9585	14001	18150	24853
General Services	15287	17730	18645	22018	26408	30259
Per Capita Expenditure (Rs.)						
Education, Sports & Culture	794	977	1324	1318	1461	1859
Medical and Public Health	147	173	173	194	295	305
Water Supply and Sanitation	166	165	217	273	327	389
Social Services	1479	1801	2172	2426	2849	3345
Economic Services	768	965	1195	1292	1298	2008
Capital Outlay	902	851	901	1287	1631	2183
General Services	1499	1705	1753	2023	2372	2658

Source : State Government Budgets

2.15 Comparison of Budget Estimates of 2015-16 and Actual Amounts of 2014-15

In this section, the budget of 2015-16 will be compared with the actual receipts and expenditure of the state government during 2014-15. The accounts for 2014-15 showed a deficit of Rs. 870 crore in the Consolidated Fund of the state government, while the budget for 2015-16 shows a small surplus of Rs. 229 crore.

From Table 2.47, it can be seen that revenue receipts and revenue expenditure are estimated to go up by nearly Rs 24,771 crore and Rs 18,638 crore, respectively in 2015-16, compared to the previous year. It has an estimated revenue surplus of Rs. 11,981 crore, which was much higher than the revenue surplus of Rs. 5848 crore in 2014-15.

Table 2.47 : Summary of Actual Amounts (2014-15) and Budget Estimates (2015-16)

(Rs. crore)

	2014-15 (Actuals)	2015-16 (BE)		2014-15 (Actuals)	2015-16 (BE)
Revenue Account			Capital Account		
Receipts			Receipts		
Tax revenues	57713	81623	Public Debt	13918	17709
Non-Tax Revenues	1558	3396	Recovery of Loans and Advances	1493	17
Grants and Contributions	19146	18171			
Total Revenue Receipts	78418	103189	Total Capital Receipts	15411	17725
Expenditure			Expenditure		
General Services	26408	30259	Capital Outlay	18150	24853
Social Services	31713	38084	Public Debt	3609	3895
Economic Services	14445	22861	Loans & advances	369	729
Grants and Contributions	4	5			
Total Revenue Expenditure	72570	91208	Total Capital Expenditure	22128	29477
Deficit Revenue A/c	-5848	-11981	Deficit Capital Account	6717	11752
Consolidated Fund Receipts	93828	120914	Consolidated Fund Expenditure	94698	120685
Net Consolidated Fund (Receipt-Expenditure)	-870	229			
Contingency Fund					
Income			Expenditure		
Contingency Fund Total			Contingency Fund Total		
Public Account			Public Account		
Receipts			Disbursements		
Small Savings, PF etc.	1104	1297	Small Savings, PF etc.	1287	1659
Reserve Funds	1404	961	Reserve Funds	1649	961
Deposits and Advances	24972	11697	Deposits and Advances	22749	11516
Suspense and Misc.	166624	0	Suspense and Misc.	167856	0
Remittances	12222	0	Remittances	12234	0
Total Receipts Public Account	206325	13956	Total Disbursements Public Account	205774	14136
Net Results Public Account (Receipt-Expenditure)	551	-181			
Net Result (All Accounts) (Receipt-Expenditure)	-319	48			

Source : State Government Budgets

In the capital account, the budget estimates for 2015-16 envisaged an increase of about Rs 7349 crore in expenditure over 2014-15. The capital receipts were estimated to increase by only Rs 2314 crore, from public debt (including loans from the market and NSSF) and also from recovery of loans and advances, leaving a net deficit in the capital account of Rs 11,725 crore. The repayment of loans during 2015-16 was estimated to increase by only Rs 286 crore, compared to 2014-15, and the lending by the state government was estimated to go up by Rs 360 crore. Capital outlay is estimated to increase substantially by Rs 6703 crore. The deficit of Rs 11,752 crore in the capital account is estimated to be completely offset by the revenue surplus of Rs 11,981 crore, leaving a small surplus of Rs 229 crore in the budget. The Public Account is estimated to leave a net deficit of Rs 181 crore, and the net results of all accounts would be a small surplus of Rs 48 crore in 2015-16, compared to a net deficit of Rs 319 crore in 2014-15.

Table 2.48 : Percentage Distribution of Consolidated Fund – Receipts and Expenditure

Receipts	2014-15 (Actual)	2015-16 (BE)	Expenditure	2014-15 (Actual)	2015-16 (BE)
Revenue Account			Revenue Account		
Tax Revenue	57713	81623	General Services	26408	30259
Non-Tax Revenue	1558	3396	Social Services	31713	38084
Grants-in-Aid and Contributions	19146	18171	Economic Services	14445	22861
			Grants-in-Aid	4	5
Capital Account			Capital Account		
Public Debt	13918	17709	Discharge of Public Debt	3609	3895
Recovery of Loans and Advances	1493	17	Loans and Advances	369	729
Inter State Settlement	0	0	Capital Outlay	18150	24853
Total	93828	120914	Total	94698	120685

Source : State Government Budgets

The structures of receipts and expenditure of the state government are presented in Table 2.48. From this table, it can be seen that, besides some variations in respect of the inter-se shares of grants and tax revenues, there was a structural change in the composition of receipts on accounts of grants-in-aid and tax revenue. The tax revenue accounted for 67 percent of the total receipts in the Consolidated Fund in 2015-16, as against 62 percent in the previous year. While the share of non-tax revenue was estimated to go up by 1 percent during 2015-16, that of public debt was expected to remain the same. The share of central government grants is likely to decrease substantially from 21 percent in 2014-15 to 15 percent in 2015-16.

The structure of expenditure was also nearly the same in two years. While the share of general services decreased by 3 percent in the budget estimates for 2015-16 over the previous year's actuals, that of social services also went down by 3 percent to claim a share of 31 percent of the total expenditure. The share of economic services increased by 4 percent from the previous

year's level of 15 percent, while that of capital outlay increased from 19 to 21 percent. The share of public debt decreased by 1 percent, while that of loans and advances remained the same. The budget discontinued the earlier trend of increasing social sector expenditure and focused on expenditure on economic services instead to create, upgrade and maintain physical infrastructure so necessary for the state's future growth.

2.16 Fourteenth Finance Commission's Recommendations and Their Impact on Bihar's Public Finance

The Fourteenth Finance Commission has submitted its report in February 2015 which is likely to alter the landscape of federal finances in India. It has recommended 42 percent of the central divisible pool of resources for transfer to the states, as against the existing 32 percent. The states will now have much more fiscal space to spend on their own priorities, instead of depending on the central government. The spirit of cooperative federalism is asserted here when the central and state governments are equal partners in development.

The divisible pool initially used to comprise only income tax and part of central excise duties. Successive commissions have increased the states' share of these taxes. The Eleventh Finance Commission (2000-05) expanded the divisible pool substantially by including in it the net proceeds from all taxes covered under Article 270 (income tax, corporation tax, central excise duty, customs duty, service tax and wealth tax) and making 29.5 percent of this pool sharable with the states. The next two Commissions increased this share to 30.5 percent and 32.0 percent respectively. Cess and surcharges are excluded from the divisible pool and this remains a sore point with all the states. Apart from devolution of taxes, Finance Commissions also recommend grants-in-aid to states under Article 275.

The taxes are expected to be divided among the states on the principles of equity and efficiency, effectively transferring resources from the rich to the poor states on the basis of a formula that factors in population and area of a state, inter-state disparities in income, and their fiscal performance. From the Sixth Commission onwards, central government has restricted the Finance Commissions to recommend only non-plan grants, plan part being the prerogative of the now dissolved Planning Commission. Plan transfers has so far mostly been dependent on the discretion of the central government; only a part was formula-based that progressively went on shrinking with the proliferation of Centrally Sponsored Schemes. These discretionary transfers have now been reduced after the replacement of the Planning Commission by Niti Aayog, an expert body without any power for resource allocation.

The Fourteenth Finance Commission recommendations will have the effect of increasing the net flow of funds to the states by extra Rs 2.21 lakh crore during 2015-16 alone – the highest ever increase in the state's share so far. During the award period of the Commission (2015-20), tax share to states will exceed Rs 44 lakh crore. In addition, 11 states with deficits in their revenue account will get grants amounting to Rs 1.95 lakh crore during the period. Local bodies stand to gain significantly, with Rs 2.00 lakh crore earmarked for Gram Panchayats and Rs 87,000 crore for urban local bodies. The aggregate level of transfer of central resources — plan and non-plan

combined — is estimated go up only by about 2 percent over the award period, but most of it will now be based on formula, rather than on discretion and not tied to plan schemes of questionable usefulness. The Commission’s methodology has been robust and estimates conservative, avoiding a high growth scenario in respect of taxes and GDP. This increases the credibility of their recommendations. By including forest cover as a new environmental factor and by giving weightage to 2011 population, it has taken into account the changing realities of the time.

Table 2.49 also shows the criteria used by the successive Finance Commissions for determining the inter-se distribution of the proceeds of the central divisible pool of taxes among the states. All Finance Commissions are guided by three stated principles of — equalisation, equity, efficiency. The transfers are equalizing transfers of resources from the richer to the poorer states, without compromising the efficiency and performance of any state. The criteria used by all Finance Commission reflect these principles and are not much different from Commission to Commission, as seen from Table 2.49.

Table 2.49 : Shares of Vertical Devolution and Criteria for Horizontal Devolution through Successive Finance Commissions

	FC11	FC12	FC13	FC14
Vertical Devolution				
States’ share (Percentage)	28.5	30.5	32.0	42.0
Weightage for Horizontal Devolution				
Population (1971)	10	25	25	17.5
Population (2011)	–	–	–	10
Income Distance	62.5	50	–	50
Area	7.5	10	10	15
Index of Infrastructure	7.5	–	–	–
Tax Effort	5	7.5	–	–
Fiscal Discipline	7.5	7.5	17.5	–
Fiscal Capacity Distance	–	–	47.5	–
Environment	–	–	–	7.5
Total	100	100	100	100

Source : Different Finance Commission Reports

Every Finance Commission adopts its own criteria for determining the inter-se share of the states; however, the Fourteenth Finance Commission’s criteria, mark two important deviations from all previous Commissions. All previous Commissions have adopted 1971 population as one of the criteria for the distribution of the proceeds of taxes among the states, but the latest Commission has also taken into account 2011 population, in view of changed demographic scenario in the country. Also, for the first time, by including forest cover as a new criterion while determining the transfers, environmental concerns have been given due recognition. Both these factors have significant impact upon Bihar.

Table 2.50 : Inter-Se Vertical Devolution from the Eleventh through Fourteenth Finance Commissions

(Figures in percent)

State	FC11		FC12		FC13		FC14	
	Union Taxes (excluding Service Tax)	Service Tax	Union Taxes (excluding Service Tax)	Service Tax	Union Taxes (excluding Service Tax)	Service Tax	Union Taxes (excluding Service Tax)	Service Tax
Andhra Pradesh	7.701	7.802	7.356	7.453	6.937	7.047	4.305	4.398
Arunachal Pradesh	0.244	0.247	0.288	0.292	0.328	0.332	1.370	1.431
Assam	3.285	3.328	3.235	3.277	3.628	3.685	3.311	3.371
Bihar	14.597	14.788	11.028	11.173	10.917	11.089	9.665	9.787
Chhattisgarh	-	-	2.654	2.689	2.470	2.509	3.080	3.166
Goa	0.206	0.209	0.259	0.262	0.266	0.270	0.378	0.379
Gujarat	2.821	2.858	3.569	3.616	3.041	3.089	3.084	3.172
Haryana	0.944	0.956	1.075	1.089	1.048	1.064	1.084	1.091
Himachal Pradesh	0.683	0.692	0.522	0.529	0.781	0.793	0.713	0.722
Jammu & Kashmir	1.290	Nil	1.297	Nil	1.551	nil	1.854	nil
Jharkhand	-	-	3.361	3.405	2.802	2.846	3.139	3.198
Karnataka	4.930	4.994	4.459	4.518	4.328	4.397	4.713	4.822
Kerala	3.057	3.097	2.665	2.700	2.341	2.378	2.500	2.526
Madhya Pradesh	8.838	8.954	6.711	6.799	7.120	7.232	7.548	7.727
Maharashtra	4.632	4.693	4.997	5.063	5.199	5.281	5.521	5.674
Manipur	0.366	0.371	0.362	0.367	0.451	0.458	0.617	0.623
Meghalaya	0.342	0.346	0.371	0.376	0.408	0.415	0.642	0.650
Mizoram	0.198	0.201	0.239	0.242	0.269	0.273	0.460	0.464
Nagaland	0.220	0.223	0.263	0.266	0.314	0.318	0.498	0.503
Orissa	5.056	5.122	5.161	5.229	4.779	4.855	4.642	4.744
Punjab	1.147	1.162	1.299	1.316	1.389	1.411	1.577	1.589
Rajasthan	5.473	5.544	5.609	5.683	5.853	5.945	5.495	5.647
Sikkim	0.184	0.186	0.227	0.230	0.239	0.243	0.367	0.369
Telangana	-	-	-	-	-	-	2.437	2.499
Tamil Nadu	5.385	5.455	5.305	5.374	4.969	5.047	4.023	4.104
Tripura	0.487	0.493	0.428	0.433	0.511	0.519	0.642	0.648
Uttar Pradesh	19.798	20.057	19.264	19.517	19.677	19.987	17.959	18.205
Uttarakhand	-	-	0.939	0.952	1.120	1.138	1.052	1.068
West Bengal	8.116	8.222	7.057	7.150	7.264	7.379	7.324	7.423
All	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Source : Different Finance Commission Reports

Table 2.50 shows the shares of all the states in the total devolution of resources through the last four Finance Commissions. It can be seen that Bihar's share has reduced gradually from 11.028 percent during the award period of the Twelfth Finance Commission to 9.665 percent for the Fourteenth Commission in respect of the central divisible pool of taxes, excluding service taxes, For service taxes, the share has fallen from 11.173 to 9.787 percent during the same period.

Table 2.51 shows the amounts of transfers recommended by Fourteenth Finance Commission for Bihar from the central divisible pool of taxes during its award period, i.e. from 2015-16 to 2019-20. Of the total Rs 20.95 lakh crore to be transferred, Bihar's share will be a total of Rs 3.84 lakh crore spread over five years. Total devolution of central resources to a state comes through its share of divisible pool of taxes and central grants, both for plan and non-plan purposes. Total devolution to Bihar during 2010-15 was Rs 2,28,072 crore — Rs 1,72,944 crore by Finance Commission recommendations and the rest being plan grants. In contrast, Fourteenth Finance Commission recommended a total devolution of Rs 3,83,854 crore during its award period 2015-20, excluding grants for local bodies amounting to Rs 21,057 crore. Even after factoring inflation, this apparently represents a hefty increase in devolution of central resources to Bihar, but the increase in total devolution is a myth. While the states' shares of divisible pool have indeed gone up, their shares of grants, plan plus non-plan, have come down drastically, reflecting hardly any increase in the total resources transferred.

Table 2.51 : Transfers Recommended by Fourteenth Finance Commission

(Rs. Crore)

Sl. No.	Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Total for all states							
A	Total Central Taxes	5,79,282	6,68,425	7,72,304	8,93,430	10,34,745	39,48,186
B	Service Taxes	2,56,116	3,03,721	3,60,174	4,27,119	5,06,508	18,53,638
	(A-B)	3,23,166	3,64,704	4,12,130	4,66,311	5,28,237	20,94,548
Share of Bihar							
	Central Taxes Without Service Taxes (9.665 %)	31,234	35,249	39,832	45,069	51,054	2,02,438
	Service Taxes (9.787%)	25,066	29,725	35,250	41,802	49,572	1,81,416
	Total Share	56,300	64,974	75,083	86,871	1,00,626	3,83,854

Source : Annual Report, Department of Finance, GOB

Table 2.52 shows the non-plan grants for Bihar under Fourteenth Finance Commission recommendations. During its award period, Bihar will receive total grants of Rs 26,688 crore, of which Rs 21,018 crore (79 percent) will be on account of the PRI institutions in Bihar and Rs 2676 crore (10 percent) on account of urban local bodies. Other than this, only grants of Rs 2332 crore have been recommended for disaster relief, besides Rs 662 crore to strengthen the judicial systems in the state.

Table 2.52 : Non-Plan Grants for Bihar Under Fourteenth Finance Commission Recommendations

(Rs. crore)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Local Bodies Grant (Basic Grant)						
Rural Local Bodies (RLB)	2,269	3,142	3,630	4,200	5,675	18,916
Urban Local Bodies (ULB)	257	356	411	475	642	2,141
Local Bodies Grant (Performance Grants)						
Rural Local Bodies (RLB)	–	413	466	530	694	2,102
Urban Local Bodies (ULB)	–	105	119	135	177	535
Others Grants						
Disaster Relief Grant to State	422	443	465	489	513	2,332
Grant for Justice						662
Total	2,948	4,459	5,091	5,829	7,701	26,688

Source : Fourteenth Finance Commission Report

Grants for local bodies, as seen from Table 2.52, have been given under two heads, basic grants and performance grants. In case of Gram Panchayats, 90 percent of the grant will be the basic grant and 10 per cent will be the performance grant. In case of municipalities, the division between basic and performance grant will be on a 80:20 basis. The Commission recommended that the basic grants should go to only Gram Panchayats, which are directly responsible for the delivery of basic services, without any share for other two levels. The earmarked basic grants for Gram Panchayats will be distributed among them, using the formula prescribed by the respective State Finance Commissions. Similarly, the basic grant for urban local bodies will be divided into tier-wise shares and then distributed across each tier, namely the municipal corporations (Tier I), municipalities (Tier II) and the Nagar Panchayats (Tier III), using the formula given by the respective State Finance Commissions.

The performance grants have been provided to address the following issues: (i) making available reliable data on receipt and expenditure of local bodies through audited accounts; and (ii) improvement in own revenues. In addition, the urban local bodies will have to measure and publish service level benchmarks for basic services. These performance grants will be disbursed from the second year of the award period (2016-17) onwards so as to enable sufficient time to state governments and the local bodies to put in place a scheme and mechanism for implementation.

For transfers outside the Finance Commission, the Commission has recommended setting up of a new institutional mechanism 'consistent with the overarching objective of strengthening cooperative federalism', by limiting discretion, improving design and giving adequate flexibility to the states. By recommending to exclude the states from the operations of NSSF which was forced upon them, it has given them more liberty to manage their debt. All these recommendations are likely to bring in transparency and accountability in the public finances of central as well as states governments.

2.17 State Public Sector Undertakings and Corporations

Government Investments in Public Sector

The public sector in Bihar presently comprises 70 government companies and 3 statutory corporations. However, of the 70 government companies, only 30 are working. The total investment by the state government in public sector units, as of March 2014, is shown in Table 2.53. Such investments amounted to Rs 28,221 crore till 2014 (Rs 18,323 crore as equity and Rs 9898 crore as long term loans). Of these, Rs 729 crore (Rs 181 crore as equity and Rs 548 crore as long term loans) were invested in non-working companies (Table 2.54).

Table 2.53 : State Government Investment in Public Sector

As on 31 st March	Total number of Working PSUs	Total number of Non-Working PSUs	Statutory Corporations	Total Public Sector Companies/Corporations	Total Equity (Rs crore)	Total Loans (Rs crore)	Total Investment (Rs crore)
2008	16	34	4	54	531	8149	8680
2009	19	40	4	63	526	8615	9141
2010	21	40	4	65	585	9037	9622
2011	21	40	4	65	625	10240	10865
2012	22	40	4	66	633	11741	12374
2013	28	40	3	71	3743	4579	8322
2014	30	40	3	73	18323	9898	28221

Source : Audit Reports on Public Sector Undertakings of the Comptroller and Auditor General of India

Table 2.54 : Investment in Working and Non-Working Public Sector Companies (March 31, 2014)

(Rs crore)

Type of Company/corporation	Government Companies			Statutory Corporations			Grand Total
	Capital	Long Term Loans	Total	Capital	Long Term Loans	Total	
Working	17957	8573	26530	186	776	962	27492
Non-Working	181	548	729	---	---	---	729
Total	18138	9121	27259	186	776	962	28221

Source : Audit Reports on Public Sector Undertakings of the Comptroller and Auditor General of India

The investments increased significantly only during 2013-14. The total investments till 2012-13 stood at Rs 8322 crore, almost at the same level of 2007-08. The massive increase during 2013-14 by almost Rs 20,000 crore was, however, a notional increase only due to the inclusion of the assets of the erstwhile Bihar State Electricity Board which had since been unbundled into five

separate companies and the release of the state government's budgetary support to these entities. These data were not included till the last year.

The sector-wise break-up of the public sector units as at the end of March 2014 is presented in Table 2.55. The majority of the working companies belong to power, infrastructure and financial sectors.

Table 2.55 : Sector-wise Government Companies and Corporations (2013-14)

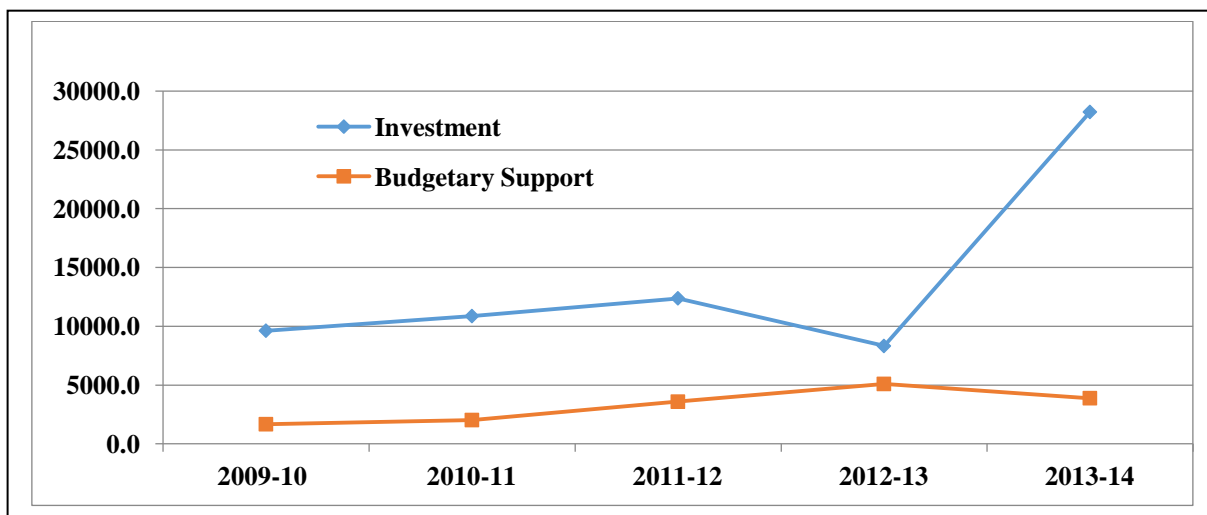
Sector	Number of Statutory Corporations	Number of Working Companies	Number of Non-Working Companies
Agriculture	0	3	12
Power	0	9	0
Infrastructure	0	6	1
Manufacturing	0	3	12
Services	2	3	1
Financing	1	4	4
Others	0	2	10
Total	3	30	40

Of the 40 non-working companies, 9 are under liquidation process, as their continuance may not serve any useful purpose. Of these, 7 companies have been under liquidation process for the last 14 years. One of these companies had even incurred an expenditure of Rs 8 crore on salaries and wages during 2013-14. No company could be wound up during the year. The 30 working companies and 3 statutory corporations generated a total turnover of Rs 7925 crore in 2013-14 (2.3 percent of GSDP), compared to a turnover of Rs 4858 crore in 2012-13 (1.4 percent of GSDP). As per their latest finalized financial accounts, of the 33 working PSUs, 14 PSUs had earned a total profit of Rs 240.12 crore during 2013-14 and 15 incurred a total loss of Rs 203.16 crore, while two had nil profit/ loss. The remaining two PSUs were yet to finalise their first ever accounts. Thus, there was a total profit of Rs 36.96 crore during 2013-14 earned by the PSUs, compared to a loss of Rs 1109 crore in 2012-13. The major profit making companies were Bihar Rajya Pul Nirman Nigam (Rs 107 crore), Bihar State Beverages Corporation (Rs 39 crore) and Bihar State Road Development Corporation (Rs 37 crore), while major loss making companies were Bihar State Road Transport Corporation (Rs 58 crore), North Bihar Power Distribution Company (Rs 74 crore) and South Bihar Power Distribution Company (Rs 23 crore). The state government has not yet formulated any dividend policy for the public sector so as to ensure a minimum return on investment; but three profit making PSUs had proposed some nominal dividends for 2013-14 — Bihar Rajya Pul Nirman Nigam (Rs 1.05 crore), Bihar State Beverages Corporation (Rs 6.00 crore) and Bihar State Building Construction Corporation (Rs 0.50 crore).

As of March 2014, the PSUs in Bihar employed 16,458 employees — Working Companies (13594) and Non-Working Companies (2864). Their total accumulated debt amounted to Rs

9898 crore at the end of 2013-14, compared to Rs 4579 crore in 2012-13. The growth in investment by the state government and the budgetary support given by it to the PSUs in the forms of equity capital, loans, grants, subsidy, guarantees, waiver of loans etc. are shown in the Chart 2.6. The data relating to BSEB are included in this chart for 2012-13.

Chart 2.6 : Investment in Public Sector (Rs. crore)



Among the public sector units in Bihar, investment is mainly focused on the power sector, which accounted for about 83 percent of the total state government investment in public sector undertakings at the end of 2013-14, compared to 82 percent in 2008-09. The investment in this sector had increased from Rs 7475 crore to Rs 23,534 crore, during the period 2008-09 to 2013-14, due to adjustments necessitated by the unbundling of the BSEB. The investment in other important sectors, which include finance and manufacturing, did not show much variation during the same period. The financial sector accounted for 7 percent and manufacturing sector only 4 percent of the total investments in public sector at the end of 2008-09; these figures stood respectively at 2 percent and 1.5 percent for these two sectors at the end of 2013-14.

Table 2.57 gives the paid up capital, investments and loans made by the state government on the 33 working companies or statutory corporations, as on March, 2013, along with their working results in the latest year for which their accounts are available. The years in which they have prepared their last accounts are also shown in the table. It can be seen that most of the companies have not prepared up-to-date accounts. Since the accounts are not up-to-date, return on the investments cannot be calculated. The Board meetings of most of these companies are also not held regularly. Altogether only 10 of the non-working companies out of a total of 40 had prepared their accounts which were not older than five years. However, most working companies are now fast pulling up the arrears in finalization of their accounts. With only three companies failing to reduce the arrears in finalization of accounts to within 10 years, the situation was vastly improved compared to 2012-13. Still, on the average, the arrears in finalization of accounts per PSU was more than 6 years, and the total numbers of arrear accounts of the PSUs were as high as 199 as at the end of 2013-14.

Table 2.56 : Summarised Results of Public Sector as per their latest accounts (as on 31st March 2014)

(Rs crore)

	Name of PSU	Year up to which accounts finalized	Paid up capital as per latest a/c	Total Outstanding Loans (Govt.+ Others)	Total Man-power	Net Profit/ Loss (-)	Accumulated Profit/ Loss (-)	% Return on Capital Employed
A. Working Companies								
Agriculture								
1	Bihar Rajya Beej Nigam Limited.	2013-14	3.71 (0.03)	27.93	78	-4.99	-58.45	-
2	Bihar Rajya Matsya Vikas Nigam Limited.	1996-97		2.63	-	-0.22	-1.92	-
3	SCADA Agro Business Company Ltd..	2011-12	0.05	-	-	-0.00	-1.81	0.36
Finance								
4	Bihar State Credit & Investment Corporation Ltd.	2013-14	15.12 (0.12)	53.48	43	-0.84	-150.46	7.60
5	Bihar State Backward Classes Development & Finance Corpn.	2006-07	21.3 (8.00)	16.14	17	-0.29	0.53	10.10
6	Bihar State Minorities Finance Corporation Ltd.	2013-14	33.89	27.32	30	-1.49	-8.48	0.81
7	Bihar State Film Development & Finance Corporation Ltd	2014-15	1.00	0.15	08	0.01	-0.13	2.97
Infrastructure								
8	Bihar Police Building Construction Corporation Ltd	2014-15	0.10 (0.00)	0.43	323	-0.89	-13.89	
9	Bihar Rajya Pul Nirman Nigam Ltd.	2014-15	3.50	-	396	106.99	182.17	33.77
10	Bihar State Health Project Development Corporation.	2014-15	5.00	-	107	14.59	8.69	193.96
11	Bihar State Road Development Corporation Ltd. ¹	2013-14	20.00	125.00	107	37.36	182.71	18.05
12	Bihar Urban Infrastructure Development Corporation Ltd.	2013-14	5.00	-	58	5.83	5.50	55.52
13	Bihar State Educational Infrastructure Development Corporation Ltd.	2013-14	20.00	-	217	5.24	39.81	8.76
Manufacturing								
14	Bihar State Electronic Development Corporation Ltd.	2014-15	5.66 (5.51)	6.00	66	13.64	10.53	32.37

¹ Accounts are yet to be audited by the CAG of India.

15	Bihar State Mineral Development Corporation Ltd	2004-05	9.97	-	01	9.29	7.04	44.92
16	Bihar State Beverages Corporation Ltd.	2014-14	5.00	-	269	39.28	43.10	73.60
Power								
17	Bihar State Hydro Electric Power Corporation Ltd.	2013-14	99.04	405.81	184	-1.42	-28.18	1.61
18	Bihar State Power (Holding) Company limited	2013-17	8923.96 (8912.96)	92.50	263	-9.11	-9.09	0.03
19	Bihar State Power Generation Company Limited	2013-14	2005.42 (2003.32)	1704.72	295	-	-	-
20	Bihar State power Transmission Company	2013-14	2307.08 (2305.08)	225.74	1454	-	-	0.26
21	North Bihar Power Distribution Company Limited	2014-15	2170.84 (2168.74)	1231.80	4123	-74.26	-714.34	0.51
22	South Bihar Power Distribution Company Limited	2013-14	2268.85 (2266.75)	2068.98	4789	-22.79	83.76	3.81
23	Bihar Grid Company Limited	2014-15	5.00	-	-	-	-	-
24	Pirpainti Bijli Company Private Limited		0.01	12.70	-	-	-	-
25	Lakhisarai Bijli Company Private Limited (LBCPL)		0.01	11.71	-	-	-	-
Service								
26	Bihar State Tourism Development Corporation Limited	2013-14	5.00	-	233	3.17	7.98	24.42
27	Bihar State Food & Civil Supplies Corporation Limited	2012-13	10.00 (4.73)	2560.06	533	-11.18	-46.04	
28	Bihar Medical Services & Infrastructure Corporation Limited	2013-14	6.74 (6.69)	-	-	2.49	2.31	27.51
Miscellaneous								
29	Bihar State Forest Development Corporation Limited	2005-06	2.29	-	-	0.28	0.32	23.93
30	Bihar State Text Book Publishing Corporation Limited	2013-14	0.48	-	-	-0.32	-6.29	-

Government Companies								
B. Working Statutory Corporations								
1	Bihar State Financial Corporation	2014-15	77.84	228.47	210	-17.67	-404.58	-
Service								
2	Bihar State Road Transport Corporation	2014-15	101.27	547.79	1000	-57.69	-843.75	-
3	Bihar State Warehousing Corporation	2013-14	6.42	-	182	1.95	4.87	13.77
C. Non-working Government Companies								
Agriculture & Allied								
1.	Bihar State Water Development Corporation Limited (BSWDCL)	1997-98	10.00	49.68	-	2.17	11.20	9.06
2.	Bihar State Dairy Corporation Limited (BSDCL)	2013-14	6.72	-	-	-0.00	-10.58	-
3.	Bihar Hill Area Lift Irrigation Corporation Limited (BHALICL)	1993-94	10.82	8.55	-	-0.26	-0.86	-
4.	Bihar State Agro Industries Development Corporation Limited (BSAIDCL)	2013-14	7.64	12.60	136	-2.22	-34.73	-
5.	Bihar State Fruit & Vegetables Development Corporation Limited (BSFVDCL)	2010-11	2.10	1.12	9	-0.92	-7.82	-
6.	Bihar Insecticide Limited (BIL)	1991-92	2.96 (2.39)	1.54	53	-1.03	-1.03	-
7.	SCADA Agro Business Khagaul Limited (SABLK)	NA	NA	NA	NA	NA	NA	NA
8.	SCADA Agro Business Limited, Dehri (SABLD)	NA	NA	NA	NA	NA	NA	NA
9.	SCADA Agro Business Limited, Arrah (SABLA)	NA	NA	NA	NA	NA	NA	NA
10.	SCADA Agro Business Limited, Aurangabad (SABLA)	NA	NA	NA	NA	NA	NA	NA
11.	SCADA Agro Business Limited, Mohania (SABLM)	NA	NA	NA	NA	NA	NA	NA
12.	SCADA Agro Forestry Company Limited, Khagaul (SAFCLK)		NA	NA	NA			
Finance								
13.	Bihar Panchayati Raj Finance Corporation Limited (BPRFCL)	1991-92	3.02	-	54	-0.01	-0.03	3.92
14.	Bihar State Handloom and Handicrafts Corporation Limited (BSHHCL)	1996-97	10.00	1.16	-	-0.10	-0.44	0.14
15.	Bihar State Small Industries Corporation Limited (BSSICL)	2005-06	7.18	12.23	49	-1.42	-16.56	-
16.	Bihar State Industrial Development Corporation Limited (BSIDCL)	2009-10	14.04	66.56	768	-3.51	-26.42	6.23
Infrastructure								
17.	Bihar State Costruction Corporation Limited (BSCCL)	2014-15	7.00	2.03	227	-2.85	-11.82	-

Manufacturing								
18.	Bihar Solvent & Chemicals Limited (BS&CL)	1995-96	1.08	0.89	-	-0.32	-0.32	-
19.	Magadh Mineral Limited (MML)	-	0.36	0.47	5	-	-	-
20.	Kumardhubi Metal Casting & Engineering Limited (KMC&EL)	1995-96	2.17	6.63	-	-2.39	-8.16	-
21.	Beltron Video System Limited (BVSL)	1998-99	5.05	4.51	-	-0.15	-0.22	-
22.	Beltron Mining System Limited (BMSL)	2002-03	2.48	-	-	-0.10	-0.49	-
23.	Beltron Informatics Limited (BIL)	-	0.00	-	-	-	-	-
24.	Bihar State Sugar Corporation Limited (BSSCL)	1996-97	20.00	322.95	-	-9.20	-72.31	-
25.	Bihar State Cement Corporation Limited (BSCCL)	-	0.00	0.03	-	-	-	-
26.	Bihar State Pharmaceuticals & Chemicals Development Corporation Limited (BSP&CDCL)	1992-93	15.78 (0.78)	4.25	52	-0.17	-0.74	-
27.	Bihar Maize Product Limited (BMPL)	1987-88	0.74 (0.74)	0.02	-	-0.03	-0.06	-
28.	Bihar Drugs & Chemicals Limited (BD&CL)	1991-92	4.00	1.28	-	-0.03	-0.16	-
29.	Bihar State Textiles Corporation Limited (BSTCL)	1995-96	10.78	2.27	51	-0.09	-0.32	-
Services								
30.	Bihar State Export Corporation Limited (BSECL)	1990-00	2.00	1.22	23	-0.10	-0.01	2.67
Miscellaneous								
31.	Bihar Paper Mills Limited (BPML)	1997-98	7.77	10.72	-	-0.06	-0.31	-
32.	Bihar State Glazed Tiles & Ceramics Limited (BSGT&CL)	1997-98	1.40 (0.25)	3.66	32	-0.08	-0.51	-
33.	Vishwamitra Paper Industries Limited (VPIL)	1988-89	1.74 (0.60)	0.81	-	-0.01	-0.01	-
34.	Jhanjhanpur Paper Industries	1991-92	1.49 (0.42)	0.46	13	-0.01	-0.02	-
35.	Bihar State Tannin Extract Limited (BSTEL)	1993-94	1.57	2.14	-	-0.32	-0.67	-
36.	Bihar State Finished Leathers Corporation Limited (BSFLCL)	1986-87	1.47	9.18	-	-1.49	-2.13	-
37.	Synthetic Resins (Eastern) Limited (SREL)	1987-88	0.31	1.05	-	-0.02	0.01	-
38.	Bhavani Active Carbon Limited (BACL)	1989-90	0.09	-	-	-0.01	0.01	-
39.	Bihar State Leather Industries Development Corporation Limited (BSLIDCL)	2004-05	17.40	14.13	-	-0.37	2.92	-
40.	Bihar Scooters Limited (BSL)		1.63	6.09	-			

Source : Principal Auditor General, Bihar

APPENDIX

Table A 2.1 : Act-wise / Circle-wise Collection 2013-14 and 2014-15

(Rs. lakh)

Division / Circle	VAT		C.S.T		ENT. Tax		E.D.		ADV Tax	
	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
Patna Special	406365	400694	2733	2136	0	0	13965	37233	0	0
Patliputra	122840	129092	1927	1362	1999	3274	0	0	0	0
Central Division	529204	529786	4660	3498	1999	3274	13965	37233	0	0
Patna West	14739	16626	33	65	804	218	1	0	28	39
Patna Central	12306	11764	153	217	2	0	0	0	12	18
Patna North	14979	14993	61	67	87	96	0	0	0	0
Gandhi Madan	5857	7555	133	172	0	0	0	0	15	11
Patna South	14230	16767	76	114	4	2	0	0	2	3
KadamKuan	6460	8677	69	48	1	0	0	0	0	0
Patna City East	13172	16035	78	140	1	1	0	0	0	0
Patna City West	14250	14935	209	239	1	15	0	0	0	0
Danapur	26204	28422	99	123	20	22	0	0	0	0
Barh	16621	13440	195	110	12	12	0	0	0	0
Shahabad	4401	5109	33	18	19	23	0	0	0	0
Buxar	2227	2359	9	9	15	17	0	0	0	0
Biharshariff	4964	5815	14	12	35	35	0	0	0	0
Patna Division	150410	162497	1163	1332	1001	440	1	0	58	70
Sasaram	9185	9872	113	195	16	17	0	0	0	0
Bhabhua	6228	6512	69	156	5	5	0	0	0	0
Gaya	11834	12318	301	182	62	58	0	0	0	0
Jehanabad	2209	2796	0	1	2	1	0	0	0	0
Nawada	2953	3442	0	1	14	17	9	6	0	0
Aurangabad	4751	5634	31	61	12	13	0	0	0	0
Gaya Division	37161	40573	515	596	110	111	9	6	0	0
Saran	4301	4541	1	4	24	24	0	0	0	0
Siwan	4163	5571	17	20	14	16	0	0	0	0
Gopalganj	4642	5296	10	22	15	14	0	0	0	0
Muzaffarpur West	10095	11608	244	160	19	18	1	2	0	0
Muzaffarpur East	6670	6892	130	108	40	42	1	1	0	0
Hajipur	15700	15512	316	266	56	62	0	0	0	0
Sitamarhi	7901	5550	16	20	54	51	0	0	0	0
Motihari	5957	6891	21	22	40	40	0	0	0	0
Raxaul	956	1166	22	19	11	11	0	0	0	0
Bettiah	5645	5318	26	21	30	25	6	7	0	0
Bagaha	1627	1218	14	31	10	11	0	0	0	0
Tirhut Division	67657	69564	816	695	313	314	9	10	0	0
Darbhanga	8019	9120	18	50	56	55	0	0	0	0
Samastipur	5836	7197	303	320	29	30	12	9	2	2
Madhubani	3526	4217	5	3	27	30	0	0	0	0
Janjharpar	951	1124	0	1	0	0	0	1	0	0
Begusarai	4824	5768	87	90	135	26	1	1	0	0
Teghara	506	649	43	45	7	7	0	0	0	0
Darbhanga Division	23662	28075	455	509	255	147	13	10	2	2
Saharsa	5307	5838	2	15	31	30	0	0	0	0
Madhepura	2417	2768	2	1	10	10	0	0	0	0
Purnea	7630	8204	226	149	66	56	0	0	0	0
Katihar	6282	6544	45	31	45	34	0	0	0	0
Forbesganj	2891	3404	47	35	12	15	0	0	0	0
Kishanganj	2731	2757	287	122	9	9	0	0	0	0
Khagaria	2191	2365	10	14	8	7	0	0	0	0
Purnea Division	29448	31880	619	366	182	161	0	0	0	0
Bhagalpur	9714	9787	61	53	62	51	12	12	0	0
Lakhisarai	1862	1982	12	17	5	5	0	0	0	0
Munger	3017	2963	12	9	2	1	71	45	0	0
Jamui	2508	2514	27	30	3	3	0	0	0	0
Bhagalpur Division	17101	17246	112	109	73	60	83	57	0	0
State	854643	879621	8341	7104	3932	4556	14081	37315	60	73

(Contd....)

Table A.2.1 : Act-wise / Circle-wise Collection 2014-15 and 2014-15 (Contd.)

(Rs. lakh)

Division / Circle	LUX Tax		ENTRY Tax		Professional Tax		TOTAL		TARGET	
	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
Patna Special	0	0	140210	186870	95	85	563367	627017	632147	732549
Patliputra	0	0	56450	62567	106	126	183322	196422	217216	238374
Central Division	0	0	196660	249436	201	211	746689	823438	849363	970923
Patna West	288	275	2769	2553	361	570	19023	20346	20003	24652
Patna Central	46	67	5567	4224	264	169	18350	16459	19305	23862
Patna North	87	73	3893	3526	764	259	19871	19014	19803	25839
Gandhi Madan	157	129	2618	2709	95	123	8876	10748	8097	11542
Patna South	4	8	7981	7925	49	57	22347	24875	22045	29057
Kadam Kuan	14	12	1859	2059	16	19	8418	10816	8569	10946
Patna City East	0	0	6458	7919	7	7	19717	24103	16612	25640
Patna City West	7	7	4452	4152	27	28	18947	19375	16977	24637
Danapur	1	2	5520	4940	126	137	31971	33646	31291	41572
Barh	1	3	12568	4689	28	41	29425	18294	39535	38225
Shahabad	12	8	1399	1327	106	48	5969	6533	4967	7762
Buxar	1	0	228	282	60	68	2540	2736	2406	3303
Biharshariff	42	39	983	1171	120	160	6158	7232	6283	8008
Patna Division	659	624	56295	47476	2025	1687	211613	214176	215894	275045
Sasaram	2	3	2083	1942	99	124	11498	12152	10949	14945
Bhabhua	3	4	704	877	46	49	7055	7602	3760	9043
Gaya	220	271	3977	3686	149	206	16542	16720	15908	21514
Jehanabad	0	0	128	109	70	82	2410	2989	2057	3134
Nawada	0	1	562	705	58	69	3597	4242	3361	4593
Aurangabad	1	8	13714	12792	80	96	18589	18604	19162	24172
Gaya Division	226	286	21169	20112	502	626	59691	62309	55198	77401
Saran	5	4	951	912	177	217	5459	5702	5745	7101
Siwan	3	2	1498	1547	74	90	5768	7247	5064	7502
Gopalganj	1	2	901	1142	64	74	5633	6550	4821	7325
Muzaffarpur West	17	26	8687	8078	230	242	19294	20133	21171	25095
Muzaffarpur East	9	8	2329	2229	111	115	9290	9396	9447	12079
Hajipur	4	1	3928	3505	121	155	20126	19501	17824	26177
Sitamarhi	1	2	833	853	92	98	8896	6574	7787	11568
Motihari	3	4	1744	1751	75	110	7840	8818	6935	10197
Raxaul	0	0	173	178	10	13	1172	1387	1169	1524
Bettiah	4	6	1035	1007	66	93	6813	6478	7019	8859
Bagaha	0	0	133	39	23	23	1806	1323	2635	2358
Tirhut Division	47	55	22212	21242	1042	1229	92097	93109	89618	119785
Darbhanga	6	10	1806	2259	140	143	10045	11636	8613	13062
Samastipur	3	4	1789	1924	171	205	8144	9691	7363	10589
Madhubani	3	2	661	766	76	79	4297	5097	4027	5588
Janjharpur	0	0	36	26	34	33	1022	1184	1011	1329
Begusarai	3	5	89258	68663	118	132	94427	74683	51415	122693
Teghara	2	1	451	479	5	7	1013	1188	894	1317
Darbhanga Division	16	23	94001	74117	544	597	118948	103479	73324	154579
Saharsa	4	8	459	516	101	130	5905	6537	6062	7678
Madhepura	1	2	279	486	49	54	2757	3321	2505	3585
Purnea	7	8	5226	5319	84	95	13239	13832	11941	17215
Katihar	12	12	1641	1556	103	122	8128	8299	7826	10568
Forbesganj	1	2	592	714	51	57	3594	4227	3366	4674
Kishanganj	1	2	1392	1366	37	41	4458	4298	4010	5796
Khagaria	1	1	373	376	59	76	2642	2839	2199	3435
Purnea Division	26	35	9963	10333	484	576	40723	43351	37910	52951
Bhagalpur	24	24	25622	14763	252	267	35748	24956	32503	46483
Lakhisarai	0	1	387	488	53	68	2319	2560	1951	2675
Munger	2	3	1733	2391	157	188	4994	5600	5948	6494
Jamui	1	1	242	260	35	47	2817	2857	2591	3663
Bhagalpur Division	27	28	27984	17903	497	571	45878	35972	42994	59315
State	1002	1051	428284	440619	5295	5496	1315638	1375835	1364300	1710000

Source : Department of Commercial Tax, GOB

(Concluded)

Table A 2.2 : Act-wise / Circle-wise Collection 2015-16 (Up to September 2015)

(Rs. lakh)

Division / Circle	VAT	C.S.T	ENT. Tax	E.D.	ADV Tax	LUX Tax	Entry Tax	P. Tax	Total	Target
Patna Special	203684	662	0	8100	0	0	86961	19	299426	354750
Patliputra	63505	302	1753	0	0	0	28430	11	94001	112847
Central Division	267189	964	1753	8100	0	0	115391	30	393427	467597
Patna West	7093	52	52	0	9	102	1148	17	8472	10902
Patna Central	5479	65	1	0	9	21	2269	24	7868	9880
Gandhi Maidan	3764	61	20	0	9	44	1308	5	5211	5829
Patna South	8140	55	0	0	1	4	3188	6	11394	13810
Danapur	18514	62	8	0	0	3	2055	96	20738	18859
Shahabad	3475	8	10	0	0	5	497	4	3999	3795
Buxar	800	8	9	0	0	0	137	1	956	1717
Patna West Division	47265	311	100	0	29	179	10601	153	58638	64792
Patna North	6208	38	59	0	0	27	1750	8	8091	11440
Kadamkua	4251	23	0	0	0	4	880	2	5161	5752
Patna City East	8286	51	0	0	0	0	4256	0	12593	12803
Patna City West	8215	114	9	0	0	2	2063	1	10405	10868
Barh	3169	32	5	0	0	1	4082	2	7292	11882
Biharsharif	3069	10	17	0	0	8	420	3	3527	3799
Patna East Division	33198	269	91	0	0	43	13452	17	47070	56544
Sasaram	4408	31	4	0	0	3	770	3	5218	7370
Bhabhua	2571	181	3	0	0	1	517	1	3273	5000
Gaya	5238	62	28	0	0	45	1833	6	7212	9908
Jehanabad	1048	0	0	0	0	0	48	1	1097	1556
Nawada	1853	3	9	0	0	1	374	0	2239	2309
Aurangabad	2247	26	8	0	0	2	6606	1	8890	10757
Gaya Division	17364	304	52	0	0	52	10147	11	27930	36901
Saran	1857	2	12	0	0	2	779	3	2654	3232
Siwan	3260	10	8	0	0	9	647	2	3935	4347
Gopalganj	1833	3	8	0	0	1	626	4	2474	3642
Muzaffarpur West	5804	23	16	1	0	10	3434	5	9292	12221
Muzaffarpur East	3895	38	17	0	0	4	984	7	4944	5591
Hajipur	8285	97	28	0	0	0	1810	2	10222	12051
Sitamarhi	2663	7	21	0	0	1	511	7	3211	3731
Motihari	3835	11	18	0	0	2	1127	2	4996	4981
Raxaul	495	8	6	0	0	0	113	0	621	698
Bettiah	1530	11	6	1	0	4	417	13	1981	4193
Bagaha	787	1	4	0	0	0	9	0	801	741
Tirhut Division	34242	211	144	2	0	33	10455	45	45132	55427
Darbhanga	4424	6	20	0	0	3	1232	19	5705	6656
Samastipur	3029	160	12	5	0	1	1133	85	4425	5795
Madhubani	2942	1	12	0	0	1	399	1	3357	3049
Janjharpur	519	0	0	0	0	0	27	1	548	628
Begusarai	2943	29	11	0	0	2	116563	2	119549	144434
Teghara	406	16	2	0	0	1	120	1	545	728
Darbhanga Division	14263	213	57	6	0	8	119473	109	134129	161290
Saharsa	2797	4	15	0	0	1	560	1	3378	3644
Madhepura	1332	1	3	0	0	1	342	1	1681	1996
Purnea	4266	81	21	0	0	9	2483	2	6862	7915
Katihar	2540	30	13	0	0	6	676	20	3284	4451
Forbesganj	1559	29	8	0	0	1	366	18	1982	2523
Kishanganj	1388	18	3	0	0	1	611	2	2023	2678
Khagaria	1148	6	3	0	0	0	155	1	1314	1884
Supaul	217	0	1	0	0	0	0	0	218	0
Purnea Division	15248	169	68	0	0	20	5194	45	20743	25092
Bhagalpur	4381	25	25	2	0	12	7370	29	11842	16821
Lakhisarai	753	6	3	0	0	0	197	1	961	1239
Munger	1254	7	1	18	0	1	634	2	1917	2803
Jamui	998	14	1	0	0	1	86	0	1100	1506
Bhagalpur Division	7386	53	29	19	0	13	8286	33	15820	22369

Source : Department of Commercial Tax, GOB

Table A 2.3 : District-wise No. of Document and Revenue from Stamp Duty and Registration Fees

(Rs. crore)

District	No. of Document		Registration Fees		Stamp Fee		Total Receipt		Target	
	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
Patna	71860	66950	135	119	470	406	606	526	700	780
Nalanda	30533	26292	19	16	59	53	77	69	80	97
Bhojpur	26121	25843	18	18	56	56	74	74	72	91
Buxar	14534	13810	11	11	34	32	45	42	48	56
Rohtas	25356	15584	18	19	52	54	69	73	75	87
Kaimur	14952	14274	8	8	23	23	31	31	35	38
Gaya	38915	35380	29	27	92	87	121	114	140	160
Jehanabad	9885	9274	6	6	20	21	26	27	26	33
Arwal	5488	5237	3	3	9	9	12	13	11	13
Nawada	18310	17003	9	9	27	28	36	37	38	45
Aurangabad	23955	23905	15	15	45	45	59	60	64	75
Saran	36339	34245	19	20	54	56	73	76	78	92
Siwan	35287	35083	19	21	54	59	73	80	87	95
Gopalganj	29051	29847	17	18	49	53	66	72	70	83
West Champaran	44313	42289	18	18	52	50	71	68	80	90
East Champaran	67862	62345	34	34	95	95	128	129	134	158
Muzaffarpur	57337	52436	47	42	134	117	181	159	182	230
Sitamarhi	41681	40244	22	21	62	59	84	81	87	105
Sheohar	8200	7390	3	3	10	9	14	12	15	17
Vaishali	33937	33632	24	24	70	70	94	94	100	118
Darbhanga	37020	34452	23	23	65	66	88	89	99	115
Madhubani	46837	44662	22	22	60	60	82	82	87	100
Samastipur	47470	46816	20	22	56	66	76	88	95	96
Begusarai	26523	25396	22	20	66	60	88	79	92	106
Munger	7883	7161	7	7	21	20	28	27	30	32
Sheikhpura	8297	7450	3	3	10	9	13	12	16	14
Lakhisarai	10062	8823	5	5	16	16	21	21	27	25
Jamui	15408	14529	6	6	19	19	25	25	26	30
Khagaria	13723	12486	8	7	21	20	29	27	33	34
Bhagalpur	27220	23660	23	21	72	66	95	88	113	117
Banka	16817	15295	9	8	25	23	34	31	40	40
Saharsha	21541	19224	11	11	33	34	44	45	50	56
Supaul	25402	22773	9	10	26	27	35	37	72	36
Madhepura	21561	18870	10	10	28	27	38	37	43	46
Purnea	38285	34841	21	21	63	63	83	84	85	102
Kishanganj	25382	25749	9	9	26	27	35	36	40	42
Araria	33057	33635	13	14	37	40	51	54	56	62
Katihar	42120	40573	17	17	48	51	65	68	74	84
Total	1098524	1027458	711	688	2159	2080	2869	2768	3200	3600

Sources: Department of Registration, Excise and Prohibition, Government of Bihar;

CHAPTER III

AGRICULTURE AND ALLIED SECTORS

After the bifurcation of the state, the present Bihar does not have any mineral resources or a sizeable industries sector. The growth of agricultural sector, therefore, assumes great significance for the overall growth of Bihar's economy. The base of agriculture in Bihar is its soil, with abundant water resources, particularly ground water. On different soil categories found in different agro-climatic zones, the farmers in Bihar grow a variety of crops. Apart from foodgrains (cereals and pulses), the state also produces oilseeds, fibre crops, sugarcane, fruits, vegetables and other crops. Recently, there has been a diversification in production, as floriculture has caught the imagination of the farmers because of the increasing demand of flowers. The state government is trying utmost to bridge the rural-urban divide by promoting higher agricultural growth. The Agriculture Road Map II tries to ensure that the farm productivity steadily rises. The state government has introduced a strong agricultural monitoring system to ensure the sector's continuous growth. The support services in irrigation, seeds, fertilizer, farm mechanization, agricultural credit and awareness programmes are being stressed to make agriculture more productive.

The total geographical area of 93.6 lakh hectares of Bihar has three distinct agro-climatic zones — North-West, North-East and South. The North-West zone has 13 districts. This zone receives an annual rainfall of 1040-1450 mms, and the soil here is mostly loam or sandy loam. The North-East zone has 8 districts and it receives rainfall ranging from 1200-1700 mms. The soil here is loam or clay loam. Finally, the South zone, having 17 districts, receives an average annual rainfall of 990-1300 mms. and the soil is sandy loam, loam, clay and clay loam. The details of agriculture and allied sectors are presented in this Chapter under the following major heads — Rainfall, Land Utilization, Production and Productivity, Irrigation, Agricultural Inputs, and Agricultural Credit. Under Allied Activities, the Chapter discusses the performance in Animal Husbandry and Fishery sectors.

3.1 Rainfall

Bihar's water resources are indeed abundant, as it receives an average of 1009 mms. of rainfall each year. This rainfall is largely due to south-west monsoon, which accounts for around 85 percent of the total rainfall in the state. The annual rainfall is reasonably adequate for the state's agricultural operations. However, it is the year-to-year variation in rainfall which tends to create flood or draught-like situations in the state in some years. This causes serious damage, particularly to crop production, which affects the state economy in many ways.

During the period 2001 to 2013, the annual rainfall has varied from being 678 mms. in 2010 to 1506 mms. in 2007. The total rainfall has been substantially lower than the normal in 4 out of the last 5 years. The rainfall pattern of the state is presented in Table 3.1.

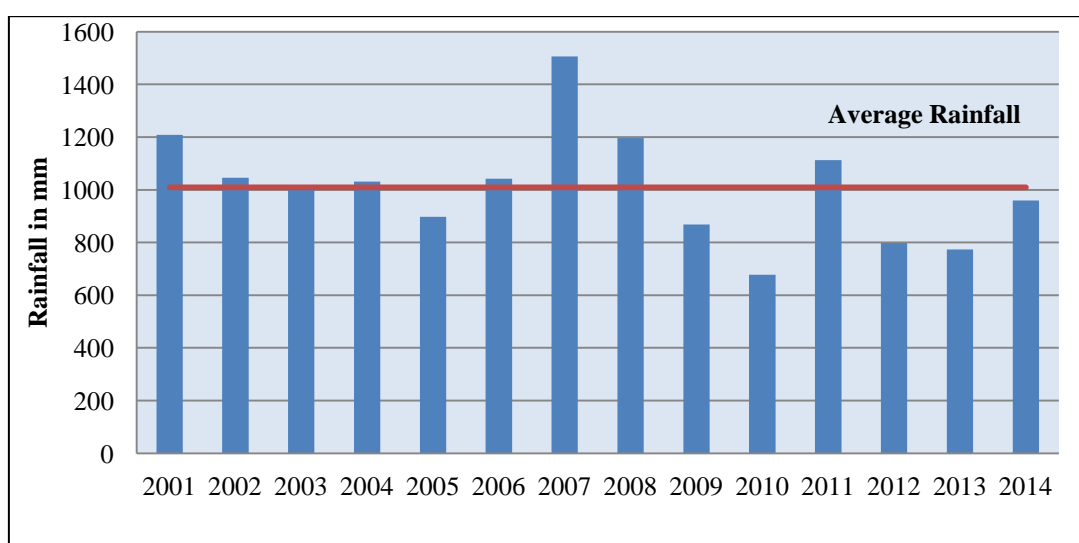
Table 3.1 : Annual Rainfall for Different Seasons

(Rainfall in mm.)

Year	Winter Rain (Jan-Feb)	Hot-Weather Rain (March-May)	Southwest Monsoon (June-Sept)	Northwest Monsoon (Oct-Dec)	Total
2001	20.90 (124.8)	86.70 (115.9)	908.20 (107.7)	192.20 (297.4)	1208.00 (121.4)
2002	48.90 (291.9)	66.80 (89.3)	896.90 (106.4)	33.20 (51.4)	1045.80 (105.1)
2003	19.20 (114.6)	93.00 (124.3)	767.60 (91.1)	128.90 (199.5)	1008.70 (101.4)
2004	23.70 (141.5)	41.40 (55.3)	906.10 (107.5)	60.10 (93.0)	1031.30 (103.7)
2005	0.10 (0.6)	89.50 (119.7)	777.60 (92.3)	30.20 (46.7)	897.40 (90.2)
2006	0.10 (0.6)	88.97 (118.9)	925.86 (109.8)	27.77 (43.0)	1042.70 (104.8)
2007	28.34 (169.2)	76.40 (102.1)	1360.85 (161.5)	40.49 (62.7)	1506.08 (151.4)
2008	30.61 (182.7)	61.78 (82.6)	1084.27 (128.6)	19.31 (29.9)	1195.97 (120.2)
2009	0.09 (0.5)	98.22 (131.3)	699.17 (83.0)	71.13 (110.1)	868.61 (87.3)
2010	0.74 (4.4)	49.30 (65.9)	584.40 (69.3)	43.41 (67.2)	677.85 (68.1)
2011	5.20 (31)	79.40 (106.1)	1028.00 (122.0)	0.50 (0.8)	1113.1 (111.9)
2012	11.20 (66.9)	31.30 (41.8)	704.20 (83.5)	51.20 (79.2)	797.9 (80.2)
2013	17.10 (102.1)	73.80 (98.7)	518.40 (61.5)	164.30 (254.3)	773.6 (77.8)
2014	33.30 (198.8)	96.10 (128.5)	788.30 (93.5)	41.90 (64.8)	959.6 (96.5)
2015 (Up to September)	11.70 (69.9)	89.30 (119.4)	693.30 (82.3)	–	–
Average (2001-2014)	17.11	73.76	853.56	64.62	1009.04

Note: Figures in parentheses denote actual rainfall as the percentage of average
Source: Directorate of Economics and Statistics, GOB

Chart 3.1 : Annual Rainfall in Bihar



The rainfall pattern in various districts of Bihar in 2014 and 2015 (up to September) can be observed from Table A 3.1 (Appendix). The annual rainfall varies in different districts, as they fall in different agro-climate zones. Just as some parts of the state are draught-prone,

other districts are flood-prone. In 2015, the state had about 18 percent deficit rainfall under south-west monsoon. From Table A3.1 (Appendix), it is observed that around 19 districts received less than the average rainfall.

3.2 Land Utilisation

The proportion of total land put to agricultural use is high in Bihar, compared to other states of India. This is because of its topographical nature, as it falls in the riverine plains of the Ganga basin. Table 3.2 presents the land-use pattern in the state from 2010-11 to 2012-13. A glance at the data would reveal that this pattern has remained nearly the same over the years. The area under forests has remained unchanged at 6.6 percent and so has the area under permanent pastures at 0.2 percent. In 2010-11, net area sown was 56.2 percent and it has increased marginally to 57.7 percent in 2012-13. Simultaneously, there has also been an increase in gross sown area between 2010-11 (7194 thousand hectares) and 2012-13 (7778 thousand hectares). The cropping intensity has increased marginally from 1.37 in 2010-11 to 1.44 in 2012-13.

Table 3.2 : Land Utilization Pattern

(Area in '000 hectares)

Land Use	2010-11	2011-12	2012-13
Geographical Area	9359.57 (100.0)	9359.57 (100.0)	9359.57 (100.0)
(1) Forests	621.64 (6.6)	621.64 (6.6)	621.64 (6.6)
(2) Barren and Unculturable Land	431.72 (4.6)	431.72 (4.6)	431.72 (4.6)
(3) Land put to Non-agricultural use	1699.74 (18.2)	1702.54 (18.2)	1708.37 (18.3)
Land Area	1342.69 (14.3)	1345.57 (14.4)	1352.89 (14.5)
Water Area	357.05 (3.8)	356.97 (3.8)	355.48 (3.8)
(4) Culturable Waste	45.34 (0.5)	45.23 (0.5)	45.02 (0.5)
(5) Permanent Pastures	15.73 (0.2)	15.7 (0.2)	15.6 (0.2)
(6) Land under Tree Crops	244.56 (2.6)	244.57 (2.6)	246.34 (2.6)
(7) Fallow Land (excl. Current Fallow)	121.88 (1.3)	121.17 (1.3)	121.78 (1.3)
(8) Current Fallow	920.27 (9.8)	781.26 (8.3)	766.7 (8.2)
Total Unculturable Land (1 to 8)	4100.87 (43.8)	3963.83 (42.4)	3957.17 (42.3)
Net Sown Area	5258.70 (56.2)	5395.75 (57.6)	5402.39 (57.7)
Gross Sown Area	7194	7646.76	7777.52
Cropping Intensity	1.37	1.42	1.44

Note : The figures in parentheses denote percentage share in total geographical area

Source : Directorate of Economics and Statistics, GOB

The land-use pattern for different districts of Bihar for the latest year 2012-13 is presented in Table A 3.2 (Appendix). An analysis would indicate that the pattern of land use exhibits substantial variation across the districts. This is due to the fact that the districts of Bihar belong to different agro-climatic zones. If one considers the net sown area of various districts for 2012-13, there exist 5 districts whose net sown area is more than 70 percent, whereas the average net sown area for the entire state is less than 60 percent. These districts are the

valuable agrarian tract of Bihar — Buxar (82.7 percent), Bhojpur (77.8 percent), Siwan (76.2 percent), Gopalganj (72.6 percent) and Madhepura (72.6 percent). On the other hand, there are 7 districts where net sown area is less than 50 percent of its geographical area. These districts are — Jamui (14.4 percent), Munger (31.9 percent), Gaya (34.2 percent), Banka (38.5 percent), Nawada (43.2 percent), Kaimur (45.6 percent) and Bhagalpur (49.7 percent). These are the districts where the cropping intensity is also low, compared to the state average. The cropping intensity is the lowest at 1.07 in Darbhanga.

Cropping Pattern

In Table 3.3, the cropping pattern in Bihar has been shown for the period 2010-11 to 2014-15. The data reveals that the agricultural economy of Bihar is very much tilted in favour of the subsistence sector, since the acreage under foodgrains, even after a decrease in recent years, is more than 90 percent. Recently, acreage under pulses has shown a marginal decline, creating shortage of pulses.

Table 3.3 : Cropping Pattern

Crops	Percentage of area				
	2010-11	2011-12	2012-13	2013-14	2014-15
Foodgrains	92.06	93.01	93.02	92.89	93.25
Cereals	84.03	85.73	85.9	85.8	86.16
Pulses	8.03	7.28	7.11	7.08	7.09
Oilseeds	1.94	1.85	1.59	1.74	1.63
Fibre Crops	2.27	2.11	1.94	1.71	1.56
Sugarcane	3.73	3.03	3.46	3.66	3.51
Total Area	100.00	100.00	100.00	100.00	100.00

Source : Department of Agriculture, GOB

3.3 Production and Productivity

The fertility of soil and the abundant ground water resources enable the farmers of Bihar to produce a variety of crops, both food and non-food. Apart from major cereals and pulses, farmers of Bihar also produce oilseeds, fibres, fruits and vegetables. Of late, the farmers have also taken interest in growing flowers in view of its increasing demand, both domestic and external.

In Table 3.4, the production of 34 most important crops of Bihar has been presented, for the period 2010-11 to 2014-15. From that table, it can be seen that the total cereal production in 2014-15 was 143.21 lakh tonnes, compared to 103.52 lakh tonnes in 2010-11. This rise is attributable to high increase in rice production in 2014-15. Taking into account the overall foodgrain situation, it is observed that, during the last 5 years, the production level of cereals has grown annually at 5.65 percent. This has increased the food security of the population. The growth rate of wheat production was negative, whereas for maize, the annual growth rate was 4.61 percent. For fibres also, the growth rate has been high (4.61 percent) and, for sugarcane, even higher (6.96 percent).

Table 3.4 : Production Levels of Major Crops

(Production in '000 tonnes)

Crops	2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
Total Cereals	10352.1	17363.65	17286.69	15716.3	14321.164	5.65
Total Rice	3112.57	8237.98	8322.01	6649.59	8241.67	18.93
Autumn Rice	444.04	914.23	960.01	798.68	1010.34	16.29
Aghani Rice	2505.5	7141.12	7076.17	5634.96	7049.78	20.11
Summer Rice	163.03	182.63	285.83	215.95	181.56	3.90
Wheat	5094.03	6530.96	6174.26	6134.68	3570.21	-7.44
Total Maize	2108.19	2557.06	2755.95	2904.24	2478.75	4.61
Kharif Maize	468.52	622.42	926.32	778.21	825.15	14.51
Rabi Maize	922.28	1098.17	791	1199.39	913.78	0.70
Summer Maize	717.39	836.47	1038.63	926.64	739.82	1.65
Total Coarse Cereals	2145.5	2594.71	2790.42	2932.03	2509.28	4.45
Barley	15.69	16.69	15.23	14.25	13.43	-4.58
Jowar	3.27	2.15	2.82	1.31	1.55	-18.03
Bajra	5.42	5.01	4.84	3.00	3.73	-11.84
Ragi	8.85	9.39	9.37	7.14	9.84	-0.61
Small Millets	4.08	4.41	2.21	2.09	1.98	-19.71
Total Pulses	467.16	521.64	542.76	522.02	428.93	-1.69
Total Kharif Pulses	30.28	27.82	29.5	30.96	33.69	3.26
Urad	13.23	11.87	12.15	14.14	14.36	3.44
Bhadai Moong	6.08	4.7	7.18	7.36	9.23	13.70
Kulthi	9.32	8.23	7.75	7.83	7.96	-3.59
Ghagra	0.24	0.57	0.78	0.34	0.43	6.66
Other Kharif Pulses	1.41	2.45	1.64	1.29	1.71	-2.48
Total Rabi Pulses	436.88	493.82	513.26	491.06	394.48	-2.08
Arhar (Tur)	39.44	42.06	47.12	36.46	28.54	-7.59
Gram	59.38	76.82	86.19	70.34	57.49	-1.52
Lentil	162.22	171.61	183.24	196.05	140.06	-1.59
Pea	19.8	19.23	19.25	18.35	17.31	-3.10
Khesari	73.17	92.07	83.8	70.55	60.06	-6.40
Summer Moong	81.26	90.1	92.13	98.01	90.73	3.09
Other Rabi Pulses	1.61	1.93	1.53	1.30	1.05	-11.77
Total Oilseeds	142.24	174.48	182.74	157.17	127.01	-3.26
Castor seed	0.16	0.1	0.1	0.15	0.09	-6.77
Safflower (Kusum)	0.06	0.23	0.08	1.32	0.08	26.15
Sesamum	2.02	2.25	1.95	1.99	2.56	3.56
Sunflower	24.98	22.87	22.26	19.79	16.64	-9.13
Mustard & Rapeseed	95.82	127.93	138.52	117.14	92.89	-1.49
Linseed	18.83	20.27	19.05	15.87	14.16	-7.83
Groundnut	0.37	0.83	0.78	0.91	0.59	10.68
Total Fibre Crops	1309.41	1738.81	1717.73	1745.08	1637.12	4.61
Jute	1164.59	1490.7	1490.24	1498.08	1418.71	4.08
Mesta	144.82	248.11	227.49	247.00	218.41	8.52
Sugarcane	11827.66	11288.58	12741.42	12881.78	15498.95	6.96

Source: Directorate of Economics and Statistics, GOB

Table 3.5 : Productivity Level of Major Crops

(Kgs/ha)

Crops	Triennium Average (2005-08)	2012-13	2013-14	2014-15	Triennium Average (2012-15)	Percentage change between trienniums
Total Cereals	1493	2776	2595	2328	2566	71.89
Total Rice	1284	2523	2110	2526	2386	85.85
Autumn Rice	868	1776	1454	1739	1656	90.82
Aghani Rice	1350	2667	2246	2711	2541	88.25
Summer Rice	1557	2719	2342	2207	2423	55.60
Wheat	1915	2797	2855	1657	2436	27.22
Total Maize	2549	3975	3966	3508	3816	49.72
Kharif Maize	1380	3549	2814	2974	3112	125.53
Rabi Maize	3477	3264	4522	3630	3805	9.44
Summer Maize	3223	5468	4820	4171	4820	49.54
Total Coarse Cereals	1956	3868	3877	1168	2971	51.89
Barley	1104	1460	1398	1109	1322	19.78
Jowar	1035	1071	1065	1068	1068	3.19
Bajra	1067	1140	1138	1134	1137	6.59
Ragi	789	1181	1015	1474	1223	55.05
Small Millets	752	765	754	757	759	0.89
Total Pulses	1606	1052	1044	848	981	-38.90
Total Kharif Pulses	860	871	886	892	883	2.67
Urad	782	864	912	913	896	14.62
Bhadai Moong	602	813	805	838	819	35.99
Kulthi	872	968	952	957	959	9.98
Other Kharif Pulses	578	751	752	757	753	30.33
Total Rabi Pulses	746	1065	1056	843	988	32.44
Arhar	949	2132	1667	1438	1746	83.95
Gram	919	1402	1147	958	1169	27.20
Lentil	753	1147	1272	916	1112	47.63
Pea	942	1041	1060	1010	1037	10.08
Khesari	826	1179	1116	990	1095	32.57
Summer Moong	594	624	672	579	625	5.22
Other Rabi Pulses	-	1101	1010	1000	1037	-
Total Oilseeds	996	1431	1279	1093	1268	27.28
Castor seed	944	960	956	958	958	1.48
Safflower (Kusum)	800	808	805	804	806	0.71
Sesamum	788	882	872	874	876	11.17
Sunflower	1339	1412	1410	1429	1417	5.83
Mustard & Rapeseed	967	1595	1374	1100	1356	40.26
Linseed	851	867	850	861	859	0.98
Ground Nut	494	1022	1024	1023	1023	107.09
Jute	9967	2180	2571	2694	2482	-75.10
Mesta	9185	2325	2746	2402	2491	-72.88
Sugarcane	40178	50896	49916	60938	53917	34.19

Source : Directorate of Economics and Statistics, GOB

The productivity levels for various crops in Bihar have been presented in Table 3.5. From the table, one can observe the comparative productivity levels, using the two triennium averages of productivity for 2005-08 and 2012-15. The last column of the table denotes the percentage change between the two trienniums. The average productivity of three important cereals for triennium 2012-15 are — 2386 kg/hect for rice, 2436 kg/hect for wheat and 3816 kg/hect for maize. For rice, there was 86 percent change in productivity between the two trienniums; for wheat, change was of the order of 27 percent; and for maize, the rise was 50 percent.

Chart 3.2 : Total Production

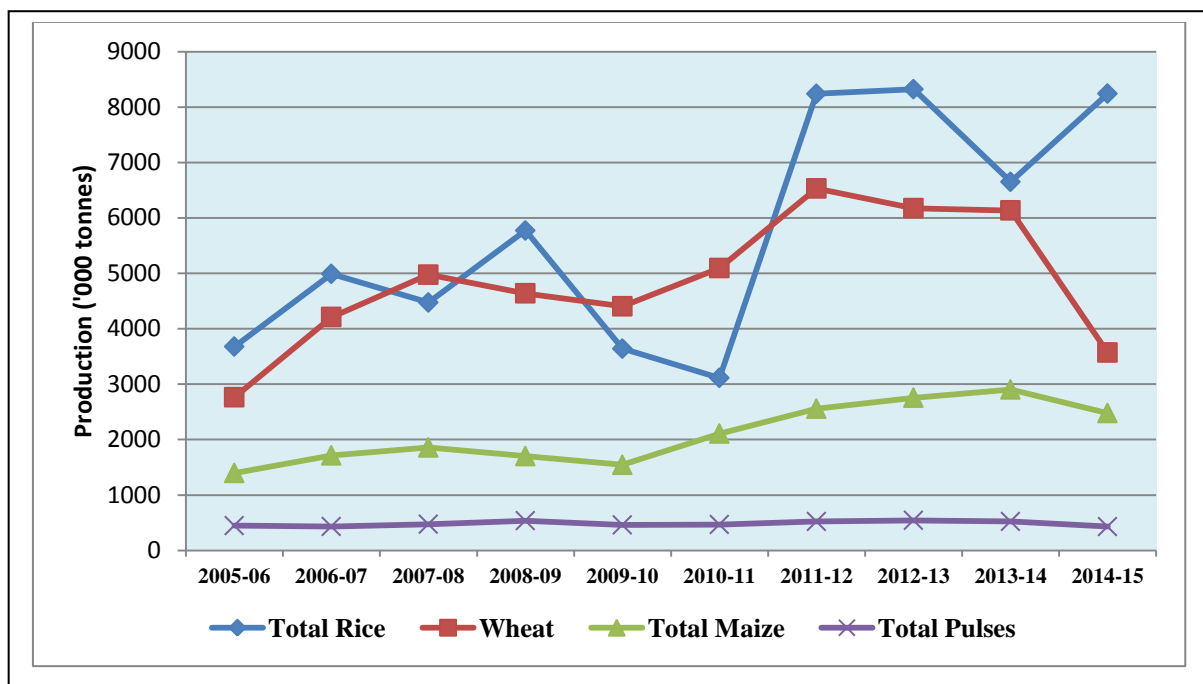
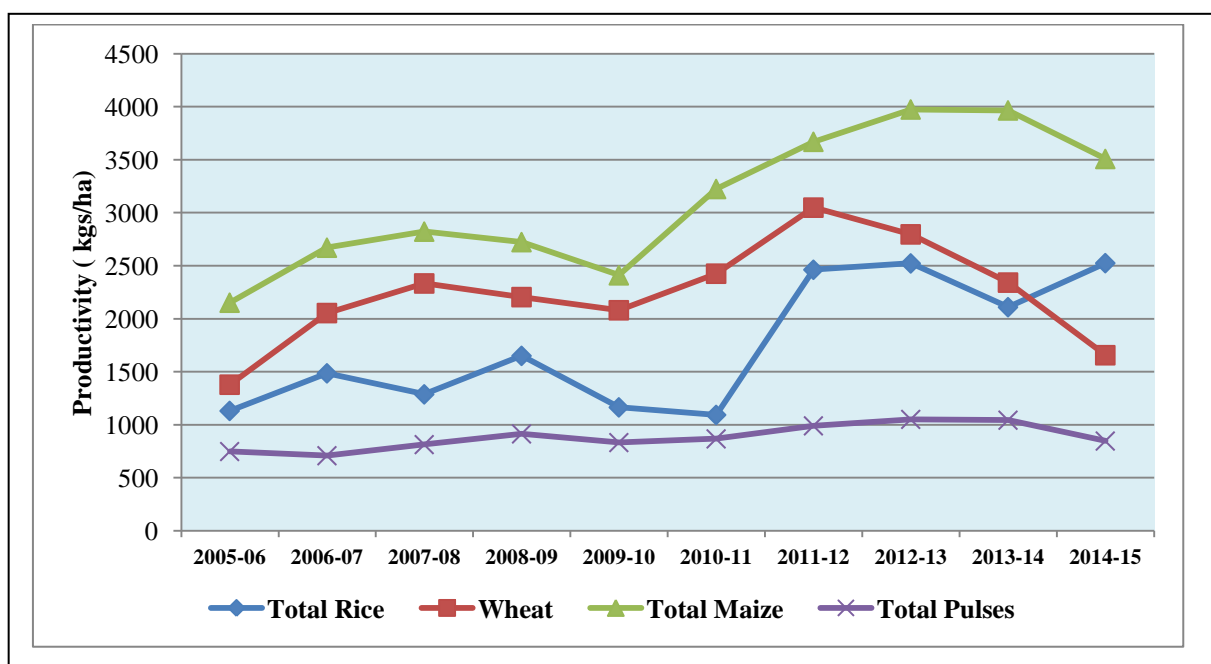


Chart 3.3 : Productivity Levels (kgs/ha)



Area and Production of Rice

In Bihar, variation in agro-climatic conditions over the regions tend to influence the cropping pattern. In the following sections, a detailed discussion on the district-wise production of four important crops are presented.

Table A 3.3 (Appendix) presents the district-wise production and productivity of rice in Bihar for two years, 2013-14 and 2014-15. The shares of each district in area and production are given in bracket. A look at these columns will reveal the relative position of the districts. The lead districts in each category are also revealed from the table. In the productivity column, the rank of each district has been presented alongside the productivity figure. In terms of production levels, the top three districts are — Rohtas, Aurangabad and West Champaran. According to productivity rankings in 2014-15, the top three districts are — Arwal, Rohtas and Sheikhpura. In 2014-15, the highest level of productivity was 4398 kg/hectare in Arwal.

Area and Production of Wheat

For an analysis of the production levels in wheat, the same methodology has been followed as in the case of rice. The district-wise shares of area and production of wheat for 2013-14 and 2014-15 have been presented in Table A3.4 (Appendix) from which one can find out easily the leading districts in terms of area and production. The productivity figures for wheat for each district have also been presented, along with their ranks in brackets.

According to productivity rankings in 2014-15, the top three districts are — Jehanabad, Patna and Gaya. The highest productivity level in 2014-15 was 2859 kg/hectare, recorded by Jehanabad. In terms of production, top three districts in 2014-15 are — Rohtas, Kaimur and Siwan.

Area and Production of Maize

The shares of various districts of Bihar in the area and production of maize for 2013-14 and 2014-15 are presented in Table A3.5 (appendix). As per productivity ranking, the top three performing districts in 2014-15 are — Katihar, Madhepura and Saharsa. The highest productivity in 2014-15 is recorded for Katihar (6510 kg/hectare). From the production point of view, the top districts are — Katihar, Madhepura and Khagaria.

Area and Production of Pulses

The area, production and productivity of pulses have been presented district-wise for the year 2013-14 and 2014-15 in Table A3.6 (Appendix). For production, top three performing district in 2014-15 are — Patna, Aurangabad and Nalanda. As per productivity, the top three districts are — Kaimur, Patna and Darbhanga. The highest productivity in 2014-15 was recorded in Kaimur (1552 kg/hectare).

On the basis of the preceding discussions, Table 3.6 has been prepared to indicate the status of top three districts in terms of production and productivity of four major crops — rice, wheat, maize and pulses.

Table 3.6 : Leading Districts for Production and Productivity of Rice, Wheat, Maize and Pulses

Crop	Production / Productivity	Top 3 Districts	
		2013-14	2014-15
Rice	Production	Rohtas, Aurangabad, Kaimur	Rohtas, Aurangabad, West Champaran
	Productivity	Rohtas, Aurangabad, Kaimur	Arwal, Rohtas, Sheikhpura
Wheat	Production	Rohtas, West Champaran, Muzaffarpur	Rohtas, Kaimur, Siwan
	Productivity	Samastipur, Sheohar, Muzaffarpur	Jehanabad, Patna, Gaya
Maize	Production	Katihar, Araria, Bhagalpur	Katihar, Madhepura, Khagaria
	Productivity	Katihar, Bhgalpur, Araria	Katihar, Madhepura, Saharsa
Pulses	Production	Patna, East Champaran, Lakhisarai	Patna, Aurangabad, Nalanda
	Productivity	East Champaran, Lakhisarai, Patna	Kaimur, Patna, Darbhanga

Area and Production of Vegetables

The agro-climatic conditions in the state are extremely suited for the production of vegetables. The Gangetic alluvial soil is a major boon for the vegetable producers of the state. Bihar ranks first among all the states in terms of vegetable production, and vegetables are exported to far-off states. In Table 3.7, the area and production of vegetables in Bihar are presented for the years 2012-13 to 2014-15.

From the table, it is found that there has been a modest increase in the area and production for major vegetables between 2012-13 and 2014-15. For example, the production of potato grew annually by 2.57 percent and onion by 3.43 percent. For other vegetables like tomato, cauliflower, brinjal, cabbage and carrot, the growth rate has been negative. The total vegetable production recorded a small decline (0.42 percent) between the two years. In 2014-15, the total vegetable production in Bihar was 144.99 lakh tonnes, whereas in 2012-13, it was 148.99 lakh tonnes. In 2014-15, out of a total of 144.99 lakh tonnes, potato accounted for 63.46 lakh tonnes, onion accounted for 12.47 lakh tonnes, tomato 10.46 lakh tonnes, cauliflower 10.04 lakh tonnes, brinjal 11.42 lakh tonnes and other remaining items accounted for 5.86 lakh tonnes.

The district-wise production along with the area for different vegetables are presented in Table A 3.7 (Appendix) for two years (2013-14 and 2014-15). From the table, it emerges that Nalanda, Patna and Saran are the lead districts in terms of production of potato. For onion, Nalanda, Patna and Katihar are the lead districts, whereas for cauliflower, the lead districts are Vaishali, Muzaffarpur, Nalanda and Samastipur.

Table 3.7 : Area and Production of Vegetables

(Area in '000 hectare/Production in '000 tonnes)

Year	Area/ Production	Potato	Onion	Tomato	Cauliflower	Cabbage
2012-13	Area	315.73	51.01	46.11	65.93	40.21
	Production	5851.99	1081.17	1061.79	1149.58	734.79
2013-14	Area	318.45	54.32	47.69	65.73	40.00
	Production	6536.00	1304.16	1061.77	1147.76	734.98
2014-15	Area	318.99	54.30	47.73	65.70	39.00
	Production	6345.56	1247.31	1046.44	1003.55	695.33
CAGR*	Production	2.57	3.43	-0.58	-2.21	-0.45
Year	Area/ Production	Brinjal	Okra (bhindi)	Chilli	Bottlegourd	Cucumber
2012-13	Area	57.28	58.09	39.20	31.64	2.06
	Production	1341.20	786.06	478.17	658.90	22.88
2013-14	Area	57.49	58.08	39.49	31.73	2.06
	Production	1240.49	783.54	478.13	658.11	22.88
2014-15	Area	57.60	57.71	44.82	40.27	4.02
	Production	1141.57	762.90	418.33	631.54	67.04
CAGR*	Production	-1.49	-1.17	-2.10	-1.46	22.34
Year	Area/ Production	Muskmelon	Pointed gourd	Bittergourd	Pea	Watermelon
2012-13	Area	1.13	6.45	9.67	9.62	1.41
	Production	14.15	69.47	70.00	67.15	30.67
2013-14	Area	1.13	6.46	9.68	10.16	1.41
	Production	14.15	69.48	70.01	67.15	30.67
2014-15	Area	1.46	6.59	9.71	10.24	1.99
	Production	12.82	69.72	67.25	65.85	29.88
CAGR*	Production	-3.43	-3.54	-1.72	-2.38	-1.58
Year	Area/ Production	Carrot	Sweet Potato	Radish	Others	Total
2012-13	Area	4.70	0.41	16.01	91.97	848.63
	Production	55.33	8.31	252.33	1164.57	14898.51
2013-14	Area	4.63	0.85	16.01	40.28	805.66
	Production	54.34	8.32	252.35	597.86	15132.14
2014-15	Area	9.27	1.03	24.10	48.97	843.49
	Production	53.45	8.34	246.55	585.53	14498.94
CAGR*	Production	-1.56	-1.32	-0.80	-18.83	-0.42

Note: *CAGR is calculated for 5 years (2010-11 to 2014-15)

Source: Department of Agriculture, GOB

Area and Production of Fruits

Bihar is known all over India for its litchi and mango. Bihar litchi is sold in all the regions of India. Litchi from Muzaffarpur is a ‘brand name’ for its taste, the ‘Shahi Litchi’ being the most famous. The Malda variety of mango is another juicy member in the fruit basket of Bihar. The levels of production of eight major fruits in Bihar in 2014-15 were — mango (1272 thousand tonnes), guava (370 thousand tonnes), litchi (198 thousand tonnes), lemon (129 thousand tonnes), banana (1527 thousand tonnes), pineapple (116 thousand tonnes), papaya (43 thousand tonnes) and amla (15 thousand tonnes) (Table 3.8). However, for litchi, lemon and pineapple, one observes a downward trend in production. For other fruits, the annual growth rate in production is positive and it is particularly high for guava (14.2 percent) and papaya (3.1 percent).

Table 3.8 : Area and Production of Fruits

(Area in ‘000 hectare/Production in ‘000 tonnes)

Year	Area/ Production	Mango	Guava	Litchi	Lemon	Banana
2012-13	Area	135.86	29.7	31.14	17.95	33.58
	Production	1343.32	238.08	233.86	130.9	1414.03
2013-14	Area	148.78	29.96	32.17	17.95	35.26
	Production	1477.44	373.71	258.69	128.90	1723.87
2014-15	Area	148.37	29.40	32.20	17.96	34.64
	Production	1271.62	369.96	197.70	128.72	1526.50
CAGR*	Production	0.77	14.20	-1.84	-0.68	1.00
Year	Area/ Production	Pineapple	Papaya	Amla	Others	Total
2012-13	Area	4.16	1.92	1.61	32.07	295
	Production	113.91	48.5	14.83	297.12	3834.56
2013-14	Area	4.16	1.76	1.69	32.09	303.81
	Production	113.91	43.27	14.96	323.61	4458.36
2014-15	Area	4.21	1.88	1.69	76.30	346.64
	Production	116.37	43.48	14.90	310.58	3979.82
CAGR*	Production	-3.53	3.09	0.25	1.86	1.58

Note : *CAGR is calculated for 5 years (2010-11 to 2014-15)

Source : Department of Agriculture, GOB

There is widespread variation across districts in Bihar in terms of fruit production. This is depicted in Table A 3.8 (Appendix). In the table, the district-wise area and production for four important fruit crops have been presented, for 2013-14 and 2014-15. These fruit crops are — mango, litchi, guava and banana. The table also presents the share of each district in area and production.

Considering the production levels for mango in 2014-15, one finds that the lead districts are Darbhanga, Samastipur and East Champaran. For guava, the lead districts are — Nalanda, Rohtas and Bhojpur. For litchi, Muzaffarpur easily dominates the scene. For banana, Muzaffarpur, Vaishali and Samastipur are the leading producers.

Area and Production of Flowers

The up-to-date data for the flower sector is not available for 2014-15. Since flower is an important sector, we are providing analysis up to 2013-14. Flower production in Bihar has increased recently, providing immense opportunity of employment and income in rural areas of Bihar. In Table 3.9, the area and production of various flowers of Bihar have been presented for the period 2009-10 to 2013-14. From the table, it is evident that about 99 tonnes of rose, 6799 tonnes of marigold, 318 tonnes of jasmine (Bela) and 536 tonnes of the tuberose were produced in 2013-14 in Bihar. Over the period 2009-10 to 2013-14, the rate of growth of rose and marigold was higher at 5.51 percent and 7.80 percent, respectively.

Table 3.9 : Area and Production of Flowers

(Area in hectare/Production in tonnes)

Year	Area/ Production	Rose	Marigold	Jasmine (Bela)	Tube Rose	Others	Total
2009-10	Area	63.55	269.85	91.6	87.45	113.9	626.35
	Production	80.86	4877.97	268.39	435.05	966.91	6629.18
2010-11	Area	68.05	283.15	105.15	105.25	126.05	687.65
	Production	86.52	5119.66	307.46	522.94	1068.23	7104.81
2011-12	Area	72.9	359.95	113.5	116.65	138.85	801.85
	Production	95.14	6565.8	348.32	595.45	1210.04	8814.75
2012-13	Area	73.64	314.70	113.4	110.15	132.6	744.49
	Production	98.90	5603.12	317.66	535.84	1080.23	7635.75
2013-14	Area	73.59	363.48	113.4	110.15	132.6	793.22
	Production	98.90	6798.68	317.66	535.84	1080.23	8831.31
CAGR	Production	5.51	7.80	3.77	4.51	2.36	6.70

Source : Department of Agriculture, GOB

There is wide variation in the area and production of various flowers across the districts. This is clear from Table A 3.9 (Appendix). For rose, the leading districts in terms of production in 2013-14 are Vaishali (8.6 percent), Patna (8.0 percent) and Muzaffarpur (7.6 percent). For marigold, in terms of production in 2013-14, the leading districts have been Patna (14.9 percent), Muzaffarpur (9.2 percent) and Vaishali (9.0 percent). For jasmine (Bela), the leading districts in terms of production in 2013-14 are Gaya (7.9 percent), Muzaffarpur (7.5 percent) and Vaishali (7.3 percent). The figures in the brackets indicate percentage share of above districts in the total production of the state. The rankings has been done in comparison with the population of the above districts in the total population. The production shares were then compared with the population share of the above districts to arrive at the conclusions.

Area and Production of Sugarcane

The sugar industry is an important component of agro-based industry in the state, providing direct employment in the producing units and indirect employment through its ancillaries and associated activities. The total cultivable land in the state is around 53 lakh hectares, of which almost 3 lakh hectares is under sugarcane. The total production of sugarcane was 15499 thousand tonnes in 2014-15, recording of an average productivity of 60.94 tonnes/hectare.

The district-wise area and production of sugarcane is presented in Table A3.10 (Appendix). The share of each district for area and production are shown in the brackets for each district, for the latest year 2014-15. Considering the share of area and production of sugarcane, one finds that West Champaran and East Champaran are the lead districts. In terms of productivity, the lead districts are — East Champaran, Nalanda and Jehanabad. The highest productivity of 106 tonnes/hectare is recorded in East Champaran.

As sugarcane has considerable potential for development of agro-based industries in Bihar, the state government has a number of schemes to enhance its productivity and production. These schemes are :

- (a) A subsidy scheme of Rs. 135 per quintal for purchase of certified sugarcane seeds of improved varieties.
- (b) An incentive scheme of Rs. 55 per quintal, for multiplication of certified seeds.
- (c) An incentive scheme of subsidy for the sugar mills, for producing base seed and breeder seed.
- (d) A scheme of farmers' training to promote the use of improved variety of sugarcane in states where such varieties are extensively grow.
- (e) A scheme of an incentive amount to promote inter-cropping and use of diesel for irrigation purposes.

3.4 Irrigation

One of the foremost input requirements of agriculture is the timely availability of irrigation for agricultural operations. Needless to say, newer and modern techniques of agriculture can succeed only when there exist facilities of assured irrigation. Therefore, under Agricultural Road Map II, the state government has identified the following targets for expansion of irrigation potential in Bihar :

- (a) There will be a strategy to increase the irrigation potential to 101.09 lakh hectares by March, 2017.
- (b) The summer irrigation potential is to be increased from 3.0 lakh hectares to 30.6 lakh hectare by March, 2017.
- (c) It is proposed to establish 14.64 lakh private tubewells by 2022.
- (d) There is a proposal for extensive renovation of about 1770 Ahar/Pynes by March, 2017.
- (e) There is a proposal to interlink rivers to transfer surplus water of North Bihar rivers by pumping through the Ganga by 2022.

A more detailed report on the status of irrigation in Bihar is included in Chapter 5 which presents the infrastructural base of the state.

3.5 Agricultural Inputs

For a highly productive agriculture sector, there is a need for adequate and quality inputs, besides fertile land and assured irrigation. These inputs include — seeds, fertilizer, farm equipment and highly efficient extension services. One should also remember here that all these inputs in agriculture need to be supplied at the proper time, matching the agricultural calendar.

Seeds

The modern agricultural operations are highly dependent on the availability of quality improved seeds. The Agricultural Road Map II of Bihar, therefore, stressed the need of producing quality, improved seeds and making it easily available to the farmers in proper time. The proper application of such seeds and maintaining a desired level of SRR (Seed Replacement Rate) are important determinants of agricultural productivity. As there was dearth of firms producing seeds in Bihar, the SRR was often low in Bihar in the past. The state government, therefore, is making all efforts for increasing the SRR in the state.

Table 3.10 : Distribution of Certified Seeds and Seed Replacement Rate (SRR) for Important Crops

(Requirement and supply in '000 qntl./SRR in percentage)

Crops	2012-13			2013-14			2014-15		
	Requirement	Supply	SRR	Requirement	Supply	SRR	Requirement	Supply	SRR
Kharif Crops									
Paddy	297.00	279.70	40.20	353.60	245.70	40.80	373.20	361.50	38.75
Maize	75.00	61.50	82.00	95.00	19.10	20.15	—	—	—
Urad	1.10	5.70	65.90	1.40	0.60	18.80	1.62	—	25.00
Moong	0.60	3.60	82.50	1.30	2.10	79.10	—	—	—
Rabi Crops									
Wheat	840.00	849.90	35.40	840.00	817.20	35.70	864.00	795.50	35.58
Maize	130.00	114.80	85.00	130.00	126.40	85.00	207.00	207.00	90.00
Arhar	3.80	4.10	27.10	4.60	2.50	19.40	5.40	1.05	10.58
Gram	17.30	13.10	16.50	23.00	7.10	9.10	27.60	4.13	5.51
Masoor	12.90	7.30	11.40	20.80	3.57	5.67	25.80	7.08	11.35
Rapeseed/ Mustard	3.30	5.10	100.00	3.30	2.60	39.80	3.46	3.06	49.04

Source : Department of Agriculture, GOB

Under the Agriculture Road Map II, the production of certified seeds of the recently evolved crop varieties have been emphasised. As many as 23 crops were identified and promotion programmes for their seeds have been initiated by the state government. Other programmes include Chief Minister's Crash Seed Programme, Seed Village Programme (Beej Gram

Yojana) and provision of subsidy for the production and purchase of certified seeds. There has also been the revival of hitherto dormant Bihar Rajya Beej Nigam (BRBN), strengthening of Bihar Seeds Certification Agency, and multiplication of foundation and breeder seeds by state farms. Under these, 3 new seed processing plants were set up at Hajipur, Bhagalpur and Begusarai. These steps have led to increased crop productivity in the state. Recently, the scheme of 'Mukhyamantri Tibra Beej Vistar Yojana' has helped farmers in the field of paddy cultivation. The SRR for major crops like paddy, wheat and maize have increased substantially in recent years. More specifically, the SRR for self-pollinated crops have reached the scientific level of 33 percent. Table 3.10 reveals the status of SRR for various crops. For two cereals (paddy and wheat) the SRR has been nearly stabilised. For other crops, however, the SRR is less than the desired level. With higher production of certified seed, the situation is likely to improve in the coming years.

Fertilizer

Since the inception of Green Revolution in India, the use of fertilizers has played a vital role in increasing productivity of the agricultural crops. In Bihar also, along with the use of better quality seeds, use of chemical fertilizers in optimum quantity has played a key role in increasing agricultural productivity of many crops. The consumption of fertilizers has been steadily increasing in recent years (Table 3.11).

In 2012-13, the total consumption of fertilizers in Bihar was 46.42 lakh tonnes, which came down to 41.16 lakh tonnes in 2014-15, registering a decrease of 11.3 percent in three years. However, this is not particularly worrisome, as the farmers are recently replacing chemical fertilizers with eco-friendly bio-fertilizers.

Table 3.11 : Consumption of Fertilizers

('000 tonnes)

Type of Fertilizer	2012-13			2013-14			2014-15		
	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total
Urea	903.03	1192.93	2095.96	861.95	1008.69	1870.64	864.29	1076.11	1940.4
DAP	216.52	325.16	541.68	94.52	265.63	360.15	128.58	224.13	352.71
SSP	37.13	27.42	64.55	29.96	28.75	58.71	26.08	30.73	56.81
MOP	44.53	69.3	113.83	51.17	88.81	139.98	54.59	99.13	153.72
Ammonium Sulphate	0	21.41	21.41	6.78	7.19	13.97	1.28	2.38	3.66
Complex	98.83	178.83	277.66	40.67	117.26	157.93	76.01	186.04	262.05
Sub Total	1300.04	1815.05	3115.09	1085.05	1516.33	2601.38	1150.83	1618.52	2769.35
N	470.89	640.39	1111.28	421.71	533.24	954.95	433.12	567.27	1000.39
P	128.67	196.92	325.59	57.15	152.7	209.85	82.35	152.76	235.11
K	32.21	57.81	90.02	34.01	61.97	95.98	39.37	71.79	111.16
Total (NPK)	631.77	895.12	1526.89	512.87	747.91	1260.78	554.84	791.82	1346.66
Grand Total	1931.81	2710.17	4641.98	1597.92	2264.24	3862.16	1705.67	2410.34	4116.01
Consumption of fertilizer (kg/ha.)	158.53	207.01	183.76	127.17	171.5	150.2	138.1	181.78	160.82

Source : Department of Agriculture, GOB

From Table 3.11, one may also observe a trend towards a more balanced use of fertilizers in the last two years. The NPK (Nitrogen, Phosphorous and Potassium) ratio for the last three years has been 12:4:1 (2012-13) and 10:2:1 (2013-14) and 9:2:1 (2014-15). In some earlier years, it was even more balanced — 6:2:1 (2008-09) and 5:1:1 (2009-10). This would mean that there has been some rationalization in the use of fertilizer components by the farmers.

Table 3.11 also indicates that urea takes the most important place and constitutes around 72 percent of the total chemical fertilizer consumption. It can also be noted that, although kharif crops are the most important crops in Bihar, the use of chemical fertilizers is comparatively higher for rabi crops. In 2014-15, whereas the farmers used 138 kgs/ha for kharif crops, they used 182 kgs/ha for rabi crops. Besides NPK, the state government is making concerted efforts to promote bio-fertilizers and green manure technique on a larger scale. Apart from the central subsidy, the state government is providing additional subsidy for the use of micro-nutrients. Under the Agriculture Road Map II, the state government is pressing for the cultivation of 'Dhaicha' and 'Moong', the green manure plants. The process has evoked immense response from the farmers.

Extension Services

An efficient team of extension workers can go a long way in transferring the most modern technology to the farmers at the field level. This team can work as a catalyst for seed management, use of optimum mix of chemical fertilizer (on the basis of land chemistry), newer cropping pattern, and wider use of high yielding variety (HYV) seeds. With the introduction of subject-matter specialist and 'Kisan Salahkar' at the sub-Block level, the working of the extension services has grown manifold in Bihar in recent years.

A massive training programme to modernize the knowledge of farmers through 'Kisan Pathshalas' has gained momentum. They are attending these 'schools' to have the first-hand knowledge of soil-testing methods, vermi compost, and new SRI (System of Rice Intensification) technique of paddy cultivation. The 'Kishan Vikas Shivirs' have become a platform for exchange of ideas between experts and farmers. 'Rabi and Kharif Mahotsavs' are being organised at the block level, before the onset of crop season. During 2011-12, 16 districts were selected for the introduction of SRI technique for paddy cultivation. During 2012-13, SRI technique for wheat cultivation was also demonstrated in those districts. They were based on 'zero tillage' methods. The farmers are now attracted to SRI technique and 'Dhaicha' cultivation. During 2014-15, most of the districts have been covered by SRI technique for rice cultivation.

The Kisan Vikas Shivirs are involved in the distribution of all agricultural inputs and related subsidies. The farmers purchase inputs like seed, bio-fertilizers or farm implements in these camps. During kharif season of 2012 and 2013, several steps were undertaken to promote agriculture on a fast track. In recent times, Dhaicha seeds are distributed to farmers free of cost. The implementation of the green manure technology will have far-reaching effect in keeping intact the soil fertility. The steps taken by the state government resulted in record rice and wheat production in the state. The productivity of the rice rose to a record high of 25.3 quintals per hectare.

Farm Mechanization

It is a historical fact that, with increasing mechanization, economies of scale starts operating in agriculture and the cost of cultivation diminishes, leading to higher productivity. So, optimal level of mechanization can go a long way in ushering in low-cost agriculture. Through mechanisation, the agricultural operations are completed in time and it also lessens the drudgery associated with manual agricultural occupation. Thus, farm mechanization is an integral part of Agricultural Road Map II of the state government. The state government is providing subsidy, in addition to the subsidy provided under the centrally sponsored scheme, for power tillers, tractors, sprayers, winnowing machine, power weeders and power threshers. The focus is on zero tillage machine which is more suitable for small and marginal farmers. Because of easy availability of subsidy, some equipments which were earlier rare in rural areas have now become a common phenomenon.

In Table 3.12, the progress of farm mechanization in Bihar through subsidy has been presented for the period 2009-10 to 2014-15. It can be seen from the table that, against 3672 tractors in 2009-10, the number had gone up to 9062 in 2014-15. However, there was a drop in the number of power tillers distributed in next two years. There is also decrease in the number of pumpsets distributed. In 2013-14, as many as 18.0 thousand pumpsets were distributed. Because of the earnestness of the extension workers, there was a quantum jump in the use of zero-tillage machines. As against a 860 such machines distributed in 2009-10, the number rose to 9760 in 2013-14. In 2014-15, the progress become slower and only 1348 machines were distributed. In case of combine harvesters, the growth rate is rather low, because of its high cost. In 2013-14, 261 combine harvesters were given to the farmers; but in 2014-15, there were 164 farmers who acquired this machine.

Table 3.12 : Number of Farm Implements Distributed on Subsidy

(In numbers)

Farm Implements	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tractor	3672	3644	3848	8158	5053	9062
Combine Harvestors	42	65	109	322	261	164
Zero Tillage	860	301	3787	7701	9760	1348
Pumpsets	37293	30340	28615	25520	18019	16203
Power Tiller	4635	5330	7567	6445	4293	2043
Manually operated tools/implements	245969	179790	146849	485209	43078	31526
Threshers	5723	4316	4857	4984	3652	1438

Source : Department of Agriculture, GOB

Organic Farming

Throughout the world, agricultural scientists are taking interest in organic farming on the ground of both health and environment. Bihar is not trailing much far in this sphere. The promotion of organic farming has been made a part of the Agricultural Road Map II of Bihar to retain the inherent fertility of soil for the future generation. This programme would cost

Rs. 255 crore over a period of 5 years. The vermi-compost production has been made demand-based, with a provision of 50 percent subsidy. Earlier, the production of at least 3000 tonnes of vermi-compost by any commercial unit used to be subsidised. Now, the ceiling has been brought down to 1000 tonnes. The state government has also allowed subsidy for the purchase of vermi-compost from 2011-12. During 2013-14, a total of Rs. 149.79 crore has been spent on promoting organic farming. The Integrated Pest Control programme has also been undertaken for controlling insect, pest and diseases from the stage of seed sowing to standing crops.

Horticulture Development

Bihar is one of the largest producers of fruits and vegetables in the country. Easy availability of quality planting material is most critical for horticultural development. So, the strategy of the state government is to make mother plants available in the agricultural universities and other departmental nurseries, to be distributed among the farmers. Depending on the agro-climatic situation, one specific horticulture crop has been identified for each district, so that a cluster approach can be undertaken for such crops in each district. Apart from important fruit crops, the universities will also set up progeny nursery for less common fruits like bael, ber, jamun, amla etc. Further, more tissue culture laboratories would be set up in the state during the period of Agriculture Road Map II (2017-22), since tissue culture technique is extensively used for the multiplication of plants like banana and flowers.

3.6 Agricultural Credit

Apart from physical inputs like seed, water, fertilizer and agricultural implements, agricultural operations also require adequate credit support. Such credit support becomes all the more indispensable as modern inputs are to be procured from the market, requiring working capital. However, the data related to the agricultural credit reveal that credit supply is not adequate in Bihar *vis-à-vis* its demand. In Table 3.13, the bank-wise details are presented for agricultural credit.

Table 3.13 : Agricultural Credit Flow

(Rs. crore)

Year	Commercial Bank		RRBs		CCB		Total	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
2010-11	9111	7058 (77.5)	5228	3188 (61.0)	1529	422 (27.6)	15868	10667 (67.2)
2011-12	12241	9689 (79.2)	7013	4882 (69.6)	1848	387 (20.9)	21102	14958 (70.9)
2012-13	14674	13203 (90.0)	8407	8035 (95.6)	2319	328 (14.2)	25401	21566 (84.9)
2013-14	18709	17786 (95.1)	10777	10676 (99.1)	800	307 (38.4)	30286	28770 (95.0)
2014-15	22191	21260 (95.8)	12809	13058 (101.9)	1000	362 (36.2)	36000	34680 (96.3)

Note : Figures in the parentheses denote achievement percentage to the target

Source: State Level Bankers' Committee

The table covers the period 2010-11 to 2014-15. The flow of agricultural credit comprises three major sources — Commercial Banks, Regional Rural Banks (RRB) and Central Cooperative Banks (CCB). In 2010-11, the achievement level for agricultural credit has been

around 67 percent. However, the level has gradually increased to 96.3 percent in 2014-15. In absolute terms, the flow of credit has increased satisfactorily. From Rs. 10,667 crore in 2010-11, it grew to Rs. 34,680 crore in 2014-15, which is about 3 times the credit flow in 2010-11. However, with rising inflation and volume of demand generated from the recent modern agricultural operations, the supply of credit is still not adequate. The share of three different sources in 2014-15 stood at Commercial Banks (61.30 percent), RRBs (37.65 percent) and CCB (1.05 percent). In other words, Commercial Banks are the major suppliers of agricultural credit in Bihar.

Since the Commercial Banks and Regional Rural Banks are not keen to supply credit to agricultural sector as they seek collaterals for granting of credits, the Cooperative Banks were supposed to play an important role in agricultural credit; but, unfortunately, this strategy has not worked as yet. The district-wise position of target and achievement of cooperative credit are presented in Table A3.11 (Appendix). It is clear from the table that no district could fulfil the targets of agricultural credit in 2014-15. The level of cooperative agricultural credit was relatively higher in districts like Begusarai, Samastipur, Khagaria, Patna, Gopalganj, Aurangabad and East Champaran. In districts like Saharsa, Supaul, Madhepura, Sheikhpura, Jehanabad and Arwal, cooperative credit operations are either nil or negligible.

Recently, for crop loan, an amount as interest subsidy has been sanctioned by the state government. This will help the farmers get loan at a rate of interest of 4 percent. NABARD has helped the state government to finance the project. This will lead to an increased flow of institutional credit to the farmers.

Kisan Credit Card

Kisan Credit Card (KCC) has been an important instrument through which credit is being provided to the farmers. The scheme was introduced in 1999 and farmers are allowed a maximum credit limit of Rs. 50,000 to procure necessary inputs. In 2010-11, an estimated number of 7.91 lakh farmers could reap the benefit of the scheme, the achievement level being 52 percent. The coverage of the scheme was 9.95 lakh farmers in 2014-15, after reaching a maximum of 10.74 lakh farmers a year before. The achievement level was 66.4 percent in 2014-15, compared to 71.6 percent in 2013-14. There is a need to extend the coverage of KCC, failing which the agricultural operations will be greatly hampered, particularly the operation of small and marginal farmers. The working of KCC in Bihar has been discussed in more detail in Chapter 9, dealing with the banking sector in the state.

3.7 Animal Husbandry

Apart from agriculture, animal husbandry is one of the key sectors which plays an important role in employment and income opportunities for the rural masses of Bihar. This sector contributes about one-fifth of the total rural income, and provides large scale employment to women, and workers belonging to the marginalised sections of society. Further, since many households are either landless or land-poor in rural Bihar, this sector supplements their low income from agricultural occupation.

According to the livestock census of 2012, the total livestock population was 329.39 lakh. The next census is planned in 2017. According to the figures presented in Table A3.12 (Appendix), 60 percent of the total livestock population are milch animals, with a cow population of 122.32 lakhs and a buffalo population of 75.67 lakhs. The goat population stands at 111.29 lakhs, and goats are popularly known as poor man's cow. The size of poultry population is high at 127.48 lakhs. Taking note of the importance of the sector, the state government has taken several important steps for its development. These include breed upgradation, health and nutrition, insurance scheme for milch animals, and marketing of the products of the sectors. Further, training programmes have been arranged for rural workers to enhance their skill in animal husbandry.

As per the data provided by the livestock census given in Table A3.12 (Appendix), one may notice that there exists a large degree of variation in livestock population across the districts. For bovine population (cows and buffaloes) the districts with higher shares are — Araria, Gaya, Katihar, Banka and Bhagalpur for cows and Madhepura, Madhubani, East Champaran, Gaya and Nalanda for buffaloes. For goats and poultry, there is higher concentration in the north-eastern region of the state, where the climate is rather conducive for their upkeep. The districts which have large concentration of goats — are Araria, East Champaran, West Champaran, Bhagalpur and Katihar. For poultry — Katihar, Muzaffarpur, Vaishali, Kishanganj and Araria are key districts.

Table 3.14 presents the comparative picture depicting the livestock wealth for last three censuses. From this table, one can notice that total livestock population grew from 269.57 lakhs in 2003 to 329.39 lakhs in 2012. For poultry the figures are 139.68 lakhs and 127.48 lakhs, respectively.

Table 3.14 : Livestock Wealth (2003, 2007 and 2012)

(Figures in '000)

Livestock and Poultry	2003	2007	2012	Livestock and Poultry	2003	2007	2012
Cattle	10470	12408	12232	Sheep	346	218	232
Males over 3 years	3020	2737	1915	Goats	9606	10167	12154
Females over 3 years	3643	4919	5982	Pigs	627	632	650
Young stock	3807	4752	4334	Horses and Ponies	115	51	49
Buffalo	5766	6690	7567	Others	0	0	55
Males over 3 years	274	329	300	Total Livestock	26957	30167	32939
Females over 3 years	2901	3546	4017	Total Poultry	13968	11420	12748
Young stock	2590	2815	3250				

Source: Department of Animal Husbandry, GOB

In Table 3.15, the production levels of various animal husbandry products have been presented for the period 2010-11 to 2014-15. Milk is the most important produce of this sector. The production of milk has increased from 65.17 lakh tonnes in 2010-11 to 77.75 lakh tonnes in 2014-15. The production of egg has also increased from 74.46 crores in 2010-11 to 98.45 crores in 2014-15.

Table 3.15 : Livestock and Fish Production

Year	Milk (lakh tonnes)	Egg (crores)	Wool (lakh kgs)	Meat (lakh tonnes)	Fish (lakh tonnes)
2010-11	65.17	74.46	2.6	2.23	2.89
2011-12	66.25	75.43	2.66	2.28	3.44
2012-13	68.45	83.72	2.67	2.28	4.00
2013-14	71.97	93.08	2.71	2.92	4.32
2014-15	77.75	98.45	2.78	2.94	4.79
CAGR	4.5	8.0	1.5	8.3	13.2

Source : Department of Animal Husbandry, GOB

The state government has several schemes like medical treatment of animals, sterilization, artificial insemination, immunization and free distribution of fodder seeds for the growth of the animal husbandry sector. The progress of livestock services over the past few years have been shown in Table 3.16.

Table 3.16 : Livestock Services

Year	Animal Treated (lakh)	Immunization (lakh)	Artificial Insemination (lakh)	Free Distribution of Fodder Seed (qntls.)
2010-11	35.73	221.73	19.48	4410.69
2011-12	28.13	121.65	3.27	2952.12
2012-13	28.24	198.78	3.30	3.40
2013-14	25.12	147.57	3.12	102.60
2014-15	31.70	19.75	2.92	Not Distributed

Source : Department of Animal Husbandry, GOB

In Appendix Table A3.13 (Appendix), the district-wise details are provided pertaining to different livestock-related services. They relate to the years 2013-14 and 2014-15. These services are not uniform across the districts. For Bihar as a whole, 31.70 lakh animals were treated in 2014-15. In addition, 19.75 lakh animals were immunized. The coverage of artificial insemination stood at 2.92 lakh animals in 2014-15. The state government has also started providing ambulatory vans (Mobile Veterinary Clinic) since 2013-14, which are equipped with latest technology and modern medicines and tools. At present, 50 such vans are providing veterinary services to remote rural areas. The state government plans to provide more such vans in the coming annual plans.

Further, the state government has established silos in Patna, Munger, Gaya, Saharsa, Purnea, Muzaffarpur, Darbhanga, Chhapra and Banka for the storage of liquid nitrogen for artificial insemination. The state government has also taken steps to renovate the artificial insemination centres in all the districts. In the new programme of artificial insemination, the non-governmental organisations (NGOs) would also be associated, where the expected number of new calves is rather high. The state government also proposes to create a modern slaughter house in each of the 38 districts, at a cost of Rs. 1 crore per unit, for the production of clean and hygienic meat.

Fisheries

The water area in Bihar is 273.3 thousand hectares and it also has 3200 kms. of river length. This constitutes about 3.9 percent of the total geographical area. Consequently, there exists wide scope of fish cultivation in the state, providing gainful occupation for fishing population. This sector is growing steadily and the contribution of this sector to the total GSDP has more-than-doubled during the last decade. In 2004-05, the production of fish in Bihar was 2.67 lakh tonnes. The production grew continuously thereafter and reached the peak level of 4.79 lakh tonnes in 2014-15 (Table 3.15).

The state government has recently taken steps to enhance the skill of the fishermen through on-site training, and exposure visits to various places in India. Such skill includes both managerial and participatory skills. The fishermen of the state have been sent to Andhra Pradesh and West Bengal for upgradation of their skills for modern fishing techniques. During 2012-13, around 1552 fishermen were trained in the state; in 2013-14, another about 2000 fishermen were inducted for training. In 2011-12, a new insurance scheme for fish farmers was introduced. One scheme is being implemented by the Oriental Insurance Company, a public sector enterprise. Under this, a premium of Rs. 3200 is fixed for each hectare of fishing area, which is shared by the beneficiary and the state government on 50:50 basis.

The schemes undertaken by the state government, like distribution of fingerlings on subsidies, distribution of easy loans to farmers for maintenance and renovation of private ponds, and free houses for poor fishermen have immensely benefited the fish farmers of the state. The development of ponds and 'chaur' have increased the water area under fishing. In 2013-14, 4812.85 lakh fish seeds were produced in the state. The district-wise details of fish production and distribution of fish seeds are given in Table A 3.14 (Appendix). The data in the table shows that the districts of the Darbhanga Division (Darbhanga, Madhubani, Samastipur) are major producers of fish. The leading fish-producing districts in 2014-15 are — Madhubani, Darbhanga and East Champaran. For fish seed, Darbhanga topped the list, followed by Muzaffarpur. The distribution of seed was also the highest in Darbhanga, followed by Muzaffarpur.

Recently, several new schemes have been undertaken by the state government for the upliftment of the poor fishermen in the state. A scheme of stocking of reservoirs with fingerlings have been newly introduced by the state government. The National Fisheries Development Board (NFDB) is assisting the process of stocking. The required credit is provided to the fishermen for the creation of hatcheries which have the capacity to breed 8-10 million fries. To maximize carp production, hatchery is being developed on Public-Private Partnership (PPP) basis. The unit cost of hatcheries is Rs. 15.00 lakh, for which 50 percent subsidy is provided. There is a target to construct 40 such hatcheries. Any beneficiary may construct a carp hatchery on his fish farm and can avail 50 percent of subsidy. There is a proposal to create a Fish Research Centre in Mithapur (Patna) at a cost of Rs. 129.37 lakh. The state government also proposes to establish a Sonaru fish seed farm in Fatuha at a cost of Rs. 99.68 lakh. The state government also plans to provide installation of tubewells and pumpsets to produce quality fish seed in water logged areas of the state to increase fish production.

APPENDIX

Table A 3.1 : District-wise Annual Rainfall for Different Seasons

(Rainfall in mm.)

Districts	2014					2015, up to September			
	Winter Rain	Hot Weather Rain	South-West Monsoon	North-West Monsoon	Total	Winter Rain	Hot Weather Rain	South-West Monsoon	Total
Patna	4.9	26.5	756.6	20.1	808.1	0	41.0	491.8	532.8
Nalanda	46.5	123.5	862.9	9.6	1042.5	9	43.3	619.6	671.9
Bhojpur	53.5	37.3	520.3	30.4	641.5	3.2	60.3	569.6	633.1
Buxar	82.3	72.3	392.5	47.2	594.3	23.8	32.1	687.9	743.8
Rohtas	45.5	35	321.9	7.9	410.4	9.3	70.6	444.2	524.1
Kaimur	32.3	29.6	484.4	37	583.3	17.9	45.7	762.4	826
Gaya	46.1	71.6	744	17.2	878.9	15.4	33.0	689.4	737.8
Jehanabad	31	24.6	784.7	9.9	850.3	5.1	11.6	574.3	591
Arwal	80.5	16.3	456.5	10.4	563.7	10.9	29.2	713.8	753.9
Nawada	41.8	101.2	881.1	10.3	1034.4	16	22.1	589.3	627.4
Aurangabad	75	44.7	595.9	29.2	744.7	17.1	70.8	861.2	949.1
Saran	38.7	44.6	701.6	55.3	840.2	3.4	32.8	431.7	467.9
Siwan	38.3	51.3	573.5	81.41	744.3	2.2	104	548.3	654.5
Gopalganj	38.2	55.1	809.2	89.3	991.8	11.3	124.7	554.5	690.5
West Champaran	38.2	45.7	983.8	118.9	1186.6	12.2	128.7	746.5	887.4
East Champaran	26.8	79.5	826.9	110.4	1043.6	8	112.3	745.5	865.8
Muzaffarpur	50.5	55.6	866.8	55.4	1028.4	6.2	6.9	453.6	466.7
Sitamarhi	50.8	126.2	718.3	113	1008.3	0.8	81.7	508.4	590.9
Sheohar	44.5	66.4	776.9	171.5	1059.4	17.6	93.4	638	749
Vaishali	0	21.2	758.6	27.1	806.9	4.6	37.9	465.1	507.6
Darbhangha	18.7	73.2	785.5	60.8	938.2	0	122.4	715.9	838.3
Madhubani	20.6	54.8	850.3	101.5	1027.2	9.8	93.6	601.9	705.3
Samastipur	39.7	95.7	848.1	35.9	1019.4	12.8	83.9	797.1	893.8
Begusarai	0	201.1	927	30.5	1158.6	20.9	83.4	858	962.3
Munger	30.3	214.2	959.2	26.4	1230	9.1	67.7	742.4	819.2
Sheikhpura	30.6	119.4	965.8	16.9	1132.7	0	38.7	755.4	794.1
Lakhisarai	99.2	108.3	795.1	16.3	1018.9	3	24.7	714.8	742.5
Jamui	13.8	174.7	812.6	29	1030.1	16.9	52.6	728.8	798.3
Khagaria	2.5	161.9	751.7	14.2	930.3	31.5	111.9	903.6	1047
Bhagalpur	33.6	147.9	887.1	14.8	1083.5	57.1	179.9	1174.5	1411.5
Banka	57.4	128.4	861.3	14.3	1061.5	21.4	91.4	607.1	719.9
Saharsa	17	185.9	781.4	11.9	996.2	16.7	134.4	806.4	957.5
Supaul	0	61	774.3	55.4	890.7	0	94.4	566	660.4
Madhepura	0.5	186.7	864.8	24.2	1076.2	20.3	169	667.7	857
Purnea	1	72.1	910	26.7	1009.8	13	111.6	693.8	818.4
Kishanganj	7.3	181.3	1614.1	10.1	1812.8	7.5	348.5	1298.4	1654.4
Araria	29.4	124.1	988.8	25.3	1167.6	0	240	768.71	1008.71
Katihar	0	232.3	761.2	26.3	1019.8	9.2	164.1	750.3	923.6
Bihar	33.3	96.1	788.3	41.9	959.6	11.7	89.3	690.7	791.7

Source: Directorate of Economics and Statistics, GOB

Table A 3.2 : District-wise Land Utilisation Pattern (2012-13)

(Area in '000 hectares)

Name of District	Geographical Area (1)	Forest (2)	Barren and Unculturable land (3)	Non- Agriculture Use (4)			Culturable Waste Land (5)
				Land area	Water Area		
					Perennial	Temporary	
Patna	317.2 (100.0)	0.1 (0.0)	12.4 (3.9)	66.7 (21.0)	10.3 (3.3)	2.4 (0.8)	0.8 (0.2)
Nalanda	232.7 (100.0)	4.6 (2.0)	1.2 (0.5)	35.5 (15.3)	2.5 (1.1)	7.6 (3.3)	0.2 (0.1)
Bhojpur	237.3 (100.0)	0.0 (0.0)	6.7 (2.8)	30.1 (12.7)	2.8 (1.2)	1.4 (0.6)	0.6 (0.3)
Buxar	167.0 (100.0)	0.0 (0.0)	2.2 (1.3)	13.1 (7.8)	3.2 (1.9)	1.3 (0.8)	0.7 (0.4)
Rohtas	390.7 (100.0)	66.7 (17.1)	16.8 (4.3)	39.1 (10.0)	9 (2.3)	0.3 (0.1)	1.1 (0.3)
Kaimur	342.4 (100.0)	113.0 (33.0)	19.3 (5.6)	31.0 (9.1)	2.5 (0.7)	1.3 (0.4)	1.9 (0.5)
Gaya	493.8 (100.0)	77.8 (15.8)	27.5 (5.6)	63.1 (12.8)	3.8 (0.8)	6.8 (1.4)	3.3 (0.7)
Jehanabad	94.0 (100.0)	0.6 (0.7)	3.3 (3.5)	13.8 (14.7)	0.8 (0.9)	0.4 (0.5)	0.1 (0.2)
Arwal	62.6 (100.0)	0.0 (0.0)	2.2 (3.5)	9.1 (14.6)	0.6 (0.9)	0.6 (1.0)	0.1 (0.1)
Nawada	248.7 (100.0)	63.8 (25.6)	11.2 (4.5)	25.7 (10.3)	3.0 (1.2)	7.0 (2.8)	1.1 (0.4)
Aurangabad	330 (100.0)	18.8 (5.7)	16.4 (5)	56.2 (17.0)	1.6 (0.5)	1.7 (0.5)	1.8 (0.6)
Saran	264.9 (100.0)	0.0 (0.0)	17.9 (6.8)	28.4 (10.7)	3.5 (1.3)	2.9 (1.1)	0.2 (0.1)
Siwan	224.4 (100.0)	0.0 (0.0)	8.7 (3.9)	29.2 (13.0)	2.0 (0.9)	1.5 (0.7)	0.7 (0.3)
Gopalganj	203.8 (100.0)	0.0 (0.0)	5.5 (2.7)	31.2 (15.3)	2.1 (1.0)	0.4 (0.2)	1.4 (0.7)
W. Champaran	484.4 (100.0)	91.7 (18.9)	2.9 (0.6)	70.9 (14.6)	15.2 (3.1)	8.4 (1.7)	1.3 (0.3)
E. Champaran	431.7 (100.0)	0.1 (0.0)	8.1 (1.9)	51.4 (11.9)	10.1 (2.3)	15.8 (3.7)	0.3 (0.1)
Muzaffarpur	315.4 (100.0)	0.0 (0.0)	5.3 (1.7)	51.3 (16.3)	7.8 (2.5)	4.5 (1.4)	0.3 (0.1)
Sitamarhi	221.9 (100.0)	0.0 (0.0)	1.8 (0.8)	45.1 (20.3)	2.5 (1.1)	15.6 (7.0)	0.1 (0.1)
Sheohar	43.5 (100.0)	0.0 (0.0)	0.4 (0.9)	9.9 (22.8)	1.3 (2.9)	0.2 (0.4)	0.0 (0.1)
Vaishali	201.4 (100.0)	0.0 (0.0)	24.1 (12)	30.3 (15.0)	5.8 (2.9)	2.0 (1.0)	0.1 (0.1)
Darbhanga	254.1 (100.0)	0.0 (0.0)	1.3 (0.5)	44.3 (17.4)	9.4 (3.7)	7.2 (2.8)	0.1 (0.1)
Madhubani	353.5 (100.0)	0.0 (0.0)	2.2 (0.6)	71.2 (20.2)	13.4 (3.8)	2.3 (0.6)	0.5 (0.1)
Samastipur	262.4 (100.0)	0.0 (0.0)	3.8 (1.5)	54.6 (20.8)	8.2 (3.1)	0.9 (0.4)	0.0 (0.0)
Begusarai	187.8 (100.0)	0.0 (0.0)	18.0 (9.6)	30.2 (16.1)	7.7 (4.1)	3.9 (2.1)	0.0 (0.0)
Munger	139.8 (100.0)	28.5 (20.4)	11.4 (8.2)	20.7 (14.8)	5.8 (4.2)	5.2 (3.7)	0.9 (0.7)
Sheikhpura	62.1 (100.0)	0.0 (0.0)	1.0 (1.6)	7.7 (12.4)	0.9 (1.4)	2.1 (3.4)	0.2 (0.4)
Lakhisarai	128.6 (100.0)	13.4 (10.5)	7.0 (5.5)	9.0 (7.0)	1.2 (0.9)	4.6 (3.6)	0.7 (0.5)
Jamui	305.3 (100.0)	92.9 (30.4)	28.6 (9.4)	39.3 (12.9)	2.2 (0.7)	2.8 (0.9)	10.3 (3.4)
Khagaria	149.3 (100.0)	0.0 (0.0)	13.6 (9.1)	19.2 (12.9)	7.7 (5.2)	4.2 (2.8)	0.6 (0.4)
Bhagalpur	254.3 (100.0)	0.1 (0.0)	22.4 (8.8)	54.5 (21.4)	6.6 (2.6)	9.7 (3.8)	2.3 (0.9)
Banka	305.6 (100.0)	46.3 (15.2)	43.0(14.1)	36.6 (12.0)	2.9 (1.0)	3.0 (1.0)	7.9 (2.6)
Saharsa	164.6 (100.0)	0.0 (0.0)	10.8 (6.6)	22.1 (13.4)	4.8 (2.9)	2.2 (1.3)	0.4 (0.3)
Supaul	238.6 (100.0)	0.0 (0.0)	20.2 (8.5)	39.2 (16.4)	9.8 (4.1)	2.9 (1.2)	1.4 (0.6)
Madhepura	179.6 (100.0)	0.0 (0.0)	3.9 (2.2)	26.8 (14.9)	3.9 (2.1)	1.1 (0.6)	0.0 (0.0)
Purnea	313.9 (100.0)	0.1 (0.0)	12.3 (3.9)	37.9 (12.1)	6.9 (2.2)	1.5 (0.5)	1.1 (0.4)
Kishanganj	189.1 (100.0)	0.4 (0.2)	11.2 (5.9)	25.7 (13.6)	7.3 (3.8)	2.6 (1.4)	1.2 (0.6)
Araria	271.7 (100.0)	0.8 (0.3)	5.0 (1.8)	40.3 (14.8)	6.4 (2.4)	5.2 (1.9)	0.5 (0.2)
Katihar	291.3 (100.0)	1.8 (0.6)	22.1 (7.6)	42.0 (14.4)	12.1 (4.2)	4.1 (1.4)	0.6 (0.2)
Bihar	9359.6 (100.0)	621.6 (6.6)	431.7 (4.6)	1352.9 (14.5)	207.4 (2.2)	148.1 (1.6)	45.0 (0.5)

Note : Figures in the parentheses denotes percentage
Source : Directorate of Economics and Statistics, GOB

(Contd.)

Table A 3.2 : District-wise Land Utilisation Pattern (2012-13) (Contd.)

(Area in '000 hectares)

District	Permanent Pastures (6)	Tree Crops (7)	Fallow land (8)	Current Fallow (9)	Total Uncultivable Land (10) (2 to 9)	Net Area Sown (11)	Grass Crop Area (12)	Cropping Intensity (13)
Patna	0.1 (0.0)	1.0 (0.3)	1.6 (0.5)	65.1 (20.5)	160.4 (50.6)	156.8 (49.4)	200.6	1.28
Nalanda	0.0 (0.0)	1.3 (0.5)	0.2 (0.1)	27.8 (11.9)	80.9 (34.8)	151.9 (65.2)	244.8	1.61
Bhojpur	0.1 (0.0)	2.0 (0.9)	2.4 (1)	6.4 (2.7)	52.6 (22.2)	184.8 (77.8)	222.9	1.21
Buxar	0.0 (0.0)	0.8 (0.5)	0.6 (0.4)	7.1 (4.3)	28.9 (17.3)	138.1 (82.7)	190.8	1.38
Rohtas	0.1 (0.0)	2.9 (0.7)	0.8 (0.2)	4.5 (1.1)	141.3 (36.2)	249.4 (63.8)	346.9	1.39
Kaimur	0.1 (0.0)	0.7 (0.2)	0.2 (0.1)	16.2 (4.7)	186.2 (54.4)	156.2 (45.6)	205.7	1.32
Gaya	2.1 (0.4)	3.9 (0.8)	11.4 (2.3)	125.2 (25.4)	324.9 (65.8)	168.9 (34.2)	240.4	1.42
Jehanabad	0.1 (0.1)	0.7 (0.8)	0.2 (0.2)	19.4 (20.6)	39.5 (42.0)	54.5 (58.0)	111.8	2.05
Arwal	0.1 (0.2)	0.9 (1.4)	1.6 (2.5)	5.3 (8.4)	20.5 (32.7)	42.1 (67.3)	46.3	1.10
Nawada	0.9 (0.3)	0.7 (0.3)	2.7 (1.1)	25.3 (10.2)	141.3 (56.8)	107.4 (43.2)	131.4	1.22
Aurangabad	0.5 (0.2)	0.6 (0.2)	1.2 (0.4)	42.9 (13.0)	141.8 (43.0)	188.2 (57.0)	329.3	1.75
Saran	0.2 (0.1)	8.6 (3.2)	3.7 (1.4)	33.4 (12.6)	98.7 (37.3)	166.2 (62.7)	204.1	1.23
Siwan	0.2 (0.1)	8.9 (4.0)	1.5 (0.7)	0.8 (0.3)	53.5 (23.8)	170.9 (76.2)	244.7	1.43
Gopalganj	0.2 (0.1)	7.5 (3.7)	2.4 (1.2)	5.2 (2.5)	55.9 (27.4)	147.9 (72.6)	223.7	1.51
West Champaran	1.1 (0.2)	6.5 (1.3)	2.6 (0.5)	3.6 (0.7)	204.4 (42.2)	280 (57.8)	442.3	1.58
East Champaran	0.4 (0.1)	27.1 (6.3)	3.0 (0.7)	43.3 (10.0)	159.6 (37.0)	272.1 (63.0)	414.4	1.52
Muzaffarpur	0.0 (0.0)	17.4 (5.5)	1.4 (0.4)	8.5 (2.7)	96.5 (30.6)	218.9 (69.4)	299.3	1.37
Sitamarhi	1.4 (0.6)	13.9 (6.3)	0.5 (0.2)	2.6 (1.2)	83.5 (37.6)	138.4 (62.4)	241.3	1.74
Sheohar	0.0 (0.0)	3.6 (8.4)	0.9 (2.1)	0.6 (1.4)	17.0 (39.1)	26.5 (60.9)	49.7	1.88
Vaishali	0.3 (0.2)	9.8 (4.8)	0.3 (0.1)	2.8 (1.4)	75.5 (37.5)	125.9 (62.5)	181.2	1.44
Darbhanga	0.1 (0.1)	12.4 (4.9)	2.2 (0.9)	21.4 (8.4)	98.5 (38.8)	155.6 (61.2)	166.3	1.07
Madhubani	1.3 (0.4)	23.9 (6.8)	2.9 (0.8)	8.0 (2.3)	125.8 (35.6)	227.7 (64.4)	313.4	1.38
Samastipur	0.1 (0.0)	8.3 (3.2)	0.9 (0.3)	12.7 (4.8)	89.5 (34.1)	172.9 (65.9)	264.5	1.53
Begusarai	0.0 (0.0)	3.7 (2.0)	0.8 (0.4)	6.8 (3.6)	71.1 (37.8)	116.7 (62.2)	172.2	1.47
Munger	0.2 (0.1)	0.6 (0.4)	1.9 (1.4)	19.9 (14.2)	95.2 (68.1)	44.6 (31.9)	50.4	1.13
Sheikhpura	0.0 (0.0)	0.3 (0.5)	1.7 (2.7)	7.6 (12.2)	21.5 (34.6)	40.6 (65.4)	53.2	1.31
Lakhisarai	0.1 (0.0)	0.3 (0.2)	6.3 (4.9)	12.6 (9.8)	55.2 (42.9)	73.4 (57.1)	100.2	1.37
Jamui	1.7 (0.5)	2.1 (0.7)	16.1 (5.3)	65.3 (21.4)	261.2 (85.6)	44.1 (14.4)	64.6	1.47
Khagaria	0.2 (0.1)	3.1 (2.1)	2.2 (1.5)	6.4 (4.3)	57.3 (38.4)	92.0 (61.6)	129.5	1.41
Bhagalpur	0.6 (0.2)	6.7 (2.6)	4.9 (1.9)	20.0 (7.9)	127.8 (50.3)	126.5 (49.7)	158.1	1.25
Banka	1.1 (0.4)	7.4 (2.4)	11.2 (3.7)	28.4 (9.3)	187.9 (61.5)	117.7 (38.5)	147.7	1.25
Saharsa	1.1 (0.7)	4.4 (2.7)	3.8 (2.3)	2.0 (1.2)	51.6 (31.4)	112.9 (68.6)	211.7	1.88
Supaul	0.3 (0.1)	3.1 (1.3)	9.5 (4.0)	5.1 (2.1)	91.5 (38.3)	147.1 (61.7)	226.4	1.54
Madhepura	0.0 (0.0)	7.1 (4.0)	1.0 (0.6)	5.3 (3.0)	49.2 (27.4)	130.4 (72.6)	202.7	1.55
Purnea	0.0 (0.0)	8.9 (2.8)	4.7 (1.5)	59.6 (19.0)	133.0 (42.4)	180.9 (57.6)	228.6	1.26
Kishanganj	0.4 (0.2)	5.1 (2.7)	3.0 (1.6)	24.8 (13.1)	81.7 (43.2)	107.4 (56.8)	150.2	1.40
Araria	0.2 (0.1)	19.1 (7.0)	3.6 (1.3)	6.8 (2.5)	88.1 (32.4)	183.6 (67.6)	309.2	1.68
Katihar	0.1 (0.0)	11.1 (3.8)	6.1 (2.1)	8.3 (2.8)	108.2 (37.1)	183.2 (62.9)	257.2	1.40
Bihar	15.6 (0.2)	246.3 (2.6)	121.8 (1.3)	766.7 (8.2)	3957.2 (42.3)	5402.4 (57.7)	7777.6	1.44

Note: Figures in the parentheses denotes percentage
Source: Directorate of Economics and Statistics, GOB

(Concluded)

Table A 3.3 : District-wise Area, Production and Productivity of Rice

(Area in '000 hectare/Production in '000 tonnes/ Productivity in kg/ha)

Districts	2013-14			2014-15		
	Area	Production	Productivity	Area	Production	Productivity
Patna	56.73 (1.8)	137.47 (2.1)	2423 (14)	63.66 (2.0)	163.12 (2.0)	2562 (19)
Nalanda	49.4 (1.6)	112.4 (1.7)	2275 (15)	83.95 (2.6)	217.1 (2.6)	2586 (18)
Bhojpur	99.84 (3.2)	283.39 (4.3)	2838 (7)	99.76 (3.1)	287.84 (3.5)	2885 (11)
Buxar	81.39 (2.6)	250.24 (3.8)	3075 (4)	82.23 (2.5)	228.89 (2.8)	2783 (13)
Rohtas	197.15 (6.3)	776.2 (11.7)	3937 (1)	196.51 (6.0)	820.98 (10.0)	4178 (02)
Kaimur	115.42 (3.7)	380.46 (5.7)	3296 (3)	102.38 (3.1)	281.88 (3.4)	2753 (15)
Gaya	61.12 (1.9)	121.22 (1.8)	1984 (19)	105.36 (3.2)	338.35 (4.1)	3211 (08)
Jehanabad	42.53 (1.3)	118.97 (1.8)	2798 (8)	35.88 (1.1)	118.14 (1.4)	3293 (07)
Arwal	26.58 (0.8)	77.45 (1.2)	2914 (6)	26.05 (0.8)	114.54 (1.4)	4398 (01)
Nawada	63.28 (2)	132.16 (2)	2089 (17)	77.23 (2.4)	237.02 (2.9)	3069 (09)
Aurangabad	139.72 (4.4)	514.56 (7.7)	3683 (2)	164.02 (5)	619.2 (7.5)	3775 (04)
Saran	74.72 (2.4)	130.55 (2)	1747 (23)	72.55 (2.2)	164.72 (2.0)	2271 (21)
Siwan	94.12 (3)	158.26 (2.4)	1682 (25)	92.63 (2.8)	190.88 (2.3)	2061 (26)
Gopalganj	84.88 (2.7)	132.97 (2)	1567 (27)	84.78 (2.6)	165.82 (2.0)	1956 (29)
West Champaran	189.48 (6)	235.79 (3.5)	1244 (31)	152.98 (4.7)	368.15 (4.5)	2407 (20)
East Champaran	162.62 (5.2)	333.46 (5)	2051 (18)	199.56 (6.1)	347.77 (4.2)	1743 (34)
Muzaffarpur	131.11 (4.2)	100.07 (1.5)	763 (38)	140.37 (4.3)	285.34 (3.5)	2033 (28)
Sitamarhi	99.39 (3.2)	94.11 (1.4)	947 (36)	96.59 (3.0)	182 (2.2)	1884 (30)
Sheohar	23.66 (0.8)	23.08 (0.3)	975 (35)	22.89 (0.7)	42.02 (0.5)	1836 (32)
Vaishali	40.21 (1.3)	58.66 (0.9)	1459 (30)	46.18 (1.4)	98.25 (1.2)	2127 (24)
Darbhanga	79.66 (2.5)	124.99 (1.9)	1569 (26)	78.98 (2.4)	134.78 (1.6)	1706 (35)
Madhubani	176.07 (5.6)	161.59 (2.4)	918 (37)	208.39 (6.4)	324.57 (3.9)	1558 (38)
Samastipur	94.19 (3)	113 (1.7)	1200 (32)	88.87 (2.7)	186.44 (2.3)	2098 (25)
Begusarai	29.58 (0.9)	32.74 (0.5)	1107 (33)	22.33 (0.7)	37.45 (0.5)	1677 (36)
Munger	25.64 (0.8)	66.21 (1)	2582 (11)	22.26 (0.7)	61.79 (0.7)	2776 (14)
Sheikhpura	14.78 (0.5)	36.83 (0.6)	2491 (12)	26.74 (0.8)	101.86 (1.2)	3810 (03)
Lakhisarai	15.65 (0.5)	33.47 (0.5)	2138 (16)	15.87 (0.5)	58.52 (0.7)	3688 (05)
Jamui	50.34 (1.6)	91.63 (1.4)	1820 (22)	42.84 (1.3)	87.45 (1.1)	2042 (27)
Khagaria	21.76 (0.7)	23.14 (0.3)	1064 (34)	23.78 (0.7)	39.48 (0.5)	1660 (37)
Bhagalpur	29.52 (0.9)	56.7 (0.9)	1921 (20)	32.35 (1.0)	95.83 (1.2)	2962 (10)
Banka	95.52 (3)	284.39 (4.3)	2977 (5)	91.86 (2.8)	323.63 (3.9)	3523 (06)
Saharsa	97.45 (3.1)	148.74 (2.2)	1526 (28)	90.32 (2.8)	166.37 (2.0)	1842 (31)
Supaul	98.43 (3.1)	167.85 (2.5)	1705 (24)	112.08 (3.4)	200.96 (2.4)	1793 (33)
Madhepura	74.76 (2.4)	111.05 (1.7)	1485 (29)	70.85 (2.2)	153.77 (1.9)	2170 (23)
Purnea	94.58 (3)	177.28 (2.7)	1874 (21)	85.48 (2.6)	229.11 (2.8)	2680 (16)
Kishanganj	84.13 (2.7)	207.25 (3.1)	2464 (13)	77.62 (2.4)	221.12 (2.7)	2849 (12)
Araria	134.38 (4.3)	359.16 (5.4)	2673 (10)	121.29 (3.7)	266.92 (3.2)	2201 (22)
Katihar	101.01 (3.2)	282.12 (4.2)	2793 (9)	105.95 (3.2)	279.58 (3.4)	2639 (17)
Bihar	3150.81 (100)	6649.59 (100)	2110	3263.37 (100.0)	8241.62 (100.0)	2525

Note : Figure in parentheses denotes percentage and ranking for productivity
Source : Department of Agriculture, GOB

Table A 3.4 : District-wise Area, Production and Productivity of Wheat

(Area in '000 hectare/Production in '000 tonnes/ Productivity in kg/ha)

Districts	2013-14			2014-15		
	Area	Production	Productivity	Area	Production	Productivity
Patna	60.66 (2.8)	170.66 (2.8)	2813 (22)	60.6 (2.8)	170.08 (4.8)	2807 (02)
Nalanda	83.86 (3.9)	234.9 (3.8)	2801 (23)	89.26 (4.1)	184.64 (5.2)	2069 (12)
Bhojpur	74.64 (3.5)	211.56 (3.4)	2834 (21)	74.57 (3.5)	136.53 (3.8)	1831 (16)
Buxar	76.68 (3.6)	229.52 (3.7)	2993 (13)	79.48 (3.7)	125.28 (3.5)	1576 (23)
Rohtas	145.34 (6.8)	424.01 (6.9)	2917 (14)	144.73 (6.7)	300.1 (8.4)	2074 (11)
Kaimur	81.17 (3.8)	166.66 (2.7)	2053 (36)	84.5 (3.9)	188.25 (5.3)	2228 (06)
Gaya	58.78 (2.7)	112.21 (1.8)	1909 (38)	72.15 (3.3)	178.51 (5)	2474 (03)
Jehanabad	23.66 (1.1)	67.57 (1.1)	2856 (19)	23.39 (1.1)	66.85 (1.9)	2859 (01)
Arwal	10.91 (0.5)	22.57 (0.4)	2068 (35)	10.78 (0.5)	18.37 (0.5)	1705 (20)
Nawada	45.49 (2.1)	110.93 (1.8)	2438 (32)	45.53 (2.1)	81.59 (2.3)	1792 (17)
Aurangabad	76.22 (3.5)	229.42 (3.7)	3010 (12)	79.12 (3.7)	160.18 (4.5)	2024 (13)
Saran	86.87 (4)	273.1 (4.5)	3144 (10)	84.46 (3.9)	170.37 (4.8)	2017 (14)
Siwan	93.27 (4.3)	286.21 (4.7)	3069 (11)	90.2 (4.2)	171.37 (4.8)	1900 (15)
Gopalganj	78.55 (3.7)	250.84 (4.1)	3193 (8)	73.94 (3.4)	71.48 (2)	967 (34)
West Champaran	114.74 (5.3)	313.16 (5.1)	2729 (26)	65.59 (3)	80.07 (2.2)	1221 (27)
East Champaran	67.96 (3.2)	195.22 (3.2)	2872 (17)	128.68 (6)	87.58 (2.5)	681 (37)
Muzaffarpur	92.73 (4.3)	330.38 (5.4)	3563 (3)	88.36 (4.1)	129.82 (3.6)	1469 (25)
Sitamarhi	92.5 (4.3)	267.09 (4.4)	2888 (15)	88.03 (4.1)	76.76 (2.2)	872 (35)
Sheohar	12.66 (0.6)	46.55 (0.8)	3676 (2)	16.62 (0.8)	22.91 (0.6)	1378 (26)
Vaishali	43.72 (2)	147.15 (2.4)	3365 (5)	44.81 (2.1)	93.82 (2.6)	2094 (09)
Darbhanga	59.39 (2.8)	156.21 (2.5)	2630 (30)	59.4 (2.8)	89.18 (2.5)	1501 (24)
Madhubani	94 (4.4)	199.23 (3.2)	2119 (34)	90.05 (4.2)	70.79 (2)	786 (36)
Samastipur	64.03 (3)	239.46 (3.9)	3740 (1)	55.74 (2.6)	116.64 (3.3)	2093 (10)
Begusarai	55.15 (2.6)	185.87 (3)	3370 (4)	53.92 (2.5)	64.16 (1.8)	1190 (28)
Munger	15.9 (0.7)	39.52 (0.6)	2485 (31)	14.17 (0.7)	23.13 (0.6)	1633 (21)
Sheikhpura	20.64 (1)	59.6 (1)	2888 (15)	25.25 (1.2)	55.17 (1.5)	2185 (08)
Lakhisarai	33.71 (1.6)	110.47 (1.8)	3277 (6)	29.7 (1.4)	67.33 (1.9)	2267 (05)
Jamui	8.67 (0.4)	17.45 (0.3)	2012 (37)	11.33 (0.5)	13.24 (0.4)	1168 (30)
Khagaria	30.37 (1.4)	98.13 (1.6)	3231 (7)	30.37 (1.4)	33.95 (1)	1118 (33)
Bhagalpur	46.95 (2.2)	127.39 (2.1)	2713 (27)	46.38 (2.2)	52.83 (1.5)	1139 (32)
Banka	25.63 (1.2)	69.26 (1.1)	2703 (28)	25.85 (1.2)	45.68 (1.3)	1767 (19)
Saharsa	42.97 (2)	117.77 (1.9)	2741 (25)	50.22 (2.3)	110.99 (3.1)	2210 (07)
Supaul	64.57 (3)	148.03 (2.4)	2293 (33)	53.75 (2.5)	84.93 (2.4)	1580 (22)
Madhepura	30.03 (1.4)	86.18 (1.4)	2870 (18)	31.09 (1.4)	71.46 (2.0)	2298 (04)
Purnea	40.32 (1.9)	106.84 (1.7)	2650 (29)	39.73 (1.8)	23.95 (0.7)	603 (38)
Kishanganj	15.91 (0.7)	45.28 (0.7)	2845 (20)	14.08 (0.7)	16.66 (0.5)	1183 (29)
Araria	43.54 (2)	121.43 (2)	2789 (24)	39.14 (1.8)	45.7 (1.3)	1168 (31)
Katihar	36.62 (1.7)	116.9 (1.9)	3193 (8)	39.46 (1.8)	69.87 (2.0)	1771 (18)
Bihar	2148.82 (100)	6134.68 (100)	2855	2154.42 (100.0)	3570.21 (100.0)	1657

Note : Figure in parentheses denotes percentage and ranking for productivity

Source : Department of Agriculture, GOB

Table A 3.5 : District-wise Area, Production and Productivity of Maize

(Area in '000 hectare/Production in '000 tonnes/ Productivity in kg/ha)

Districts	2013-14			2014-15		
	Area	Production	Productivity	Area	Production	Productivity
Patna	5.51 (0.8)	22.14 (0.8)	4018 (10)	6.78 (1.0)	21.91 (0.9)	3232 (15)
Nalanda	5.37 (0.7)	19.59 (0.7)	3648 (14)	5.9 (0.8)	18 (0.7)	3053 (17)
Bhojpur	3.55 (0.5)	8.41 (0.3)	2370 (31)	3.45 (0.5)	8.71 (0.4)	2523 (28)
Buxar	2.13 (0.3)	2.95 (0.1)	1383 (38)	1.36 (0.2)	2.03 (0.1)	1491 (37)
Rohtas	0.25 (0)	0.63 (0)	2555 (29)	0.05 (0.0)	0.13 (0.0)	2549 (26)
Kaimur	0.42 (0.1)	1.18 (0)	2788 (26)	0.38 (0.1)	0.45 (0.0)	1200 (38)
Gaya	7.85 (1.1)	23.48 (0.8)	2990 (22)	7.43 (1.1)	16.68 (0.7)	2245 (32)
Jehanabad	1.4 (0.2)	4.42 (0.2)	3161 (18)	0.45 (0.1)	1.53 (0.1)	3392 (10)
Arwal	0.81 (0.1)	3.1 (0.1)	3843 (11)	0.64 (0.1)	2.15 (0.1)	3357 (13)
Nawada	2.06 (0.3)	5.19 (0.2)	2512 (30)	1.93 (0.3)	5.03 (0.2)	2609 (25)
Aurangabad	0.34 (0)	0.81 (0)	2347 (32)	0.35 (0.0)	0.71 (0.0)	2034 (34)
Saran	28.36 (3.9)	89.4 (3.1)	3152 (19)	27.82 (3.9)	80.76 (3.3)	2903 (19)
Siwan	19.45 (2.7)	54.39 (1.9)	2796 (25)	18.16 (2.6)	44.5 (1.8)	2451 (29)
Gopalganj	12.01 (1.6)	34.92 (1.2)	2907 (24)	16.69 (2.4)	45.2 (1.8)	2708 (24)
W. Champaran	51.6 (7)	100.63 (3.5)	1950 (35)	9.83 (1.4)	28.32 (1.1)	2883 (20)
E. Champaran	10.74 (1.5)	32.52 (1.1)	3027 (21)	52.23 (7.4)	102.58 (4.1)	1964 (35)
Muzaffarpur	26.31 (3.6)	94.2 (3.2)	3580 (16)	48.77 (6.9)	191.89 (7.7)	3935 (07)
Sitamarhi	5.03 (0.7)	23.16 (0.8)	4608 (8)	5.49 (0.8)	18.6 (0.8)	3385 (11)
Sheohar	1.84 (0.3)	6.87 (0.2)	3725 (12)	1.82 (0.3)	6.45 (0.3)	3533 (09)
Vaishali	32.86 (4.5)	142.25 (4.9)	4329 (9)	32.33 (4.6)	131.45 (5.3)	4067 (06)
Darbhanga	19.42 (2.7)	51.89 (1.8)	2672 (27)	14.76 (2.1)	43.24 (1.7)	2930 (18)
Madhubani	0.51 (0.1)	1.86 (0.1)	3658 (13)	0.62 (0.1)	1.69 (0.1)	2728 (23)
Samastipur	57.91 (7.9)	188.49 (6.5)	3255 (17)	56.89 (8.1)	156 (6.3)	2742 (22)
Begusarai	56.15 (7.7)	129.11 (4.4)	2299 (33)	47.99 (6.8)	121.66 (4.9)	2535 (27)
Munger	3.33 (0.5)	8.71 (0.3)	2612 (28)	4.64 (0.7)	13.14 (0.5)	2830 (21)
Sheikhpura	0.72 (0.1)	1.05 (0)	1464 (37)	0.66 (0.1)	1.06 (0.0)	1591 (36)
Lakhisarai	4.7 (0.6)	9.67 (0.3)	2057 (34)	5.11 (0.7)	11.62 (0.5)	2276 (30)
Jamui	2.78 (0.4)	4.25 (0.1)	1530 (36)	2.8 (0.4)	6.35 (0.3)	2269 (31)
Khagaria	60.16 (8.2)	185.03 (6.4)	3076 (20)	60.16 (8.5)	214.83 (8.7)	3571 (08)
Bhagalpur	44.64 (6.1)	272.84 (9.4)	6112 (2)	46.06 (6.5)	155.81 (6.3)	3383 (12)
Banka	11.1 (1.5)	39.83 (1.4)	3587 (15)	11.03 (1.6)	35.93 (1.4)	3257 (14)
Saharsa	40.66 (5.6)	217.56 (7.5)	5351 (5)	28.24 (4.0)	128.11 (5.2)	4536 (03)
Supaul	15.22 (2.1)	78.92 (2.7)	5186 (6)	12.41 (1.8)	50.82 (2.1)	4096 (05)
Madhepura	45.55 (6.2)	247.69 (8.5)	5437 (4)	43.42 (6.1)	229.47 (9.3)	5285 (02)
Purnea	37.9 (5.2)	111.17 (3.8)	2933 (23)	35.6 (5.0)	77.57 (3.1)	2179 (33)
Kishanganj	3.04 (0.4)	15.32 (0.5)	5043 (7)	3.03 (0.4)	9.47 (0.4)	3121 (16)
Araria	52.46 (7.2)	297.19 (10.2)	5665 (3)	44.31 (6.3)	189.3 (7.6)	4272 (04)
Katihar	58.18 (7.9)	373.44 (12.9)	6419 (1)	46.94 (6.6)	305.62 (12.3)	6510 (01)
Bihar	732.34 (100.0)	2904.24 (100.0)	3966	706.52 (100.0)	2478.75 (100.0)	3508

Note : Figure in parentheses denotes percentage and ranking for productivity

Source : Department of Agriculture, GOB

Table A 3.6 : District-wise Area, Production and Productivity of Pulses

(Area in '000 hectare/Production in '000 tonnes/ Productivity in kg/ha)

Districts	2013-14			2014-15		
	Area	Production	Productivity	Area	Production	Productivity
Patna	46.94 (9.4)	75.93 (14.5)	1617 (3)	46.50 (9.2)	71.30 (16.6)	1533 (02)
Nalanda	23.04 (4.6)	25.36 (4.9)	1101 (13)	22.62 (4.5)	22.98 (5.4)	1016 (11)
Bhojpur	22.04 (4.4)	25.83 (4.9)	1172 (9)	19.17 (3.8)	17.60 (4.1)	918 (15)
Buxar	9.74 (1.9)	13.26 (2.5)	1361 (4)	12.33 (2.4)	7.10 (1.7)	576 (31)
Rohtas	13.13 (2.6)	16.51 (3.2)	1257 (5)	10.44 (2.1)	11.84 (2.8)	1134 (06)
Kaimur	13.08 (2.6)	12.34 (2.4)	943 (23)	12.59 (2.5)	19.54 (4.6)	1552 (01)
Gaya	20.13 (4)	18.44 (3.5)	916 (24)	19.80 (3.9)	17.76 (4.1)	897 (16)
Jehanabad	17.53 (3.5)	21.19 (4.1)	1209 (8)	15.55 (3.1)	18.03 (4.2)	1159 (04)
Arwal	5.8 (1.2)	5.82 (1.1)	1004 (19)	5.82 (1.2)	5.50 (1.3)	945 (14)
Nawada	11.09 (2.2)	8.9 (1.7)	803 (31)	9.92 (2.0)	6.21 (1.4)	627 (29)
Aurangabad	37.08 (7.4)	27.32 (5.2)	737 (34)	35.58 (7.0)	28.83 (6.7)	810 (21)
Saran	3.01 (0.6)	3.42 (0.7)	1138 (11)	3.37 (0.7)	3.75 (0.9)	1111 (09)
Siwan	3.94 (0.8)	4.18 (0.8)	1061 (16)	3.77 (0.7)	4.30 (1.0)	1138 (05)
Gopalganj	2.39 (0.5)	2.26 (0.4)	945 (22)	2.14 (0.4)	2.42 (0.6)	1129 (07)
West Champaran	11.9 (2.4)	14.45 (2.8)	1215 (6)	13.58 (2.7)	7.55 (1.8)	556 (32)
East Champaran	14.09 (2.8)	33.44 (6.4)	2374 (1)	13.69 (2.7)	7.11 (1.7)	519 (35)
Muzaffarpur	26.94 (5.4)	15.09 (2.9)	560 (37)	28.72 (5.7)	15.72 (3.7)	547 (33)
Sitamarhi	6.21 (1.2)	3.83 (0.7)	616 (35)	6.20 (1.2)	2.58 (0.6)	416 (37)
Sheohar	2.96 (0.6)	2.46 (0.5)	831 (30)	2.39 (0.5)	1.28 (0.3)	538 (34)
Vaishali	9.31 (1.9)	7.37 (1.4)	791 (32)	8.93 (1.8)	5.62 (1.3)	629 (28)
Darbhanga	11.41 (2.3)	9.85 (1.9)	863 (27)	11.95 (2.4)	14.35 (3.3)	1201 (03)
Madhubani	15.01 (3)	12.61 (2.4)	840 (28)	15.01 (3.0)	9.65 (2.3)	643 (25)
Samastipur	18.02 (3.6)	13.79 (2.6)	765 (33)	15.78 (3.1)	10.15 (2.4)	643 (26)
Begusarai	4.57 (0.9)	5.03 (1)	1099 (14)	4.50 (0.9)	4.36 (1)	970 (13)
Munger	2.13 (0.4)	2.43 (0.5)	1137 (12)	2.22 (0.4)	1.88 (0.4)	845 (18)
Sheikhpura	7.75 (1.5)	8.92 (1.7)	1152 (10)	6.31 (1.2)	7.06 (1.6)	1118 (08)
Lakhisarai	16.17 (3.2)	27.35 (5.2)	1692 (2)	13.19 (2.6)	11.12 (2.6)	843 (19)
Jamui	2.75 (0.5)	2.81 (0.5)	1024 (18)	6.32 (1.2)	5.03 (1.2)	797 (22)
Khagaria	7.97 (1.6)	8.74 (1.7)	1096 (15)	7.85 (1.6)	6.90 (1.6)	879 (17)
Bhagalpur	14.93 (3)	15.6 (3)	1045 (17)	15.22 (3.0)	9.58 (2.2)	630 (27)
Banka	7.44 (1.5)	9.03 (1.7)	1213 (7)	6.40 (1.3)	4.98 (1.2)	778 (23)
Saharsa	15.4 (3.1)	8.82 (1.7)	573 (36)	20.45 (4.0)	5.79 (1.3)	283 (38)
Supaul	20.95 (4.2)	18.68 (3.6)	892 (26)	30.13 (6.0)	17.73 (4.1)	589 (30)
Madhepura	19.39 (3.9)	7.82 (1.5)	403 (38)	20.93 (4.1)	9.76 (2.3)	466 (36)
Purnea	8.59 (1.7)	7.16 (1.4)	833 (29)	7.17 (1.4)	5.21 (1.2)	727 (24)
Kishanganj	8.52 (1.7)	7.79 (1.5)	914 (25)	9.20 (1.8)	9.83 (2.3)	1068 (10)
Araria	9.19 (1.8)	8.83 (1.7)	961 (21)	10.08 (2.0)	8.41 (2.0)	835 (20)
Katihar	9.42 (1.9)	9.39 (1.8)	996 (20)	10.27 (2.0)	10.13 (2.4)	987 (12)
Bihar	499.95 (100)	522.02 (100)	1044	506.08 (100.0)	428.93 (100.0)	848

Note : Figure in parentheses denotes percentage and ranking for productivity

Source : Department of Agriculture, GOB

Table A 3.7 : District-wise Area and Production of Important Vegetables

(Area in '000 hectare/Production in '000 tonnes)

Districts	Potato				Onion			
	2013-14		2014-15		2013-14		2014-15	
	Area	Production	Area	Production	Area	Production	Area	Production
Patna	12.45 (3.9)	354.32 (5.5)	12.5 (3.9)	360.00 (5.5)	2.57 (4.8)	62.60 (5.0)	2.58 (4.7)	63.00 (4.9)
Nalanda	20.81 (6.5)	599.38 (9.2)	20.81 (6.5)	600.00 (9.2)	5.99 (11.3)	164.37 (13.0)	6.00 (11.0)	160.00 (12.5)
Bhojpur	6.38 (2.0)	175.17 (2.7)	6.30 (2.0)	172.70 (2.6)	1.21 (2.3)	30.06 (2.4)	1.20 (2.2)	26.00 (2.0)
Buxar	3.84 (1.2)	103.11 (1.6)	3.92 (1.2)	105.11 (1.6)	0.93 (1.7)	22.64 (1.8)	0.93 (1.7)	22.64 (1.8)
Rohtas	7.95 (2.5)	165.84 (2.6)	7.95 (2.5)	206.90 (3.2)	1.21 (2.3)	27.15 (2.2)	1.22 (2.2)	27.25 (2.1)
Kaimur	3.20 (1.0)	84.04 (1.3)	3.20 (1.0)	84.04 (1.3)	0.98 (1.8)	20.73 (1.6)	0.98 (1.8)	20.73 (1.6)
Gaya	8.03 (2.5)	212.36 (3.3)	8.13 (2.5)	212.50 (3.2)	1.44 (2.7)	34.32 (2.7)	1.42 (2.6)	32.40 (2.5)
Jehanabad	2.76 (0.9)	73.84 (1.1)	2.76 (0.9)	73.84 (1.1)	0.55 (1.0)	13.15 (1.0)	0.55 (1.0)	13.15 (1.0)
Arwal	2.2 (0.7)	59.09 (0.9)	2.20 (0.7)	59.09 (0.9)	0.44 (0.8)	10.78 (0.9)	0.44 (0.8)	9.87 (0.8)
Nawada	4.22 (1.3)	99.18 (1.5)	4.22 (1.3)	100 (1.5)	0.99 (1.9)	21.83 (1.7)	0.99 (1.8)	21.83 (1.7)
Aurangabad	4.45 (1.4)	115.82 (1.8)	4.45 (1.4)	115.82 (1.8)	1.13 (2.1)	25.39 (2.0)	1.13 (2.1)	25.39 (2.0)
Saran	10.73 (3.4)	282.36 (4.3)	10.75 (3.4)	280.50 (4.3)	0.95 (1.8)	21.35 (1.7)	0.95 (1.7)	18.00 (1.4)
Siwan	7.64 (2.4)	205.45 (3.2)	7.70 (2.4)	205.90 (3.1)	0.91 (1.7)	20.11 (1.6)	0.92 (1.7)	21.00 (1.6)
Gopalganj	9.08 (2.9)	242.69 (3.7)	9.08 (2.8)	242.70 (3.7)	0.13 (0.2)	1.41 (0.1)	0.90 (1.7)	18.58 (1.5)
W. Champaran	9.18 (2.9)	249.94 (3.8)	9.20 (2.9)	250.00 (3.8)	2.33 (4.4)	61.46 (4.9)	2.40 (4.4)	62.00 (4.9)
E. Champaran	8.76 (2.8)	236.87 (3.6)	8.87 (2.8)	240.90 (3.7)	2.38 (4.5)	59.33 (4.7)	2.38 (4.4)	59.33 (4.6)
Muzaffarpur	85.45 (26.8)	253.09 (3.9)	85.50 (26.8)	254.00 (3.9)	2.60 (4.9)	68.88 (5.5)	2.60 (4.8)	67.00 (5.2)
Sitamarhi	5.12 (1.6)	135.49 (2.1)	5.13 (1.6)	136.50 (2.1)	0.98 (1.8)	14.54 (1.2)	1.34 (2.5)	32.50 (2.5)
Sheohar	3.21 (1.0)	83.58 (1.3)	3.22 (1.0)	83.6 (1.3)	0.72 (1.4)	17.29 (1.4)	0.73 (1.3)	17.3 (1.4)
Vaishali	9.95 (3.1)	290.54 (4.5)	9.95 (3.1)	290.54 (4.4)	1.8 (3.4)	43.44 (3.4)	1.80 (3.3)	44.00(3.4)
Darbhanga	5.75 (1.8)	153.94 (2.4)	5.82 (1.8)	154.92 (2.4)	1.11 (2.1)	24.8 (2.0)	1.00 (1.8)	25.00 (2.0)
Madhubani	7.74 (2.4)	206.93 (3.2)	7.74 (2.4)	206.93 (3.2)	1.12 (2.1)	25.3 (2.0)	1.12 (2.1)	25.30 (2.0)
Samastipur	9.18 (2.9)	249.19 (3.8)	9.20 (2.9)	250.00 (3.8)	1.40 (2.6)	30.43 (2.4)	1.40 (2.6)	30.43 (2.4)
Begusarai	6.04 (1.9)	168.02 (2.6)	6.04 (1.9)	168.02 (2.6)	2.01 (3.8)	48.35 (3.8)	2.01 (3.7)	42.36 (3.3)
Munger	5.34 (1.7)	142.08 (2.2)	5.34 (1.7)	142.08 (2.2)	1.02 (1.9)	24.42 (1.9)	1.02 (1.9)	24.5 (1.9)
Sheikhpura	4.21 (1.3)	119.89 (1.8)	4.20 (1.3)	120.00 (1.8)	1.31 (2.5)	29.43 (2.3)	1.32 (2.4)	30.00 (2.3)
Lakhisarai	2.36 (0.7)	63.45 (1.0)	2.36 (0.7)	63.45 (1.0)	0.45 (0.8)	10.12 (0.8)	0.45 (0.8)	10.12 (0.8)
Jamui	2.59 (0.8)	67.29 (1.0)	2.59 (0.8)	67.29 (1.0)	0.77 (1.4)	18.89 (1.5)	0.77 (1.4)	22.20 (1.7)
Khagaria	4.13 (1.3)	108.58 (1.7)	4.13 (1.3)	108.58 (1.7)	0.77 (1.4)	17.23 (1.4)	0.78 (1.4)	17.25 (1.3)
Bhagalpur	6.29 (2.0)	168.26 (2.6)	6.29 (2.0)	168.26 (2.6)	1.64 (3.1)	40.34 (3.2)	1.64 (3)	40.34 (3.2)
Banka	4.94 (1.6)	125.73 (1.9)	4.94 (1.5)	125.73 (1.9)	0.75 (1.4)	16.43 (1.3)	0.74 (1.4)	15.50 (1.2)
Saharsa	5.7 (1.8)	151.58 (2.3)	5.7 (1.8)	151.58 (2.3)	0.65 (1.2)	14.66 (1.2)	0.65 (1.2)	15.00 (1.2)
Supaul	4.51 (1.4)	115.98 (1.8)	4.5 (1.4)	115.98 (1.8)	0.38 (0.7)	8.46 (0.7)	0.38 (0.7)	8.50 (0.7)
Madhepura	5.33 (1.7)	140.06 (2.2)	5.33 (1.7)	140.06 (2.1)	0.98 (1.8)	22.56 (1.8)	0.98 (1.8)	22.56 (1.8)
Purnea	5.23 (1.6)	137.30 (2.1)	5.23 (1.6)	137.30 (2.1)	1.80 (3.4)	42.49 (3.4)	1.80 (3.3)	42.50 (3.3)
Kishanganj	4.51 (1.4)	117.90 (1.8)	4.51 (1.4)	117.90 (1.8)	1.39 (2.6)	31.36 (2.5)	1.39 (2.6)	31.36 (2.5)
Araria	3.69 (1.2)	89.40 (1.4)	3.69 (1.2)	89.40 (1.4)	1.52 (2.9)	33.37 (2.6)	1.52 (2.8)	30.28 (2.4)
Katihar	5.52 (1.7)	147.81 (2.3)	5.55 (1.7)	147.80 (2.3)	3.89 (7.3)	83.14 (6.6)	3.90 (7.2)	83.14 (6.5)
Bihar	318.47 (100.0)	6495.55 (100.0)	319.00 (100.0)	6549.92 (100.0)	53.20 (100)	1262.61 (100.0)	54.33 (100.0)	1278.31 (100.0)

Note : Figure in parentheses denotes percentage

Source : Department of Agriculture, GOB

(Contd.)

Table A 3.7 : District-wise Area and Production of Important Vegetables (Contd.)

(Area in '000 hectare/Production in '000 tonnes)

Districts	Cauliflower				Brinjal			
	2013-14		2014-15		2013-14		2014-15	
	Area	Production	Area	Production	Area	Production	Area	Production
Patna	3.70 (5.6)	68.12 (5.9)	3.80 (5.8)	1.28 (0.1)	1.80 (3.1)	48.13 (4)	1.85 (3.2)	49.00 (4.0)
Nalanda	3.10 (4.7)	59.03 (5.1)	3.11 (4.7)	60.00 (5.5)	7.12 (12.4)	148.48 (12.2)	7.20 (12.5)	148.50 (12.3)
Bhojpur	1.15 (1.8)	21.51 (1.9)	1.15 (1.8)	21.51 (2)	1.20 (2.1)	28.91 (2.4)	1.20 (2.1)	28.91 (2.4)
Buxar	0.70 (1.1)	12.68 (1.1)	0.70 (1.1)	12.68 (1.2)	0.74 (1.3)	16.82 (1.4)	0.75 (1.3)	16.90 (1.4)
Rohtas	1.24 (1.9)	20.81 (1.8)	1.25 (1.9)	21.90 (2.0)	0.98 (1.7)	18.76 (1.5)	0.98 (1.7)	18.76 (1.5)
Kaimur	0.77 (1.2)	13.36 (1.2)	0.77 (1.2)	13.5 (1.2)	0.58 (1)	14.3 (1.2)	0.58 (1)	14.3 (1.2)
Gaya	2.01 (3.1)	34.89 (3)	2.01 (3.1)	34.89 (3.2)	1.65 (2.9)	34.49 (2.8)	1.65 (2.9)	34.49 (2.8)
Jehanabad	0.54 (0.8)	9.7 (0.8)	0.54 (0.8)	9.7 (0.9)	0.67 (1.2)	13.74 (1.1)	0.67 (1.2)	13.74 (1.1)
Arwal	0.45 (0.7)	8.06 (0.7)	0.45 (0.7)	8.06 (0.7)	0.44 (0.8)	9.51 (0.8)	0.44 (0.8)	9.51 (0.8)
Nawada	1.4 (2.1)	22.56 (2)	1.4 (2.1)	22.85 (2.1)	1.81 (3.1)	26.81 (2.2)	1.82 (3.2)	26.81 (2.2)
Aurangabad	1.41 (2.1)	28.22 (2.5)	1.41 (2.1)	28.22 (2.6)	1.12 (1.9)	23.37 (1.9)	1.12 (1.9)	22.48 (1.9)
Saran	2.88 (4.4)	36.81 (3.2)	2.89 (4.4)	38.00 (3.5)	1.80 (3.1)	38.43 (3.2)	1.80 (3.1)	38.50 (3.2)
Siwan	1.62 (2.5)	29.45 (2.6)	1.62 (2.5)	28.35 (2.6)	1.59 (2.8)	34.94 (2.9)	1.60 (2.8)	35.00 (2.9)
Gopalganj	1.88 (2.9)	33.86 (2.9)	1.88 (2.9)	33.86 (3.1)	1.39 (2.4)	30.39 (2.5)	1.39 (2.4)	30.39 (2.5)
W. Champaran	2.88 (4.4)	52.38 (4.6)	2.90 (4.4)	53.40 (4.9)	1.97 (3.4)	44.57 (3.7)	1.95 (3.4)	45.00 (3.7)
E. Champaran	2.84 (4.3)	38.76 (3.4)	2.87 (4.4)	39.26 (3.6)	1.63 (2.8)	36.23 (3.0)	1.64 (2.8)	36.25 (3.0)
Muzaffarpur	3.53 (5.4)	67.53 (5.9)	3.55 (5.4)	68.00 (6.3)	2.90 (5.0)	36.46 (3.0)	2.90 (5.0)	36.60 (3.0)
Sitamarhi	1.34 (2.0)	24.16 (2.1)	1.35 (2.1)	24.2 (2.2)	1.29 (2.2)	26.9 (2.2)	1.29 (2.2)	26.90 (2.2)
Sheohar	0.84 (1.3)	14.94 (1.3)	0.84 (1.3)	14.98 (1.4)	0.66 (1.1)	14.08 (1.2)	0.66 (1.1)	14.08 (1.2)
Vaishali	5.97 (9.1)	99.30 (8.6)	6.00 (9.1)	100.00 (9.2)	3.10 (5.4)	68.81 (5.7)	3.20 (5.6)	69.00 (5.7)
Darbhanga	1.63 (2.5)	28.49 (2.5)	1.63 (2.5)	28.50 (2.6)	2.53 (4.4)	51.69 (4.3)	2.53 (4.4)	51.69 (4.3)
Madhubani	2.58 (3.9)	45.74 (4)	2.58 (3.9)	45.75 (4.2)	2.11 (3.7)	43.27 (3.6)	2.11 (3.7)	43.20 (3.6)
Samastipur	3.00 (4.6)	59.70 (5.2)	3.00 (4.6)	59.50 (5.5)	2.32 (4.0)	58.57 (4.8)	2.32 (4.0)	58.50 (4.8)
Begusarai	1.80 (2.7)	34.87 (3.0)	1.80 (2.7)	34.87 (3.2)	2.70 (4.7)	58.70 (4.8)	2.75 (4.8)	58.92 (4.9)
Munger	0.75 (1.1)	13.28 (1.2)	0.75 (1.1)	13.30 (1.2)	0.83 (1.4)	16.67 (1.4)	0.83 (1.4)	16.67 (1.4)
Sheikhpura	0.25 (0.4)	4.38 (0.4)	0.25 (0.4)	4.38 (0.4)	0.30 (0.5)	6.63 (0.5)	0.30 (0.5)	6.65 (0.5)
Lakhisarai	0.28 (0.4)	4.95 (0.4)	0.00 (0.0)	0.00 (0.0)	0.20 (0.3)	4.19 (0.3)	0.00 (0.0)	0.00 (0.0)
Jamui	0.43 (0.7)	7.45 (0.6)	0.43 (0.7)	7.49 (0.7)	0.59 (1.0)	12.41 (1.0)	0.59 (1.0)	12.41 (1.0)
Khagaria	1.25 (1.9)	21.43 (1.9)	1.25 (1.9)	21.43 (2.0)	1.21 (2.1)	29.64 (2.4)	1.21 (2.1)	29.64 (2.4)
Bhagalpur	1.65 (2.5)	29.17 (2.5)	1.65 (2.5)	29.17 (2.7)	1.71 (3.0)	35.98 (3.0)	1.71 (3.0)	35.98 (3.0)
Banka	0.83 (1.3)	12.4 (1.1)	0.83 (1.3)	12.4 (1.1)	0.82 (1.4)	17.41 (1.4)	0.82 (1.4)	17.41 (1.4)
Saharsa	1.77 (2.7)	31.47 (2.7)	1.77 (2.7)	31.47 (2.9)	1.33 (2.3)	28.69 (2.4)	1.33 (2.3)	28.7 (2.4)
Supaul	0.69 (1.1)	11.7 (1)	0.69 (1.1)	11.69 (1.1)	0.62 (1.1)	13.04 (1.1)	0.62 (1.1)	13.04 (1.1)
Madhepura	1.78 (2.7)	30.9 (2.7)	1.78 (2.7)	30.9 (2.9)	1.58 (2.7)	33.86 (2.8)	1.58 (2.7)	33.86 (2.8)
Purnea	2.04 (3.1)	35.24 (3.1)	2.07 (3.2)	35.24 (3.3)	1.21 (2.1)	24.56 (2.0)	1.21 (2.1)	24.58 (2.0)
Kishanganj	0.88 (1.3)	15.88 (1.4)	0.88 (1.3)	15.88 (1.5)	0.57 (1.0)	12.41 (1.0)	0.57 (1.0)	12.41 (1.0)
Araria	0.84 (1.3)	14.5 (1.3)	0.85 (1.3)	14.68 (1.4)	0.64 (1.1)	13.68 (1.1)	0.65 (1.1)	13.89 (1.1)
Katihar	3 (4.6)	51.34 (4.5)	3.00 (4.6)	51.40 (4.7)	1.77 (3.1)	38.72 (3.2)	1.77 (3.1)	38.72 (3.2)
Bihar	65.70 (100.0)	1149.02 (100.0)	65.70 (100.0)	1082.69 (100.0)	57.48 (100.0)	1214.25 (100.0)	57.59 (100.0)	1211.39 (100.0)

Note : Figure in parentheses denotes percentage

Source : Department of Agriculture, GOB

Table A 3.8 : District-wise Area and Production of Important Fruits

(Area in '000 hectare/Production in '000 tonnes)

Districts	Mango				Guava			
	2013-14		2014-15		2013-14		2014-15	
	Area	Production	Area	Production	Area	Production	Area	Production
Patna	4.09(3.0)	37.01(2.9)	4.01 (2.7)	32.50 (2.6)	1.10 (3.7)	8.92(3.7)	1.12 (3.8)	9.00 (2.4)
Nalanda	2.93(2.1)	27.11(2.1)	2.93 (2)	20.50 (1.6)	1.52(5.1)	14.18(5.9)	1.53 (5.2)	146.2 (39.5)
Bhojpur	6.27(4.6)	41.05(3.2)	4.64 (3.1)	42.75 (3.4)	1.89(6.3)	15.60 (6.5)	1.92 (6.5)	16.5 (4.5)
Buxar	3.38(2.5)	29.05(2.3)	3.41 (2.3)	32.51 (2.6)	1.57(5.3)	12.38(5.2)	1.58 (5.4)	12.52 (3.4)
Rohtas	5.70 (4.1)	50.14(3.9)	5.74 (3.9)	52.80 (4.2)	3.31(11.1)	26.93 (11.3)	3.32 (11.3)	27.00 (7.3)
Kaimur	3.37(2.5)	28.33(2.2)	3.39 (2.3)	30.29 (2.4)	1.37 (4.6)	10.65 (4.5)	1.37 (4.6)	10.65 (2.9)
Gaya	1.33 (1.0)	11.47(0.9)	1.36 (0.9)	12.46 (1)	0.67 (2.2)	5.25 (2.2)	0.68 (2.3)	5.54 (1.5)
Jehanabad	0.38(0.3)	3.23 (0.3)	0.40 (0.3)	3.20 (0.3)	0.26 (0.9)	2.04 (0.9)	0.26 (0.9)	2.14 (0.6)
Arwal	0.35(0.3)	3.05 (0.2)	0.37 (0.2)	2.96 (0.2)	0.24 (0.8)	1.86 (0.8)	0.24 (0.8)	1.78 (0.5)
Nawada	1.19(0.9)	9.80 (0.8)	1.16 (0.8)	10.20 (0.8)	0.53 (1.8)	3.79 (1.6)	0.53 (1.8)	3.88 (1.0)
Aurangabad	1.32 (1.0)	11.98(0.9)	1.34 (0.9)	12.12 (1.0)	0.71 (2.4)	5.55 (2.3)	0.72 (2.4)	4.82 (1.3)
Saran	5.16(3.8)	44.00 (3.5)	5.14 (3.5)	50.00 (3.9)	0.82 (2.7)	6.22 (2.6)	0.00 (0.0)	0.00 (0.0)
Siwan	2.53(1.8)	22.51(1.8)	2.55 (1.7)	20.10 (1.6)	0.68 (2.3)	5.40 (2.3)	0.69 (2.3)	5.45 (1.5)
Gopalganj	3.02(2.2)	27.17(2.1)	3.06 (2.1)	27.20 (2.1)	0.62 (2.1)	4.95 (2.1)	0.62 (2.1)	4.99 (1.3)
W. Champaran	7.30 (5.3)	70.10 (5.5)	7.32 (4.9)	72.50 (5.7)	1.63 (5.4)	13.62 (5.7)	1.63 (5.5)	13.75 (3.7)
E. Champaran	9.30 (6.8)	86.81(6.8)	9.31 (6.3)	82.25 (6.5)	1.67 (5.6)	13.02 (5.5)	1.68 (5.7)	14.02 (3.8)
Muzaffarpur	9.83(7.1)	9.95 (0.8)	9.83 (6.6)	82.50 (6.5)	1.45 (4.8)	11.60 (4.9)	1.45 (4.9)	11.75 (3.2)
Sitamarhi	5.28(3.8)	48.99(3.9)	5.31 (3.6)	49.50 (3.9)	0.73 (2.5)	6.02 (2.5)	0.74 (2.5)	6.20 (1.7)
Sheohar	2.66(1.9)	23.37(1.8)	2.68 (1.8)	2.08 (0.2)	0.32 (1.1)	2.62 (1.1)	0.32 (1.1)	2.62 (0.7)
Vaishali	8.34(6.1)	78.90 (6.2)	8.43 (5.7)	76.00 (6.0)	1.37 (4.6)	10.95 (4.6)	1.50 (5.1)	11.20 (3.0)
Darbhanga	1.39 (1.0)	121.09(9.5)	13.50 (9.1)	120.52 (9.5)	0.62 (2.1)	4.88 (2.1)	0.62 (2.1)	4.88 (1.3)
Madhubani	6.10 (4.4)	56.03 (4.4)	6.11 (4.1)	51.03 (4.0)	0.50 (1.7)	4.08 (1.7)	0.50 (1.7)	4.08 (1.1)
Samastipur	10.60 (7.7)	100.50 (7.9)	10.60 (7.1)	89.30 (7.0)	0.65 (2.2)	5.30 (2.2)	0.65 (2.2)	5.30 (1.4)
Begusarai	4.07 (3.0)	39.52 (3.1)	4.09 (2.8)	36.45 (2.9)	0.55 (1.8)	4.57 (1.9)	0.55 (1.9)	4.57 (1.2)
Munger	1.25 (0.9)	11.15 (0.9)	1.27 (0.9)	10.66 (0.8)	0.28 (0.9)	2.23 (0.9)	0.29 (1.0)	2.25 (0.6)
Sheikhpura	0.84 (0.6)	7.21 (0.6)	0.85 (0.6)	8.52 (0.7)	0.14 (0.5)	1.07 (0.5)	0.14 (0.5)	1.07 (0.3)
Lakhisarai	0.58 (0.4)	5.07 (0.4)	0.59 (0.4)	4.78 (0.4)	0.14 (0.5)	1.12 (0.5)	0.14 (0.5)	1.12 (0.3)
Jamui	1.08 (0.8)	9.75 (0.8)	1.12 (0.8)	9.29 (0.7)	0.23 (0.8)	1.72 (0.7)	0.23 (0.8)	1.72 (0.5)
Khagaria	1.69 (1.2)	15.51 (1.2)	1.71 (1.1)	14.50 (1.1)	0.38 (1.3)	2.99 (1.3)	0.38 (1.3)	2.99 (0.8)
Bhagalpur	7.55 (5.5)	75.25 (5.9)	7.52 (5.1)	60.53 (4.8)	0.70 (2.4)	5.80 (2.4)	0.70 (2.4)	5.80 (1.6)
Banka	6.27 (4.6)	53.91 (4.2)	6.31 (4.2)	48.55 (3.8)	0.31 (1.1)	2.45 (1.0)	0.32 (1.1)	2.55 (0.7)
Saharsa	2.58 (1.9)	23.5 (1.8)	2.16 (1.5)	23.20 (1.8)	0.66 (2.2)	5.33 (2.2)	0.66 (2.2)	5.33 (1.4)
Supaul	1.25 (0.9)	10.75 (0.8)	1.28 (0.9)	10.08 (0.8)	0.44 (1.5)	3.32 (1.4)	0.44 (1.5)	3.32 (0.9)
Madhepura	1.97 (1.4)	17.55 (1.4)	2.01 (1.4)	14.25 (1.1)	0.63 (2.1)	4.99 (2.1)	0.65 (2.2)	5.01 (1.4)
Purnea	2.50 (1.8)	22.21 (1.7)	2.53 (1.7)	22.52 (1.8)	0.38 (1.3)	0.17 (0.1)	0.38 (1.3)	3.17 (0.9)
Kishanganj	0.80 (0.6)	6.93 (0.5)	0.82 (0.6)	7.52 (0.6)	0.24 (0.8)	1.88 (0.8)	0.24 (0.8)	1.88 (0.5)
Araria	0.68 (0.5)	5.87 (0.5)	0.67 (0.5)	5.21 (0.4)	0.20 (0.7)	1.51 (0.6)	0.2 (0.7)	1.22 (0.3)
Katihar	2.85 (2.1)	28.20 (2.2)	2.89 (1.9)	20.3 (1.6)	0.45 (1.5)	3.71 (1.6)	0.45 (1.5)	3.71 (1.0)
Bihar	137.77 (100.0)	1274.02 (100.0)	148.37 (100.0)	1271.62 (100.0)	29.96 (100.0)	238.62 (100.0)	29.40 (100.0)	369.96 (100.0)

Note : Figure in parentheses denotes percentage

Source : Department of Agriculture, GOB

(Contd.)

Table A 3.8 : District-wise Area and Production of Important Fruits (Contd.)

(Area in '000 hectare/Production in '000 tonnes)

Districts	Litchi				Banana			
	2013-14		2014-15		2013-14		2014-15	
	Area	Production	Area	Production	Area	Production	Area	Production
Patna	–	–	–	–	0.70 (2.0)	32.00 (2.0)	0.70 (2.0)	30.25 (2.0)
Nalanda	–	–	–	–	0.51 (1.5)	21.78 (1.4)	0.51 (1.5)	24.4 (1.6)
Bhojpur	–	–	–	–	0.32 (0.9)	15.09 (1.0)	0.36 (1.0)	15.2 (1.0)
Buxar	–	–	–	–	0.23 (0.7)	10.44 (0.7)	0.25 (0.7)	10.55 (0.7)
Rohtas	–	–	–	–	0.28 (0.8)	13.18 (0.8)	0.31 (0.9)	14.20 (0.9)
Kaimur	–	–	–	–	0.21 (0.6)	9.89 (0.6)	0.23 (0.7)	11.13 (0.7)
Gaya	–	–	–	–	0.32 (0.9)	10.74 (0.7)	0.26 (0.7)	12.94 (0.8)
Jehanabad	–	–	–	–	0.18 (0.5)	7.62 (0.5)	0.19 (0.5)	8.13 (0.5)
Arwal	–	–	–	–	0.12 (0.3)	5.38 (0.3)	0.14 (0.4)	6.11 (0.4)
Nawada	–	–	–	–	0.35 (1.0)	15.21 (1.0)	0.36 (1.0)	12.00 (0.8)
Aurangabad	–	–	–	–	0.33 (1.0)	15.34 (1.0)	0.36 (1.0)	16.23 (1.1)
Saran	1.08 (3.6)	7.53 (3.2)	1.13 (3.5)	9.30 (4.7)	0.76 (2.2)	34.98 (2.2)	0.88 (2.5)	38.40 (2.5)
Siwan	1.12 (3.7)	8.16 (3.5)	1.16 (3.6)	7.60 (3.8)	0.72 (2.1)	34.13 (2.2)	0.84 (2.4)	35.06 (2.3)
Gopalganj	1.20 (4.0)	8.67 (3.7)	1.23 (3.8)	8.02 (4.1)	0.70 (2.0)	31.79 (2.0)	0.80 (2.3)	32.00 (2.1)
W. Champaran	2.08 (6.9)	15.41 (6.6)	2.14 (6.6)	11.52 (5.8)	1.00 (2.9)	45.94 (2.9)	1.07 (3.1)	51.02 (3.3)
E. Champaran	1.95 (6.4)	13.57 (5.8)	1.96 (6.1)	12.25 (6.2)	1.08 (3.1)	50.35 (3.2)	1.08 (3.1)	48.08 (3.1)
Muzaffarpur	7.30(24.1)	58.98 (25.2)	7.89 (24.5)	40.52 (20.5)	5.00 (14.5)	239.05 (15.1)	5.31 (15.3)	272.5 (17.9)
Sitamarhi	2.19 (7.2)	16.18 (6.9)	2.25 (7.0)	17.4 (8.8)	0.67 (1.9)	30.83 (1.9)	0.75 (2.2)	30.40 (2.0)
Sheohar	0.99 (3.3)	6.92 (3.0)	1.01 (3.1)	6.76 (3.4)	0.3 (0.9)	12.96 (0.8)	0.34 (1.0)	12.00 (0.8)
Vaishali	3.61(11.9)	27.05 (11.5)	3.66 (11.4)	21.70 (11.0)	3.35 (9.7)	167.9 (10.6)	3.36 (9.7)	142.00 (9.3)
Darbhanga	0.82 (2.7)	5.60 (2.4)	0.84 (2.6)	4.05 (2.0)	1.76 (5.1)	81.83 (5.2)	1.29 (3.7)	70.86 (4.6)
Madhubani	0.81 (2.7)	5.68 (2.4)	0.82 (2.5)	5.48 (2.8)	1.03 (3.0)	48.26 (3.0)	1.14 (3.3)	45.20 (3.0)
Samastipur	1.29 (4.3)	9.81 (4.2)	1.53 (4.7)	10.25 (5.2)	2.27 (6.6)	123.05 (7.8)	2.26 (6.5)	102.52 (6.7)
Begusarai	0.63 (2.1)	4.69 (2.0)	0.63 (2.0)	3.26 (1.6)	1.00 (2.9)	47.08 (3.0)	1.00 (2.9)	45.42 (3.0)
Munger	0.25 (0.8)	1.78 (0.8)	0.26 (0.8)	2.18 (1.1)	0.42 (1.2)	20.04 (1.3)	0.45 (1.3)	21.19 (1.4)
Sheikhpura	0.10 (0.3)	0.68 (0.3)	0.03 (0.1)	0.27 (0.1)	0.14 (0.4)	6.26 (0.4)	0.15 (0.4)	6.2 (0.4)
Lakhisarai	0.05 (0.2)	0.33 (0.1)	0.05 (0.2)	0.30 (0.2)	0.14 (0.4)	6.62 (0.4)	0.16 (0.5)	6.54 (0.4)
Jamui	0.18 (0.6)	1.50 (0.6)	0.14 (0.4)	1.20 (0.6)	0.22 (0.6)	10.03 (0.6)	0.22 (0.6)	9.63 (0.6)
Khagaria	0.33 (1.1)	2.40 (1.0)	0.34 (1.1)	2.10 (1.1)	1.05 (3.1)	47.04 (3.0)	1.06 (3.1)	45.7 (3.0)
Bhagalpur	0.58 (1.9)	5.01 (2.1)	0.56 (1.7)	4.32 (2.2)	1.35 (3.9)	58.72 (3.7)	1.3 (3.7)	52.58 (3.4)
Banka	0.06 (0.2)	0.44 (0.2)	0.06 (0.2)	0.28 (0.1)	0.65 (1.9)	30.22 (1.9)	0.35 (1)	14.72 (1.0)
Saharsa	0.55 (1.8)	3.99 (1.7)	0.56 (1.7)	4.65 (2.4)	1.24 (3.6)	52.68 (3.3)	1.25 (3.6)	51.50 (3.4)
Supaul	0.19 (0.6)	1.32 (0.6)	0.11 (0.3)	0.72 (0.4)	0.62 (1.8)	28.63 (1.8)	0.65 (1.9)	24.00 (1.6)
Madhepura	0.29 (1.0)	2.05 (0.9)	0.21 (0.7)	1.43 (0.7)	1.31 (3.8)	62.30 (3.9)	1.40 (4.0)	68.40 (4.5)
Purnea	0.28 (0.9)	9.33 (4.0)	1.3 (4.0)	8.52 (4.3)	1.30 (3.8)	51.70 (3.3)	1.33 (3.8)	48.50 (3.2)
Kishanganj	0.41 (1.4)	2.95 (1.3)	0.42 (1.3)	2.07 (1.0)	0.64 (1.9)	30.06 (1.9)	0.66 (1.9)	31.52 (2.1)
Araria	0.41 (1.4)	2.89 (1.2)	0.41 (1.3)	1.36 (0.7)	0.48 (1.4)	21.91 (1.4)	0.48 (1.4)	18.72 (1.2)
Katihar	1.50 (5.0)	11.29 (4.8)	1.52 (4.7)	10.20 (5.2)	1.65 (4.8)	55.80 (3.5)	1.46 (4.2)	40.72 (2.7)
Bihar	30.25 (100.0)	234.21 (100.0)	32.22 (100.0)	197.71 (100.0)	34.40 (100.0)	1586.83 (100.0)	34.71 (100.0)	1526.52 (100.0)

Note : Figure in parentheses denotes percentage.

Source : Department of Agriculture, GOB

Table A 3.8 : District-wise Area and Production of Vegetables and Fruits (Contd.)

(Area in '000 hectare/Production in '000 tonnes)

Districts	Total Vegetables				Total Fruits			
	2013-14		2014-15		2013-14		2014-15	
	Area	Production	Area	Production	Area	Production	Area	Production
Patna	36.07 (4.4)	773.80 (5.1)	46.19 (5.4)	715.86 (4.8)	7.98 (2.6)	103.51 (2.3)	8.02 (2.3)	80.35 (2)
Nalanda	52.93 (6.5)	1218.89 (8)	62.76 (7.4)	1215.17 (8.1)	6.65 (2.2)	215.99 (4.8)	6.68 (1.9)	208.05 (5.2)
Bhojpur	17.02 (2.1)	366.08 (2.4)	16.69 (2.0)	364.35 (2.4)	8.36 (2.8)	92.88 (2.1)	8.40 (2.4)	88.48(2.2)
Buxar	11.29 (1.4)	234.16 (1.5)	11.73 (1.4)	237.21 (1.6)	6.15 (2.0)	67.20 (1.5)	6.17 (1.8)	64.29 (1.6)
Rohtas	16.99 (2.1)	351.71 (2.3)	22.54 (2.6)	353.28 (2.4)	10.48 (3.5)	110.70 (2.5)	10.50 (3)	105.13 (2.6)
Kaimur	9.28 (1.1)	187.88 (1.2)	9.29 (1.1)	188.09 (1.3)	5.81 (1.9)	62.71 (1.4)	5.80 (1.7)	59.63 (1.5)
Gaya	21.89 (2.7)	492.00 (3.2)	24.10 (2.8)	492.90 (3.3)	3.78 (1.2)	45.71 (1.0)	3.79 (1.1)	45.10 (1.1)
Jehanabad	8.08 (1.0)	167.59 (1.1)	7.80 (0.9)	168.11 (1.1)	1.55 (0.5)	21.88 (0.5)	1.55 (0.4)	20.28 (0.5)
Arwal	6.52 (0.8)	135.27 (0.9)	6.53 (0.8)	131.38 (0.9)	1.24 (0.4)	17.48 (0.4)	1.22 (0.4)	15.18 (0.4)
Nawada	14.72 (1.8)	261.41 (1.7)	14.78 (1.7)	263.6 (1.8)	3.40 (1.1)	45.39 (1.0)	3.42 (1.0)	38.79 (1.0)
Aurangabad	15.42 (1.9)	301.10 (2.0)	15.48 (1.8)	300.16 (2.0)	4.00 (1.3)	52.47 (1.2)	4.01(1.2)	48.75 (1.2)
Saran	26.07 (3.2)	522.52 (3.4)	26.47 (3.1)	519.42 (3.5)	9.86 (3.2)	124.72 (2.8)	9.05 (2.6)	115.32 (2.9)
Siwan	20.75 (2.5)	422.96 (2.8)	22.85 (2.7)	426.26 (2.8)	7.117 (2.3)	97.74 (2.2)	7.13 (2.1)	86.35 (2.2)
Gopalganj	22.09 (2.7)	470.65 (3.1)	23.10 (2.7)	468.85 (3.1)	7.16 (2.4)	96.50 (2.2)	7.18 (2.1)	86.45 (2.2)
W. Champaran	28.64 (3.5)	596.72 (3.9)	28.84 (3.4)	600.30 (4.0)	15.11 (5.0)	187.82 (4.2)	15.10 (4.4)	176.25 (4.4)
E. Champaran	26.99 (3.3)	569.96 (3.8)	28.53 (3.3)	575.80 (3.8)	16.89 (5.6)	197.65 (4.4)	16.90 (4.9)	181.82 (4.6)
Muzaffarpur	112.27 (13.8)	749.88 (4.9)	112.36 (13.2)	723.39 (4.8)	26.56 (8.7)	485.55(10.9)	26.58 (7.7)	427.56 (10.7)
Sitamarhi	16.59 (2.0)	344.02 (2.3)	17.35 (2.0)	345.41 (2.3)	10.12 (3.3)	122.31 (2.7)	54.33 (15.7)	114.16 (2.9)
Sheohar	9.57 (1.2)	193.51 (1.3)	9.99 (1.2)	193.96 (1.3)	5.012 (1.6)	59.47 (1.3)	5.01 (1.4)	29.99 (0.8)
Vaishali	40.73 (5.0)	834.55 (5.5)	40.93 (4.8)	839.42 (5.6)	18.69 (6.2)	312.24 (7.0)	18.71 (5.4)	268.54 (6.7)
Darbhanga	22.35 (2.7)	429.87 (2.8)	22.25 (2.6)	428.52 (2.9)	19.04 (6.3)	251.67 (5.6)	18.34 (5.3)	220.00 (5.5)
Madhubani	22.74 (2.8)	463.44 (3.1)	22.74 (2.7)	463.45 (3.1)	10.54 (3.5)	140.88 (3.2)	10.54 (3.0)	124.07 (3.1)
Samastipur	28.65 (3.5)	609.33 (4)	28.65 (3.4)	610.03 (4.1)	17.10 (5.6)	257.77 (5.8)	17.11 (4.9)	227.83(5.7)
Begusarai	24.50 (3.0)	493.88 (3.3)	25.59 (3.0)	490.68 (3.3)	7.91 (2.6)	117.73 (2.6)	7.907 (2.3)	106.215 (2.7)
Munger	14.04 (1.7)	285.10 (1.9)	14.55 (1.7)	285.61 (1.9)	2.95 (1.0)	45.08 (1.0)	2.96 (0.9)	43.23 (1.1)
Sheikhpura	8.33 (1.0)	193.24 (1.3)	8.34 (1.0)	194.05 (1.3)	1.52 (0.5)	19.52 (0.4)	1.52 (0.4)	19.44 (0.5)
Lakhisarai	6.04 (0.7)	119.40 (0.8)	4.21 (0.5)	91.68 (0.6)	1.24 (0.4)	17.69 (0.4)	1.24 (0.4)	15.83 (0.4)
Jamui	7.91 (1.0)	159.15 (1.0)	7.95 (0.9)	159.41 (1.1)	2.41 (0.8)	30.38 (0.7)	2.41 (0.7)	28.51 (0.7)
Khagaria	14.48 (1.8)	278.71 (1.8)	14.49 (1.7)	278.84 (1.9)	4.43 (1.5)	83.99 (1.9)	4.71(1.4)	74.59 (1.9)
Bhagalpur	21.89 (2.7)	446.19 (2.9)	21.11 (2.5)	446.55 (3.0)	12.19 (4.0)	169.67 (3.8)	12.20(3.5)	142.41 (3.6)
Banka	11.27 (1.4)	229.02 (1.5)	11.00 (1.3)	223.14 (1.5)	8.19 (2.7)	92.25 (2.1)	8.20 (2.4)	80.59 (2.0)
Saharsa	18.09 (2.2)	355.39 (2.3)	18.13 (2.1)	355.85 (2.4)	6.663 (2.2)	110.396 (2.5)	6.22 (1.8)	99.90 (2.5)
Supaul	10.16 (1.2)	203.03 (1.3)	13.42 (1.6)	202.81 (1.4)	3.20 (1.1)	53.87 (1.2)	3.21 (0.9)	44.78 (1.1)
Madhepura	17.82 (2.2)	347.72 (2.3)	17.82 (2.1)	347.61 (2.3)	5.59 (1.8)	107.72 (2.4)	5.62 (1.6)	101.92 (2.6)
Purnea	20.56 (2.5)	384.69 (2.5)	19.72 (2.3)	364.45 (2.4)	8.65 (2.8)	149.01 (3.3)	8.68 (2.5)	141.01 (3.5)
Kishanganj	12.41 (1.5)	254.54 (1.7)	12.44 (1.5)	255.03 (1.7)	5.31 (1.7)	112.73 (2.5)	5.36 (1.5)	114.15 (2.9)
Araria	11.39 (1.4)	220.79 (1.5)	11.42 (1.3)	217.14 (1.4)	2.94 (1.0)	50.12 (1.1)	2.87 (0.8)	40.67 (1.0)
Katihar	27.86 (3.4)	523.74 (3.4)	29.95 (3.5)	441.09 (2.9)	8.03 (2.6)	127.98 (2.9)	8.03 (2.3)	94.23 (2.4)
Bihar	814.40 (100.0)	15191.89 (100.0)	852.09 (100.0)	14978.86 (100.0)	303.81 (100.0)	4458.36 (100.0)	346.64 (100.0)	3979.82 (100.0)

Note: Figure in parentheses denotes percentage.

Source: Department of Agriculture, GOB

Table A 3.9 : District-wise Area and Production of Flowers

(Area in hectare/Production in tonnes)

Districts	Rose		Marigold		Jasmine (Bela)		Tube Rose	
	2013-14		2013-14		2013-14		2013-14	
	Area	Production	Area	Production	Area	Production	Area	Production
Patna	4.70 (6.4)	7.87 (8)	58.00 (16.0)	1012.00 (14.9)	5.40 (4.8)	17.28(5.4)	5.00(4.5)	25.88(4.8)
Nalanda	2.50 (3.4)	3.4 (3.4)	18.75 (5.2)	413.00 (6.1)	3.20 (2.8)	9.92 (3.1)	2.60(2.4)	13.00(2.4)
Bhojpur	2.60 (3.5)	3.48 (3.5)	19.00 (5.2)	283.00 (4.2)	3.15(2.8)	9.45 (3)	1.80(1.6)	9.09 (1.7)
Buxar	1.40 (1.9)	1.54 (1.6)	3.55 (1.0)	63.90 (0.9)	1.80 (1.6)	5.22 (1.6)	1.60(1.5)	7.84 (1.5)
Rohtas	1.10(1.5)	1.16 (1.2)	2.30 (0.6)	38.64 (0.6)	1.50 (1.3)	4.75 (1.5)	1.20(1.1)	5.64 (1.1)
Kaimur	1.20 (1.6)	1.5 (1.5)	2.05 (0.6)	34.85 (0.5)	1.40 (1.2)	3.78 (1.2)	2.50(2.3)	5.56 (1)
Gaya	3.20 (4.3)	4.75 (4.8)	27.5 (7.6)	512.00 (7.5)	12.70(11.2)	25.00(7.9)	4.85(4.4)	22.81(4.3)
Jehanabad	1.20 (1.6)	1.44 (1.5)	13.00 (3.6)	283.00 (4.2)	3.45 (3.0)	10.01(3.2)	2.40(2.2)	11.52(2.2)
Arwal	1.30 (1.8)	1.56 (1.6)	7.75 (2.1)	135.63 (2)	3.30 (2.9)	9.57 (3.0)	1.95(1.8)	9.56 (1.8)
Nawada	1.50 (2.0)	1.7 (1.7)	2.45 (0.7)	41.65 (0.6)	1.25 (1.1)	3.25 (1.0)	1.10 (1)	5.06 (0.9)
Aurangabad	1.50 (2.0)	1.8 (1.8)	6.25 (1.7)	217.00 (3.2)	2.40 (2.1)	8.20 (2.6)	1.35(1.2)	6.48 (1.2)
Saran	1.30 (1.8)	1.5 (1.5)	4.4 (1.2)	77.00 (1.1)	2.30 (2.0)	6.21 (2.0)	1.60(1.5)	7.84 (1.5)
Siwan	1.20 (1.6)	1.44 (1.5)	3.05 (0.8)	54.29 (0.8)	1.45 (1.3)	4.06 (1.3)	1.65(1.5)	7.90 (1.5)
Gopalganj	1.25 (1.7)	1.53 (1.5)	3.50 (1.0)	60.28 (0.9)	1.50 (1.3)	4.20 (1.3)	1.45(1.3)	7.32 (1.4)
E. Champaran	2.50 (3.4)	3.48 (3.5)	9.40 (2.6)	174.84 (2.6)	3.70 (3.3)	10.20(3.2)	4.80(4.4)	24.96(4.7)
W. Champaran	2.45 (3.3)	3.33 (3.4)	8.60 (2.4)	156.52 (2.3)	2.45 (2.2)	7.60 (2.4)	3.40(3.1)	17.34(3.2)
Muzaffarpur	5.72 (7.8)	7.5 (7.6)	27.00(7.4)	628.00 (9.2)	7.40 (6.5)	23.68(7.5)	8.85(8.0)	40.82(7.6)
Sitamarhi	1.05 (1.4)	1.16 (1.2)	2.90 (0.8)	49.88 (0.7)	2.00 (1.8)	5.46 (1.7)	1.25(1.1)	5.75 (1.1)
Sheohar	0.85 (1.2)	0.89 (0.9)	1.05 (0.3)	17.85 (0.3)	0.90 (0.8)	2.34 (0.7)	0.80(0.7)	3.60 (0.7)
Vaishali	4.85 (6.6)	8.52 (8.6)	32.5 (8.9)	610.00 (9)	7.50 (6.6)	23.25(7.3)	9.40(8.5)	47.94 (9)
Darbhanga	1.90 (2.6)	2.38 (2.4)	6.80 (1.9)	119.00 (1.8)	2.60 (2.3)	7.28 (2.3)	1.90(1.7)	10.03(1.9)
Madhubani	1.00 (1.4)	1.3 (1.3)	3.55 (1)	63.19 (0.9)	3.10 (2.7)	7.69 (2.4)	1.40(1.3)	7.00 (1.3)
Samastipur	4.00 (5.4)	5.83 (5.9)	17.53 (4.8)	315.00 (4.6)	6.35 (5.6)	19.69(6.2)	8.95(8.1)	49.98(9.3)
Begusarai	2.75 (3.7)	2.88 (2.9)	12.00 (3.3)	180.17 (2.7)	3.45 (3.0)	10.35(3.3)	3.25(3.0)	16.25(3.0)
Munger	0.70 (1.0)	4.15 (4.2)	10.6 (2.9)	188.68 (2.8)	3.20 (2.8)	7.20 (2.3)	4.70(4.3)	18.32(3.4)
Sheikhpura	0.95 (1.3)	0.77 (0.8)	0.90 (0.2)	15.48 (0.2)	1.00 (0.9)	2.66 (0.8)	0.80(0.7)	3.76 (0.7)
Lakhisarai	0.90 (1.2)	1.09 (1.1)	2.30 (0.6)	40.02 (0.6)	1.20 (1.1)	3.18 (1.0)	0.95(0.9)	4.47 (0.8)
Jamui	1.05 (1.4)	0.99 (1.0)	1.70 (0.5)	28.90 (0.4)	0.80 (0.7)	2.08 (0.7)	0.7 (0.6)	3.15 (0.6)
Khagaria	1.05 (1.4)	1.16 (1.2)	1.95 (0.5)	33.93 (0.5)	1.30 (1.2)	3.45 (1.1)	1.30(1.2)	6.24 (1.2)
Bhagalpur	2.7 (3.7)	3.62 (3.7)	10.95 (3.0)	202.58 (3)	6.40 (5.6)	19.20(6.0)	4.40(4.0)	22.44(4.2)
Banka	0.85 (1.2)	0.98 (1)	2.10 (0.6)	36.12 (0.5)	1.35 (1.2)	3.51 (1.1)	0.80(0.7)	3.68 (0.7)
Saharsa	1.80 (2.4)	2.23 (2.3)	7.05 (1.9)	124.08 (1.8)	2.15 (1.9)	5.81 (1.8)	2.40(2.2)	11.52(2.2)
Supaul	0.70 (1.0)	0.77 (0.8)	1.95 (0.5)	33.35 (0.5)	0.85 (0.8)	2.25 (0.7)	0.80(0.7)	3.68 (0.7)
Madhepura	0.90 (1.2)	1.04 (1.1)	2.80 (0.8)	48.16 (0.7)	1.05 (0.9)	2.84 (0.9)	1.10(1.0)	5.17 (1.0)
Purnea	1.8 (2.4)	2.39 (2.4)	7.55 (2.1)	134.39 (2.0)	2.60 (2.3)	7.28 (2.3)	3.20(2.9)	15.36(2.9)
Kishanganj	2.5 (3.4)	3.20 (3.2)	8.85 (2.4)	157.53 (2.3)	3.35 (3.0)	9.05 (2.9)	5.55(5.0)	27.20(5.1)
Araria	1.1 (1.5)	1.23 (1.2)	1.65 (0.5)	28.22 (0.4)	1.05 (0.9)	2.73 (0.9)	0.80(0.7)	3.68 (0.7)
Katihar	2.55 (3.5)	3.34 (3.4)	10.25 (2.8)	186.55 (2.7)	2.85 (2.5)	7.98 (2.5)	7.60(6.9)	38.00(7.1)
Bihar	73.59 (100.0)	98.90 (100.0)	363.48 (100.0)	6798.68 (100.0)	113.40 (100.0)	317.66 (100.0)	110.15 (100.0)	535.84 (100.0)

Note : Figure in parentheses denotes percentage.

Source : Department of Agriculture, GOB

Table A 3.10 : District-wise Area, Production and Productivity of Sugarcane

(Area in '000 ha. / Production in '000 Ton/ Yield in Ton/ha)

Districts	2013-14			2014-15		
	Area	Prod.	Yield	Area	Prod.	Yield
Patna	0.48 (0.2)	34.40 (0.2)	71 (10)	0.47 (0.2)	34.03 (0.2)	72 (07)
Nalanda	0.22 (0.1)	14.21 (0.1)	66 (17)	0.2 (0.1)	20.83 (0.1)	103 (02)
Bhojpur	0.53 (0.2)	30.77 (0.2)	58 (24)	0.48 (0.2)	26.88 (0.1)	57 (24)
Buxar	0.42 (0.1)	22.28 (0.1)	53 (31)	0.37 (0.1)	19.26 (0.1)	52 (30)
Rohtash	0.33 (0.1)	17.46 (0.1)	53 (32)	0.29 (0.1)	15.3 (0.1)	52 (29)
Kaimur	0.11 (0.0)	3.29 (0.0)	31 (37)	0.15 (0.0)	4.65 (0.0)	30 (37)
Gaya	0.49 (0.2)	38.10 (0.2)	78 (09)	0.38 (0.1)	27.68 (0.1)	72 (06)
Jahanabad	0.03 (0.0)	2.89 (0.0)	99 (02)	0.08 (0.0)	7.96 (0.0)	97 (03)
Arwal	0.01 (0.0)	1.55 (0.0)	103 (01)	0.04 (0.0)	2.94 (0.0)	66 (14)
Nawada	0.16 (0.1)	11.60 (0.1)	71 (11)	0.40 (0.1)	21.73 (0.1)	54 (25)
Aurangabad	0.10 (0.0)	6.01 (0.0)	61 (22)	0.09 (0.0)	6.83 (0.0)	74 (05)
Saran	1.46 (0.5)	98.69 (0.6)	68 (16)	1.83 (0.6)	121.45 (0.6)	66 (12)
Siwan	5.12 (1.8)	353.29 (2.0)	69 (13)	6.39 (2.1)	432.85 (2.1)	68 (10)
Gopalganj	26.43 (9.3)	1510.00 (8.4)	57 (27)	33.32 (10.8)	1455.35 (7.0)	44 (31)
W. Champaran	149.61 (52.6)	9560.47 (53.3)	64 (19)	148.5 (48.1)	9698.43 (46.7)	65 (15)
E. Champaran	34.32 (12.1)	2337.43 (13.0)	68 (15)	52.69 (17.1)	5575.68 (26.8)	106 (01)
Muzaffarpur	5.7 (2.0)	545.75 (3.0)	96 (03)	9.24 (3.0)	637.54 (3.1)	69 (08)
Sitamarhi	17.05 (6.0)	976.43 (5.4)	57 (26)	17.37 (5.6)	755.33 (3.6)	43 (32)
Sheohar	3.54 (1.2)	161.16 (0.9)	46 (34)	3.94 (1.3)	170.02 (0.8)	43 (33)
Vaishali	0.66 (0.2)	61.24 (0.3)	93 (04)	0.86 (0.3)	55.21 (0.3)	64 (16)
Darbhanga	2.18 (0.8)	150.76 (0.8)	69 (12)	2.49 (0.8)	155.89 (0.8)	63 (17)
Madhubani	4.83 (1.7)	388.06 (2.2)	80 (07)	5.24 (1.7)	327.03 (1.6)	62 (18)
Samastipur	8.07 (2.8)	259.33 (1.4)	32 (36)	6.77 (2.2)	257.64 (1.2)	38 (35)
Begusarai	6.48 (2.3)	233.65 (1.3)	36 (35)	6.84 (2.2)	269.58 (1.3)	39 (34)
Munger	0.19 (0.1)	11.45 (0.1)	61 (20)	0.16 (0.1)	9.65 (0.0)	60 (20)
Sheikhpura	0.44 (0.2)	24.12 (0.1)	55 (28)	0.35 (0.1)	21.12 (0.1)	60 (21)
Lakhisarai	0.04 (0.0)	2.52 (0.0)	61 (21)	0.02 (0.0)	1.42 (0)	58 (23)
Jamui	1.00 (0.4)	64.42 (0.4)	64 (18)	0.81 (0.3)	49.19 (0.2)	60 (19)
Khagaria	0.31 (0.1)	14.30 (0.1)	46 (33)	0.32 (0.1)	11.96 (0.1)	37 (36)
Bhagalpur	5.43 (1.9)	445.29 (2.5)	82 (06)	5.56 (1.8)	377.76 (1.8)	68 (09)
Banka	2.73 (1.0)	212.32 (1.2)	78 (08)	2.90 (0.9)	194.89 (0.9)	67 (11)
Saharsa	0.73 (0.3)	38.91 (0.2)	54 (30)	0.80 (0.3)	42.22 (0.2)	53 (28)
Supaul	0.00 (0.0)	0.0 (0.0)	0 (38)	0.00 (0.0)	0.0 (0.0)	0 (38)
Madhepura	3.71 (1.3)	212.77 (1.2)	57 (25)	4.02 (1.3)	211.59 (1.0)	53 (27)
Purnia	0.90 (0.3)	52.61 (0.3)	58 (23)	0.97 (0.3)	56.82 (0.3)	59 (22)
Kishanganj	0.22 (0.1)	20.50 (0.1)	92 (05)	0.18 (0.1)	16 (0.1)	91 (04)
Araria	0.28 (0.1)	15.17 (0.1)	54 (29)	0.32 (0.1)	17.45 (0.1)	54 (26)
Katihar	0.08 (0)	5.50 (0.0)	69 (14)	0.11 (0.0)	7.28 (0.0)	66 (13)
Bihar	284.38 (100.0)	17938.65 (100.0)	63.08	308.59 (100.0)	20766.06 (100.0)	67.29

Note: Figure in parentheses denotes percentage and ranking for productivity

Source: Department of Sugarcane, GOB

Table A 3.11 : District-wise Cooperative Credit Distribution

District	Target (Rs. Lakh)			Achievement (Rs. lakh)		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Patna	12128	7686	11433	906.65 (3.8)	1564.32 (5.1)	3013.20 (7.9)
Nalanda	11643	4044	4303	601.93 (2.5)	429.21 (1.4)	434.99 (1.1)
Bhojpur	13860	4814	5391	426.90 (1.8)	466.10 (1.5)	520.91 (1.4)
Buxar	20098	3507	3926	310.95 (1.3)	345.25 (1.1)	402.38 (1.1)
Rohtas	6299	2188	2351	740.67 (3.1)	1223.76 (4.0)	1743.26 (4.6)
Kaimur	3622	1258	1647	270.10 (1.1)	524.5 (1.7)	583.38 (1.5)
Gaya	7892	2741	3047	137.64 (0.6)	248.49 (0.8)	268.38 (0.7)
Jehanabad	0	828	1018	7.19 (0.0)	11.43 (0.0)	6.55 (0.0)
Arwal	0	347	383	0.71 (0.0)	1.73 (0.0)	1.00 (0.0)
Nawada	7431	2581	2865	48.90 (0.2)	802.03 (2.6)	2729.81 (7.2)
Aurangabad	8291	2880	3208	2062.73 (8.7)	1346.70 (4.4)	1534.52 (4.0)
Saran	-	-	-	-	-	-
Siwan	8438	2931	3393	181.50 (0.8)	695.65 (2.3)	789.90 (2.1)
Gopalganj	2602	904	1092	1032.14 (4.4)	1415.25 (4.6)	1935.46 (5.1)
W. Champaran	8717	3028	3583	227.55 (1.0)	259.05 (0.8)	488.72 (1.3)
E. Champaran	4522	1571	2199	148.46 (0.6)	1041.41 (3.4)	2318.87 (6.1)
Muzaffarpur	5358	1861	2997	341.83 (1.4)	161.14 (0.5)	205.53 (0.5)
Sitamarhi	4322	1501	1601	162.91 (0.7)	227.09 (0.7)	121.19 (0.3)
Sheohar	582	202	286	48.32 (0.2)	74.34 (0.2)	45.82 (0.1)
Vaishali	2386	829	964	153.66 (0.7)	185.78 (0.6)	156.36 (0.4)
Darbhanga	-	-	-	-	-	-
Madhubani	16208	5630	7907	4292.7 (18.2)	4198.75 (13.6)	3951.74 (10.4)
Samastipur	9423	3273	3398	3100 (13.1)	3732.24 (12.1)	2951.83 (7.7)
Begusarai	19468	6762	11727	3830.12 (16.2)	7494.06 (24.4)	8326.25 (21.9)
Munger	1174	408	563	3.4 (0.0)	21.69 (0.1)	11.09 (0.0)
Sheikhpura	1971	684	814	0.0 (0.0)	3.3 (0.0)	
Lakhisarai	4296	1492	1532	0.0 (0.0)	17.85 (0.1)	
Jamui	1988	691	977	327.79 (1.4)	107.7 (0.4)	
Khagaria	9756	3388	3388	2347.5 (9.9)	3143.33 (10.2)	4326.32 (11.4)
Bhagalpur	3403	1182	1265	93.08 (0.4)	186.89 (0.6)	233.39 (0.6)
Banka	3831	1331	1557	28.71 (0.1)	17.88 (0.1)	26.23 (0.1)
Saharsa	-	-	-	-	-	-
Supaul	-	-	-	-	-	-
Madhepura	-	-	-	-	-	-
Purnea	8272	2873	3464	760.22 (3.2)	254.93 (0.8)	295.37 (0.8)
Kishanganj	8830	3067	3540	419.89 (1.8)	89.60 (0.3)	390.67 (1.0)
Araria	5022	1744	2180	561.64 (2.4)	85.96 (0.3)	120.01 (0.3)
Katihar	5108	1774	2001	34.80 (0.1)	384.29 (1.2)	155.58 (0.4)
Bihar	226941	80000	100000	23610.70 (100.0)	30761.67 (100.0)	38088.71 (100.0)

Note : Figures in the parentheses denote percentage

Source : Department of Cooperative, GOB

Table A 3.12 : District-wise Livestock Wealth (2012)

(Figures in '000)

District	Cow	Buffalo	Pig	Sheep	Goat	Poultry
Patna	306 (2.5)	293 (3.9)	39 (5.9)	13 (5.7)	179 (1.5)	401 (3.1)
Nalanda	176 (1.4)	317 (4.2)	23 (3.5)	8 (3.5)	157 (1.3)	520 (4.1)
Bhojpur	204 (1.7)	202 (2.7)	131 (20.2)	19 (8.1)	115 (0.9)	161 (1.3)
Buxar	162 (1.3)	183 (2.4)	8 (1.3)	16 (6.7)	81 (0.7)	80 (0.6)
Rohtas	396 (3.2)	299 (3.9)	11 (1.7)	14 (6.0)	369 (3.0)	187 (1.5)
Kaimur	204 (1.7)	222 (2.9)	8 (1.3)	43 (18.5)	111 (0.9)	131 (1.0)
Gaya	654 (5.3)	314 (4.2)	83 (12.8)	10 (4.2)	428 (3.5)	496 (3.9)
Jehanabad	80 (0.7)	132 (1.7)	16 (2.5)	2 (0.9)	73 (0.6)	95 (0.7)
Arwal	53 (0.4)	73 (1.0)	4 (0.6)	2 (1.0)	50 (0.4)	134 (1.0)
Nawada	307 (2.5)	130 (1.7)	28 (4.3)	3 (1.1)	224 (1.8)	274 (2.1)
Aurangabad	364 (3.0)	200 (2.6)	11 (1.7)	25 (10.9)	209 (1.7)	377 (3.0)
Saran	321 (2.6)	187 (2.5)	8 (1.3)	5 (2.2)	188 (1.5)	325 (2.5)
Siwan	295 (2.4)	149 (2.0)	10 (1.6)	2 (0.9)	235 (1.9)	232 (1.8)
Gopalganj	188 (1.5)	115 (1.5)	6 (1.0)	0 (0.2)	211 (1.7)	146 (1.1)
W. Champaran	367 (3.0)	260 (3.4)	17 (2.7)	2 (1.0)	593 (4.9)	466 (3.7)
E. Champaran	360 (2.9)	340 (4.5)	16 (2.5)	2 (0.7)	725 (6.0)	684 (5.4)
Muzaffarpur	344 (2.8)	278 (3.7)	5 (0.8)	2 (0.8)	564 (4.6)	853 (6.7)
Sitamarhi	151 (1.2)	186 (2.5)	6 (1.0)	0 (0.1)	366 (3.0)	281 (2.2)
Sheohar	40 (0.3)	47 (0.6)	1 (0.2)	0 (0.0)	96 (0.8)	48 (0.4)
Vaishali	213 (1.7)	169 (2.2)	2 (0.3)	2 (0.7)	299 (2.5)	756 (5.9)
Darbhangha	260 (2.1)	222 (2.9)	9 (1.3)	1 (0.2)	302 (2.5)	480 (3.8)
Madhubani	526 (4.3)	380 (5.0)	16 (2.4)	1 (0.5)	400 (3.3)	259 (2.0)
Samastipur	467 (3.8)	241 (3.2)	3 (0.5)	3 (1.1)	387 (3.2)	551 (4.3)
Begusarai	363 (3.0)	99 (1.3)	4 (0.6)	0 (0.0)	231 (1.9)	256 (2.0)
Munger	167 (1.4)	52 (0.7)	8 (1.2)	0 (0.1)	169 (1.4)	141 (1.1)
Sheikhpura	67 (0.5)	46 (0.6)	5 (0.8)	1 (0.5)	64 (0.5)	60 (0.5)
Lakhisarai	126 (1.0)	58 (0.8)	4 (0.6)	1 (0.6)	107 (0.9)	45 (0.4)
Jamui	459 (3.8)	78 (1.0)	33 (5.0)	11 (4.6)	351 (2.9)	189 (1.5)
Khagaria	239 (2.0)	88 (1.2)	4 (0.7)	0 (0.0)	228 (1.9)	148 (1.2)
Bhagalpur	509 (4.2)	191 (2.5)	9 (1.4)	1 (0.2)	582 (4.8)	358 (2.8)
Banka	552 (4.5)	142 (1.9)	21 (3.3)	16 (6.9)	377 (3.1)	212 (1.7)
Saharsa	298 (2.4)	163 (2.1)	11 (1.7)	0 (0.0)	347 (2.9)	138 (1.1)
Supaul	475 (3.9)	313 (4.1)	11 (1.7)	16 (7.1)	448 (3.7)	176 (1.4)
Madhepura	346 (2.8)	820 (10.8)	7 (1.1)	1 (0.3)	403 (3.3)	198 (1.6)
Purnea	499 (4.1)	133 (1.8)	19 (2.9)	0 (0.0)	516 (4.2)	559 (4.4)
Kishanganj	411 (3.4)	45 (0.6)	12 (1.8)	1 (0.6)	407 (3.4)	736 (5.8)
Araria	678 (5.5)	300 (4.0)	16 (2.4)	3 (1.4)	980 (8.1)	722 (5.7)
Katihar	605 (4.9)	101 (1.3)	23 (3.5)	6 (2.7)	580 (4.8)	876 (6.9)
Bihar	12232 (100.0)	7567 (100.0)	650 (100.0)	232 (100.0)	12154 (100.0)	12748 (100.0)

Note : Figure in parentheses denotes percentage
Source : Directorate of Animal Husbandry, GOB

Table A 3.13 : District-wise Achievement for Livestock-Related Services

Districts	Animal Treated (lakh)		Immunization (Lakh)		Artificial Insemination (Lakh)		Free Distribution of Fodder Seed (Qntls.)	
	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15	2013-14	2014-15
Patna	1.29	1.78	4.74	1.00	0.29	0.30	4.50	Fodder Seed was not distributed in the year 2014-15
Nalanda	0.89	1.05	3.39	0.50	0.07	0.12	3.95	
Bhojpur	0.70	0.99	3.15	0.20	0.03	0.13	2.75	
Buxar	0.16	0.40	2.49	0.50	0.04	0.04	2.15	
Rohtash	1.06	1.21	4.24	0.30	0.98	0.09	3.75	
Kaimur	0.43	0.48	3.33	0.75	0.33	0.05	2.15	
Gaya	1.52	1.58	7.64	0.50	0.10	0.18	4.70	
Jahanabad	0.58	0.63	1.70	0.40	0.04	0.06	0.75	
Arwal	0.19	0.26	0.90	0.30	0.02	0.04	2.15	
Nawada	0.71	0.85	3.68	0.70	0.08	0.12	2.75	
Aurangabad	0.96	1.25	4.49	0.40	0.10	0.16	1.55	
Saran	0.64	0.71	4.12	0.90	0.01	0.06	3.95	
Siwan	0.43	0.78	3.36	0.50	0.03	0.05	3.75	
Gopalganj	0.46	0.51	2.43	0.50	0.03	0.06	2.75	
W. Champaran	0.56	0.65	4.81	1.00	0.01	0.02	3.35	
E. Champaran	0.95	1.08	5.84	1.00	0.05	0.05	5.35	
Muzaffarpur	0.66	1.13	4.78	0.30	0.38	0.09	3.15	
Sitamarhi	0.39	0.76	2.62	0.40	0.00	0.03	3.55	
Sheohar	0.09	0.07	0.76	0.20	0.00	0.07	0.75	
Vaishali	0.58	0.74	3.13	0.20	0.02	0.02	3.15	
Darbhanga	1.17	1.44	3.89	0.40	0.04	0.11	3.55	
Madhubani	0.85	0.94	6.05	0.60	0.01	0.04	3.95	
Samastipur	1.14	2.03	5.56	0.60	0.04	0.11	4.15	
Begusarai	0.82	1.4	2.74	0.40	0.01	0.06	3.55	
Munger	0.30	0.06	1.65	0.70	0.01	0.06	1.75	
Sheikhpura	0.49	0.05	0.93	0.20	0.02	0.05	1.15	
Lakhisarai	0.11	0.3	1.21	0.25	0.00	0.03	1.15	
Jamui	0.36	0.64	4.39	0.50		0.04	1.95	
Khagaria	0.70	0.9	3.00	0.20	0.05	0.11	1.35	
Bhagalpur	0.83	1.28	5.36	1.00	0.02	0.06	3.15	
Banka	0.65	1.01	5.40	0.60		0.03	2.15	
Saharsa	0.60	0.9	3.79	0.50	0.00	0.07	2.15	
Supaul	0.59	0.94	5.62	0.80		0.06	2.35	
Madhepura	0.58	0.89	4.05	0.40	0.02	0.03	2.35	
Purnia	0.92	0.10	5.55	0.70	0.10	0.10	2.75	
Kishanganj	0.58	0.6	3.79	0.20	0.02	0.05	1.35	
Araria	0.59	0.55	7.62	0.35	0.07	0.11	1.75	
Katihar	0.59	0.76	5.37	0.80	0.10	0.05	3.15	
Bihar	25.12	31.70	147.57	19.75	3.12	2.92	104.60	

Source : Department of Animal Husbandry, GOB

Table A 3.14 : District-wise Production of Fish and Fish Seed Production

Districts	Fish Production (000 tonnes)	Fish Seeds (Lakh)	Fish Production (000 tonnes)	Fish Seeds (Lakh)	Fish Production (000 tonnes)	Fish Seeds (Lakh)
	2012-13		2013-14		2014-15	
Patna	14.60	147.60	12.09	35.30	14.01	21.18
Nalanda	16.80	181.50	21.12	293.00	16.59	290.00
Bhojpur	11.80	54.50	12.60	0.00	9.32	5.00
Buxar	7.00	67.80	8.80	0.00	6.42	3.00
Rohtas	9.40	139.90	6.85	0.00	6.30	81.40
Kaimur			4.85	0.00	7.00	135.00
Gaya	7.10	88.90	5.27	68.00	2.54	6.00
Jehanabad	7.70	43.80	4.08	7.00	3.15	7.70
Arwal			2.20	0.00	1.76	3.01
Nawada	6.00	0.00	5.93	0.00	5.20	70.00
Aurangabad	5.50	41.50	3.29	2.00	5.03	0.00
Saran	18.50	272.60	22.91	80.00	9.49	75.20
Siwan	14.00	243.00	17.95	750.00	16.96	51.00
Gopalganj	11.50	60.00	16.47	500.00	8.50	0.00
West Champaran	17.80	480.00	17.09	396.35	22.17	81.50
East Champaran	19.90	32.20	23.00	579.00	36.88	25.00
Muzaffarpur	19.90	9.40	19.98	95.00	20.15	530.00
Sitamarhi	24.10	142.50	16.80	174.60	11.15	56.25
Sheohar			2.68	3.00	1.85	5.96
Vaishali	15.50	0.00	6.28	40.00	13.40	30.25
Darbhanga	19.00	518.00	26.35	650.00	38.67	6542.50
Madhubani	20.40	640.00	23.60	26.50	42.30	118.00
Samastipur	11.40	105.60	11.40	119.00	12.02	109.86
Begusarai	14.30	280.00	7.22	0.00	23.24	0.00
Munger	10.50	57.90	4.83	0.00	6.20	6.50
Sheikhpura			0.05	5.75	3.01	0.00
Lakhisarai			4.43	0.00	7.31	0.00
Jamui	5.60	0.00	6.34	5.00	2.10	0.00
Khagaria	7.30	133.50	18.38	0.00	18.75	0.00
Bhagalpur	11.00	0.00	10.90	70.00	13.58	207.90
Banka	5.50	40.00	8.04	0.00	8.26	43.45
Saharsa	12.90	185.20	17.16	47.23	8.18	12.00
Supaul	8.20	181.00	6.85	157.00	8.78	77.88
Madhepura	7.10	101.40	12.75	0.00	2.90	0.00
Purnea	13.60	223.30	15.00	36.00	13.65	35.50
Kishanganj	7.90	249.50	7.10	190.00	6.03	0.00
Araria	7.00	17.90	6.86	157.77	9.99	200.90
Katihar	11.80	0.00	14.80	325.35	36.96	0.00
Bihar	400.10	4738.30	432.30	4812.85	479.80	8831.94

Source : Department of Animal Husbandry, GOB

CHAPTER IV

ENTERPRISES SECTOR

The process of economic development involves a steady decline in the share of primary sectors in Gross Domestic Products and a corresponding increase in the shares of secondary (industrial) and tertiary (services) sectors. Although the size of industrial sector in Bihar is relatively small, this structural change of the economy is observed in Bihar also. This is because while the overall growth rate of the state's economy has been 10.52 percent during the past decade, its industrial sector has grown at a higher rate of 13.07 percent during the same period.

In 2014-15, the industrial sector in Bihar has grown by 9.10 percent, which was marginally lower than the growth rate of GSDP at 9.45 percent (Table 4.1). The slower growth of industrial sector in 2014-15 is due to the slower growth of manufacturing sector which grew at a little over 5 percent. This is basically a reflection of the slower growth of manufacturing sector in the entire national economy. A deceleration in growth rate was also observed for construction and electricity/water supply/gas; but even after that, construction sector grew by 10.45 percent and the latter grew by 7.52 percent. With a considerable improvement in availability of power in Bihar, it is expected that its industrial sector will grow at higher rate in the coming years.

Table 4.1 : Annual Growth Rate of Industrial Sector in Bihar

Sector	Annual Growth Rate				
	2010-11	2011-12	2012-13	2013-14	2014-15
1. Mining & Quarrying	1.17	11.83	-11.54	11.96	00.00
2. Manufacturing	22.77	-9.20	1.83	3.63	5.41
(i) Registered	63.14	-20.61	1.34	0.78	5.72
(ii) Unregistered	4.81	-1.30	2.09	5.21	5.24
3. Construction	34.37	7.81	0.12	15.08	10.45
4. Electricity/Water Supply / Gas	2.99	8.35	7.14	9.69	7.52
Total Industry Sector	28.56	3.09	0.99	11.87	9.10
Total GSDP	15.04	10.29	10.69	9.12	9.45

Source: Directorate of Economics and Statistics, GOB

The relative size of the industrial sector in the major states of India can be gauged from Table 4.2 which presents the contribution of the industrial sector to GSDP. For the entire country, this ratio stands at about 29 percent; in Bihar, this ratio is the lowest at about 19 percent. However, it is

quite apparent from the table that the process of structural transformation of the economy is visible in every state, including Bihar. The shares in 2014-15 is generally less than those for year before; but this is because the industrial growth was exceptionally low in that year throughout the country.

Table 4.2 : Contribution of Industrial Sector in GSDP

States	2012-13	2013-14	2014-15	States	2012-13	2013-14	2014-15
Andhra Pradesh	21.1	19.9	19.6	Maharashtra	29.8	29.0	28.6
Bihar	18.1	18.6	18.5	Odisha	32.7	33.1	33.4
Chhattisgarh	42.3	42.4	41.9	Punjab	28.9	27.9	27.0
Gujarat	40.1	38.2	NA	Rajasthan	32.5	31.4	30.6
Haryana	28.4	27.8	27.0	Tamil Nadu	30.2	29.0	28.0
Jharkhand	38.5	37.5	36.1	Uttar Pradesh	22.2	21.6	20.8
Karnataka	27.6	26.8	26.2	West Bengal	19.3	19.1	18.7
Kerala	21.3	20.3	NA				
Madhya Pradesh	27.7	25.9	24.6	India	28.2	28.7	28.5

Source: Central Statistical Organisation (CSO)

4.1 Annual Survey of Industries

The Annual Survey of Industries (ASI) is one of the principal source of industrial statistics in India, although it covers only large industrial units. These surveys relate to manufacturing units, employing at least 10 workers (with power) or 20 workers (without power).

In 2012-13, the latest year for ASI data, there were 3347 manufacturing units in Bihar, compared to 2807 units in 2010-11, implying an increase of 19.2 percent (Table 4.3). For the entire country, this growth was lower at 8.6 percent. As regards factories in operation, it was 2946 in Bihar in 2012-13, 88.1 percent of the registered factories. For the entire country, the corresponding ratio was much lower at 80.1 percent. The distribution of the factories between agro-based and non-agro-based indicates that the share of agro-based industries in Bihar is lower (34.1 percent), compared to the national figure (39.5 percent). This actually implies that the substantial potential that Bihar has for agro-based industries is yet to be realised fully. In the Appendix, Table A 4.1 and A 4.2 present the different types of Agro-based and non-Agro-based industries operational in Bihar and India.

Table 4.3 : Number of Factories and Factories in Operation

Categories	2010-11		2011-12		2012-13	
	India	Bihar	India	Bihar	India	Bihar
No. of Factories						
Agro-based	87520 (42.8)	918 (32.7)	93251 (42.9)	1126 (34.8)	87803 (39.5)	1141 (34.1)
Non-Agro Based	117011 (57.2)	1889 (67.3)	124303 (57.1)	2106 (65.2)	134317 (60.5)	2206 (65.9)
All	204531 (100.0)	2807 (100.0)	217554 (100.0)	3232 (100.0)	222120 (100.0)	3347 (100.0)
No. of Factories in Operation						
Agro-based	69249 (41.6)	822 (32.3)	72769 (41.4)	1014 (35.3)	68698 (38.4)	1005 (34.1)
Non-Agro Based	97387 (58.4)	1725 (67.7)	102939 (58.6)	1858 (64.7)	110403 (61.6)	1941 (65.9)
All	166636 (100.0)	2547 (100.0)	175708 (100.0)	2872 (100.0)	179101 (100.0)	2946 (100.0)

Source: Annual Survey of Industries

Table 4.4 : Industries in Bihar

Characteristics	2010-11		2011-12		2012-13	
	India	Bihar	India	Bihar	India	Bihar
Number of Factories (in '000)	211.66	2.81 (1.33)	217.55	3.23 (1.49)	222.12	3.35 (1.51)
Fixed capital (Rs. '000 crore)	1607.01	5.26 (0.33)	1949.55	7.55 (0.39)	2180.26	6.47 (0.30)
Working Capital (Rs. '000 crore)	620.36	2.47 (0.4)	588.79	-0.24 (-0.04)	603.41	2.48 (0.41)
Persons Engaged (in '000)	12695	106 (0.84)	13430	127 (0.94)	12950	116 (0.90)
Value of Output (Rs. '000 crore)	4676.22	36.05 (0.77)	5776.02	60.17 (1.04)	6025.95	51.68 (0.86)
Net Value Added (Rs. '000 crore)	704.58	4.42 (0.63)	836.7	5.64 (0.67)	851.95	1.30 (0.15)

Note: Figures in the parenthesis denote percent share to All India

Source: Annual Survey of Industries

From Table 4.4, presenting some salient characteristics of the industrial sector in both Bihar and India, it is quite apparent that the average size of the factories in Bihar is smaller, compared to the national average. In 2012-13, the share of Bihar in total number of factories in India was 1.51 percent, but its shares in all other characteristics were much lower — fixed capital (0.30 percent), working capital (0.41 percent), persons employed (0.90 percent), value of output (0.86 percent) and net value added (0.15 percent). The preponderance of the smaller factories is, however, an expected phenomenon, since the process of industrialisation is still at a nascent stage in Bihar. Table 4.4 also shows that the number of factories in Bihar is increasing at a higher rate than the national average; one can, therefore, expect that some of the future factories in the state will be larger ones, making its industrial sector more vibrant.

Table 4.5 : Structural Ratios of Industries in India and Bihar (2012-13)

Characteristics	India	Bihar
Fixed capital / factory in operation (Rs. lakh)	1217	220
Fixed capital/ employee (Rs. lakh)	16.90	5.50
Workers / factory in operation (Number)	56	34
Employee /factory in operation (Number)	72	40
Net Value Added / factory in operation (Rs. lakh)	476	44
Net Value Added /employee (Rs. lakh)	6.58	1.12

Source: Annual Survey of Industries

Table 4.6 : Share of Gross Value Added in Gross Value of Output

(Rs. crore)

State	2010-11		2011-12		2012-13	
	Gross Value of Output	Gross Value Added	Gross Value of Output	Gross Value Added	Gross Value of Output	Gross Value Added
Andhra Pradesh	343560	68490 (19.9)	390934	79371 (20.3)	207128	31320 (15.1)
Bihar	36051	4843 (13.4)	60167	6203 (10.3)	51680	2957 (5.7)
Chhattisgarh	79545	15464 (19.4)	93014	15519 (16.7)	103528	18380 (17.8)
Gujarat	806784	109622 (13.6)	998413	110487 (11.1)	1116395	146852 (13.2)
Haryana	215269	29940 (13.9)	243956	35700 (14.6)	278077	45252 (16.3)
Jharkhand	97207	22597 (23.2)	103053	20197 (19.6)	108512	24926 (23.0)
Karnataka	285950	48933 (17.1)	394840	112507 (28.5)	399509	63912 (16.0)
Kerala	82050	10040 (12.2)	111587	10797 (9.7)	121791	13360 (11.0)
Madhya Pradesh	115898	20280 (17.5)	156584	22719 (14.5)	163930	25468 (15.5)
Maharashtra	785363	168467 (21.5)	1005378	179222 (17.8)	1022032	202578 (19.8)
Odisha	92142	21444 (23.3)	115419	24207 (21.0)	113696	24722 (21.7)
Punjab	148663	23300 (15.7)	178119	36283 (20.4)	171034	23324 (13.6)
Rajasthan	150048	21831 (14.5)	190455	43977 (23.1)	199381	35169 (17.6)
Tamil Nadu	472122	85469 (18.1)	609635	92079 (15.1)	619525	108816 (17.6)
Uttar Pradesh	292216	51326 (17.6)	332655	44595 (13.4)	361329	49206 (13.6)
West Bengal	206111	25133 (12.2)	233201	26044 (11.2)	247187	27094 (11.0)
India	4676217	825133 (17.6)	5776024	977358 (16.9)	6025945	1007280 (16.7)

Note: Figures in parentheses are percentages to gross output

Source: Annual Survey of Industries

The information on the operational disadvantages of the factories in Bihar, which are generally small, is presented in Table 4.5. For example, the fixed capital per operating factory is as high as Rs. 1217 lakh in India, compared to only Rs. 220 lakh in Bihar, barely one-fifth of the national average. This difference in capital base is also observed when one considers the ratio of fixed capital per employee. In Bihar, this amount is Rs. 5.50 lakh; but for India, this amount is more than three times at Rs. 16.90 lakh. It is, therefore, not surprising that net value added per employee is only Rs. 1.12 lakh in Bihar, compared to Rs. 6.58 lakh for the entire country. Because of the fact that factories in Bihar are relatively smaller, both in terms of capital base and manpower employed, their capacity for value addition is also rather limited (Table 4.6). For the entire country, 'gross value added' as a percentage of 'gross value of output' stands at about 17 percent; but for Bihar, their ratio stands at about 12 percent (ignoring the exceptionally low figure in 2012-13). As mentioned before, this structural deficiency of industries in Bihar will probably be removed gradually when the average size of the factories increases in future.

Table 4.7 : Estimate of Employment and Emoluments Paid in the Factory Sector (2012-13)

States	No. of factories in operation	No. of persons engaged	No. of unpaid family workers	No. of paid workers	Wages, salaries & bonus (Rs. lakh)	Wages, salaries & bonus per person annually (Rs.)
Andhra Pradesh	12503	503615	9162	494453	739248	149508
Bihar	2946	116399	2103	114181	103785	90806
Chhattisgarh	2143	173076	1086	171990	452618	263165
Gujarat	18175	1363628	4678	1358950	2490522	183268
Haryana	4889	566595	1407	565188	1207652	213673
Jharkhand	2149	188046	5460	182586	557785	305492
Karnataka	9730	862203	2646	859557	1914771	222763
Kerala	6333	380498	2395	378103	493429	130501
Madhya Pradesh	3412	302209	693	301516	576720	191273
Maharashtra	23068	1784909	9329	1775580	4668567	262932
Odisha	2434	263651	686	262965	530189	201620
Punjab	10064	583520	5128	578392	736779	127384
Rajasthan	7935	443027	5918	437109	724240	165689
Tamil Nadu	26739	1965020	11549	1953471	3109133	159159
Uttar Pradesh	11641	825537	4142	821395	1363228	165965
West Bengal	7387	656123	1806	654317	997597	152464
India	179102	12950025	76172	12873853	23805727	184915

Source: Annual Survey of Industries

The industrial development of an economy not only raises its productivity, it also offers larger employment opportunities for workers who were earlier engaged in low-productivity agricultural sector. Table 4.7 presents the extent of employment in those factories which are covered by the ASI. In 2012-13, such factories had employed 1.16 lakh workers in Bihar which accounted for less than 1 percent of 129.50 lakh employees in the country. This is again a consequence of the relatively smaller factories in Bihar. As regards the level of wages for a worker, it was only Rs. 90.8 thousand per year in Bihar, barely half the national average of Rs. 184.9 thousand for the entire country.

The industrial sector in Bihar, as was revealed by the ASI data, is characterised by not only its limited size, but the existing factories are also smaller in terms of capital base and number of workers. The state government is, therefore, always eager to promote large industries in the state by providing them with a number of incentives. Since 2013-14, it has approved six such industries. These are — one sugar mill (Sitamarhi), one rice mill with captive power plant (Buxar), two brewery units (Patna), one cement plant (Aurangabad) and one cycle manufacturing plant (Patna). Many of these units have already started production and other will start soon.

4.2 Micro, Small and Medium Enterprises (MSME)

For expanding the industrial sector in Bihar, the state government also promotes the establishment of micro, small and medium enterprises (MSME). It is very likely that these relatively smaller enterprises will eventually create a base for large enterprises in the state. At present, the number of registered micro, small and medium enterprises is — 54 units (medium), 1964 units (small) and 2.00 lakh units (micro) (Table 4.8). Between 2010-11 and 2014-15, a period of 5 years, the growth of enterprises has been — 315 percent (medium units), 27 percent (small units) and 9 percent (micro units). This higher growth of medium enterprises, compared to small and micro enterprises, is a positive trend in the industrial scenario in Bihar.

Table 4.8 : Year-wise Micro, Small and Medium Registered Units set up in Bihar

Year	Medium	SSI	Tiny/ micro	Total	Investment (Rs. crore)	Investment per unit (Rs. crore)	Employment (in No.)	Employment per unit (No.)
Upto 2009-10	13	1541	180389	181943	1183.48	—	590338	—
2010-11	3	33	4799	4835	185.57	3.84	17365	3.59
2011-12	2	56	3904	3962	385.64	9.73	16079	4.06
2012-13	3	53	3681	3737	253.85	6.79	10894	2.92
2013-14	11	131	2991	3133	315.59	10.07	17293	5.52
2014-15	22	150	1879	2051	2839.29	138.43	24065	11.73
Total	54	1964	197643	199661	5163.42	—	676034	—

Source : Department of Industry, GOB

The figures for investment and employment in Table 4.8 also indicate that investment and employment per unit is steadily increasing in Bihar. Compared to an investment of Rs. 3.84 crore per unit in 2010-11, it was Rs. 138.43 crore in 2014-15. Similarly, the employment per unit was 3.6 persons in 2010-14, which increased to 11.7 persons in 2014-15.

In view of varying infrastructural facilities, the location of micro, small and medium enterprises in the state is very uneven. Table 4.9 presents the location pattern of the enterprises that were registered in 2014-15. One can safely conclude that the location pattern of all the existing units also follows a similar pattern. Instead of district-wise information, Table 4.9 presents the distribution of new enterprises among 9 divisions of the state. Most of the enterprises are concentrated in Patna and Tirhut divisions. Their shares in total number of enterprises are — Patna (28.0 percent) and Tirhut (23.4 percent). The two divisions with the least share of enterprises are — Magadh (5.1 percent) and Bhagalpur (1.6 percent). There were four divisions where no medium enterprises were set up in 2014-15 — Bhagalpur, Purnea, Darbhanga and Kosi. The district-wise distribution of MSMEs registered in 2014-15 is presented in Table A 4.3 (Appendix).

Table 4.9 : Distribution of Micro, Small and Medium Enterprises Registered in 2014-15

Divisions	Number of units			
	Micro	Small	Medium	Total
Patna	481 (25.6)	79 (52.7)	14 (63.6)	574 (28.0)
Munger	222 (11.8)	15 (10.0)	1 (4.5)	238 (11.6)
Bhagalpur	29 (1.5)	3 (2.0)	0 (0.0)	32 (1.6)
Purnea	140 (7.5)	6 (4.0)	0 (0.0)	146 (7.1)
Magadh	99 (5.3)	3 (2.0)	2 (9.1)	104 (5.1)
Darbhanga	139 (7.4)	3 (2.0)	0 (0.0)	142 (6.9)
Kosi	152 (8.1)	0 (0.0)	0 (0.0)	152 (7.4)
Tirhut	439 (23.4)	38 (25.3)	3 (13.6)	480 (23.4)
Saran	178 (9.5)	3 (2.0)	2 (9.1)	183 (8.9)
Total	1879 (100.0)	150 (100.0)	22 (100.0)	2051 (100.0)

Source : Department of Industry, GOB

Note : The Figures in the parenthesis denote percent share to total

4.3 Prime Minister's Employment Generation Programme (PMEGP)

The PMEGP is a Centrally Sponsored Scheme to generate employment opportunities by providing bank credit, specially to the traditional artisans. This credit-linked scheme was started in 2008, by merging erstwhile Rural Employment Generation Programme (REGP) and Prime Minister Rojgar Yojana (PMRY). The scheme is implemented by Khadi and Village Industries Commission (KVIC), state level Khadi and Village Industries (KVI) Board, and District Industries Centres (DIC).

The information on the performance of this programme in Bihar is presented in Table 4.10. Both in 2012-13 and 2013-14, the performance of PMEGP was modest, the actual attainments being nearly half of the target. For example, in 2013-14, 3093 persons were benefited by the programme, against a target of 5591. A total credit of Rs. 76.75 crore was distributed to them against a target of Rs. 128.60 crore. In 2014-15, however, the achievements under this programme was very limited, when only 1734 persons were benefited with a credit of Rs. 43.58 crore. It is also noted from Table 4.10 that DICs play a major role in implementation of PMEGP, the role of KVIC and KVI Boards being very marginal.

Table 4.10 : Performance of PMEGP

Agencies		KVIC	KVI Board	DIC	Total
2012-13					
Target/Margin Money	Physical (Nos.)	1887 (30.0)	1887 (30.0)	2516 (40.0)	6290 (100.0)
	Financial (Rs. lakh)	4340.66 (30.0)	4340.66 (30.0)	5787.56 (40.0)	14468.88 (100.0)
Margin Money disbursed by Nodal banks	Physical (Nos.)	284 (9.0)	305 (9.7)	2561 (81.3)	3150 (100.0)
	Financial (Rs. lakh)	774.28 (10.1)	922.89 (12.0)	5971.91 (77.9)	7669.08 (100.0)
2013-14					
Target/Margin Money	Physical (Nos.)	559 (10.0)	559 (10.0)	4473 (80.0)	5591 (100.0)
	Financial (Rs. lakh)	1285.81 (10.0)	1285.81 (10.0)	10288.76 (80.0)	12860.38 (100.0)
Margin Money disbursed by Nodal banks	Physical (Nos.)	341 (11.0)	176 (5.7)	2576 (83.3)	3093 (100.0)
	Financial (Rs. lakh)	900.89 (11.7)	467.93 (6.1)	6306.64 (82.2)	7675.46 (100.0)
2014-15					
Target/Margin Money	Physical (Nos.)	2294 (30.0)	2294 (30.0)	3060 (40.0)	7648 (100.0)
	Financial (Rs. lakh)	3321.96 (30.0)	3321.96 (30.0)	4429.27 (40.0)	11073.19 (100.0)
Margin Money disbursed by Nodal banks	Physical (Nos.)	280 (16.1)	130 (7.5)	1324 (76.4)	1734 (100.0)
	Financial (Rs. lakh)	629.73 (14.4)	389.54 (8.9)	3338.79 (76.6)	4358.06 (100.0)

Source: Department of Industry, GOB

Note : The Figures in the parenthesis denote percent share to total

4.4 Agro-based Industries

The bio-diversity in Bihar is very wide and the farms here produce a variety of crops, besides foodgrains. These crops include oilseeds, fibres, fruits, vegetables, sugarcane and tea. In addition, the production of milk is also very substantial in Bihar. Thus Bihar offers enormous opportunities for establishment of agro-based industries.

Food Processing Industries

The status of food processing industries in Bihar is presented in Table 4.11. At the end of 2014-15, there were 366 food processing industries in the state out, of which 207 (56.6 percent) were operational. By September, 2015, there were a few additions, resulting 379 units, of which 210 (55.4 percent) were operational. Although cereal-based food processing industries are the largest

in number (rice, wheat and maize), there are also a number of units producing milk products and edible oils. The total employment in these food processing industries is around 45 thousand.

Table 4.11 : Achievements of Food Processing Units

As on September, 2015					
Project	Number of Units		Financial Progress (Rs. lakh)		Employment (Nos.)
	Total	In commercial Production	Approved Project cost	Grant released so for as per progress	
Rice Mills	169	89	156409.60	12963.62	5745
Wheat Milling	44	30	35060.15	4729.87	104
Maize Processing	37	21	41053.51	3994.33	2281
Rural Agri Business Centres	52	24	46468.78	6644.26	1572
F & V Processing	16	7	10819.25	1297.89	168
Milk Processing	11	6	24241.58	1082.61	598
Makhana Processing	3	2	369.63	64.82	56
Honey Processing	2	2	224.14	69.80	32
Biscuits Manufacturing	9	8	20875.95	2655.10	1906
Edible Oil Manufacturing	10	8	50749.62	3174.67	2001
Other Projects	24	13	28647.49	2105.38	1900
Food Park	2	0	30980.40	150.00	28597
Total	379	210	445900.10	38932.35	44960
2014-15					
Project	Number of Units		Financial Progress (Rs. lakh)		Employment (Nos.)
	Total	In commercial Production	Approved Project cost	Grant released so for as per progress	
Rice Mills	162	89	153990.91	9995.15	5566
Wheat Milling	42	27	34740.94	3365.34	16
Maize Processing	34	21	40079.50	2509.78	2200
Rural Agri Business Centres	52	24	46468.78	5031.60	1562
Cold Storage	3	1	1510.12	0.00	1834
F & V Processing	14	7	10445.91	1102.03	122
Milk Processing	10	5	13441.58	1063.92	553
Makhana Processing	3	2	369.63	64.82	56
Honey Processing	2	2	224.14	69.80	32
Biscuits Manufacturing	9	7	20875.95	2480.46	1906
Edible Oil Manufacturing	10	8	50749.62	2874.66	2001
Ice Cream	4	2	1073.38	184.37	89
Other Projects	19	12	24420.21	1770.76	1400
Food Park	2	0	30980.40	150.00	28597
Total	366	207	429371.07	30662.69	45934

Source : Department of Industry, Directorate of Food Processing, GOB

The Directorate of Food Processing is currently providing special assistance to the sector under the following schemes:

- (i) Integrated Development Project : Under this project, the ongoing subsidy for cluster scheme is payable at 40 percent and, for individual units, it is 35 percent. The project provides the following facilities:
 - (a) For the capacity expansion under the cluster scheme, the maximum subsidy amount payable is Rs. 10.00 crore and, for individual unit, it is Rs. 5.00 crore.
 - (b) For the scheduled castes / scheduled tribes / women / handicapped entrepreneurs, an additional 5 percent subsidy is payable.
 - (c) For the projects costing of Rs. 50-100 crore, an interest subsidy of 3 percent and on the projects costing above Rs. 100 crore an interest subsidy of 6 percent is also payable.
- (ii) Food Park Scheme : Under this scheme, the rate of payable subsidy has been raised to 30 percent with a maximum of Rs. 50 crore. The establishment of a Food Park at Buxar has been approved. In 2013-14, a sum of Rs. 30 crore was approved for subsidy payment.
- (iii) Modernisation Scheme for Established Rice Mills : Under National Food Processing Mission of the central government, the traditional rice milling units are paid 25 percent subsidy for modernization. Under this scheme, an additional state subsidy of 15 percent is payable in accordance with the guidelines of the central government.
- (iv) Cold Storage Scheme : The cold storage with a capacity of 5-10 thousand tonnes is paid a subsidy of 30 percent on the capital expenditure. For a capacity of more than 10 thousand tonnes, 35 percent subsidy will be payable. The maximum amount of subsidy will be Rs. 5 crore.
- (v) Establishment of Silo for Maize Storage : Under this scheme, the benefit of subsidy will be given for establishment of silos for the storage of maize. The construction of silo with a storage target of 5 thousand tonnes of maize will be considered as one unit and a subsidy of 35 percent will be payable on this.

Sugar Industries

The area under sugarcane cultivation in Bihar is about 3 lakh hectares which is about 6 percent of the total cultivable area. In view of its widespread cultivation, the state government has decided promote the sugar industry in the state to strengthen the rural economy. Apart from providing direct employment, the sugar industry also creates indirect employment through its related activities. For the benefit of sugar mills, various concessions have been provided by the state government, which include reduction in VAT on ethanol and denatured spirit (from 12.5 to 4.0 percent) and abolition of literage fees on ethanol and liquor.

Out of 28 old sugar mills in the state, 19 are closed and only 9 are working, all in the private sector. There are two new sugar mills under Bihar State Sugar Corporation, which were handed over to a HPCL in 2011 on lease. During 2014-15, a total of 574.45 lakh qntls. of sugarcane was crushed in Bihar, providing 52.67 lakh qntls. of sugar. The production of sugar was about 11 percent less than the level in 2013-14. The overall recovery percentage of sugar has increased marginally in Bihar from 8.6 percent (2012-13) to 9.2 percent (2014-15).

Table 4.12 : Performance of Sugar Mills

Name of Sugar Mill	Sugar-cane Crushed (lakh qntl.)	Sugar Produced (lakh qntl.)	Recovery (Percentage)	Sugar-cane Crushed (lakh qntl.)	Sugar Produced (lakh qntl.)	Recovery (Percentage)	Sugar-cane Crushed (lakh qntl.)	Sugar Produced (lakh qntl.)	Recovery (Percentage)
	2012-13			2013-14			2014-15		
Bagha	48.90	4.31	8.8	82.49	7.89	9.6	79.86	7.55	9.4
Harinagar	90.15	7.86	8.7	139.00	12.94	9.3	125.67	11.52	9.2
Narkatiagunj	69.50	6.26	9.0	95.44	9.11	9.6	82.08	7.65	9.3
Majhulia	30.73	2.73	8.9	60.75	5.33	8.8	48.47	4.77	9.8
Motipur		0.10	4.1	Closed			Closed		
Sasamusa	19.13	1.73	9.0	28.75	2.56	8.9	18.44	1.55	8.4
Gopalganj	35.65	3.06	8.6	50.25	4.53	9.0	38.81	3.69	9.5
Sidhwalia	38.85	3.51	9.0	62.62	5.66	9.9	51.56	4.78	9.3
Riga	29.53	2.56	8.7	52.84	4.7	8.9	47.95	4.2	8.8
Hasanpur	26.82	2.45	9.1	35.27	2.94	8.3	34.55	3.11	9.0
Sub Total	391.69	34.57	8.8	607.41	55.66	9.2	527.39	48.82	9.23
New Sugar Mills									
Lauriya	13.12	0.64	4.9	26.17	1.8	6.9	25.1	2.00	8.0
Sugauli	13.11	0.67	5.1	30.42	2.04	6.7	21.96	1.85	8.4
Sub Total	26.23	1.31	5.00	56.59	3.84	6.8	47.06	3.85	8.2
Total	417.92	35.88	8.6	664.00	59.50	9.0	574.45	52.67	9.2

Source: Department of sugarcane, GOB

At present, the following schemes are in operation for supporting sugar mills and sugarcane growers :

- (a) The farmers are given a subsidy at the rate of Rs. 135 per quintal on purchase of certified sugarcane seed of improved variety, declared by sugar mills. A farmer will get the benefit of this scheme for a maximum of 5 acres and, once a farmer has availed the subsidy, he will not be entitled for the subsidy on that variety for the next three years.

- (b) There is a provision for subsidy of Rs. 55 per quintal to the farmers for growing certified seed.
- (c) There is also a provision for subsidy to the sugar mills for growing base seed at the rate of Rs. 15,000 per hectare. Further, there is also a provision of subsidy for growing breeder seed.
- (d) There is a training facility for farmers for use of improved variety of sugarcane, selected from outside the state, and sowing the seeds by twain method.
- (e) There is an incentive amount for inter-cropping with sugarcane as well as diesel subsidy for irrigating the crop.
- (f) There is an arrangement for technical publicity and extension scheme, both of which are closely supervised and monitored.

Despite good soil, favourable to the sugarcane cultivation, the productivity is low in Bihar for several reasons. Presently, only 25-30 percent of the area under sugarcane is having irrigation facility and even this irrigated area gets only 1-2 waterings on an average because, during April-June, water is not available in the canal. The state is facing shortage of high-yielding varieties of sugarcane. The state government, in coordination with Sugarcane Research Institute (SRI) and sugar mills, is making an attempt to solve this problem. The inadequacy of technical knowledge and publicity affects the productivity of sugarcane adversely. The officers and staff of the department and the sugarcane scientists are aware of this and are working to overcome this problem.

Dairy Industry

The animal husbandry is a traditional occupation for rural households, because of its close linkage with farming operations. At one hand it provides animal power for agricultural operations and, on the other, it produces milk. Apart from meeting the in-house demand for milk, the farmers also sell milk to supplement their agricultural income. But, at present, the dairy is viewed as an industry. The Bihar State Milk Cooperative Federation (COMFED), established in 1983, has played a pivotal role in the development of dairy industry in the state. It is the implementing agency for Operation Flood Programme, working towards the white Revolution. It has contributed much towards enhancing the income level of rural households, particularly small and marginal farmers. For the establishment of the milk cooperatives, COMFED has adopted a three-tier pattern, under which there is milk producers' cooperative society at the village level, milk union at the district level, and finally milk federation at the state level.

The number of milk cooperative societies in 2014-15 was 18.4 thousand, of which 14.2 thousand were working, and 5.8 thousand were registered (Table 4.13). The number of working

cooperative has increased by 12.1 percent in 2014-15, over the last year when there were 12.7 thousand societies. From Table 4.14, presenting the data on daily milk collection, one can observe that it has increased steadily over the years. During the five year period of 2010-11 to 2014-15, it had grown annually at 12.6 percent. Among the 6 different milk cooperative unions and three projects, the annual growth rate for milk procurement was the highest for Kosi Dairy Project (51.5 percent), followed by Magadh Dairy Project (44.8 percent).

Although there is some year-to-year variations, the milk procurement per functional society per day has also recorded an increase between 2010-11 and 2015-16. Compared to a procurement of 1192 thousand litres per day in 2010-11, it has increased to 1227.69 thousand litres per day in 2015-16 upto September, registering an increase of 2.99 percent. In 2015-16, the two leading milk cooperative unions in terms of milk procurement per cooperative society were — Ranchi (326 thousand litres) and Barauni (241 thousand litres).

The milk procured by COMFED is sold either as milk or milk products. The COMFED also provides a number of services to the milk producing households like artificial insemination, deworming and the like. Table 4.16 presents data on different activities of COMFED during the last five years. It is quite apparent from the table that, over the years, COMFED has been steadily expanding its operation to strengthen dairy industry in Bihar.

Table 4.13 : Number of Dairy Cooperative Societies

	2014-15			2013-14		
	Organised Societies	Working Societies	Registered Societies	Organised Societies	Working Societies	Registered Societies
Vaishal Patliputra Milk Union	3840	2929	1218	3623	2631	1200
Deshratna Dr. Rajendra Prasad Milk Union	2124	1987	1079	2020	1854	1039
Mithila Milk Union	2186	2001	879	1926	1689	848
Tirhut Milk Union	3027	1964	887	2709	1754	791
Shahbad Milk Union	3007	2375	1205	2686	2173	1205
Vikramshila Milk Union	1404	813	234	1205	784	163
Magadh Dairy Project	1461	1124	160	1286	971	135
Kosi Dairy Project	1276	950	80	1162	752	27
Ranchi Dairy Project	60	46	12	58	46	12
Total	18385	14189	5754	16675	12654	5420

Source : COMFED, GOB

Table 4.14 : Progress of Unions and Projects in Daily Milk Collection

(in 000 kgs)

Union/Project	2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
Vaishal Patliputra Milk Union, Patna	221.23	210.15	224.85	282.09	318.91	10.8
Deshratna Dr. Rajendra Prasad Milk Union, Barauni	333.08	314.12	343.80	375.20	409.72	6.1
Mithila Milk Union, Samastipur	248.14	250.98	282.99	340.57	354.51	10.7
Tirhut Milk Union, Muzaffarpur	118.13	115.12	133.53	181.87	196.87	15.9
Shahbad Milk Union, Ara	123.75	129.44	176.17	206.24	259.67	21.5
Vikramshila Milk Union, Bhagalpur	35.05	35.73	48.34	54.88	70.13	19.9
Magadh Dairy Project, Gaya	10.76	7.50	13.19	22.55	39.53	44.8
Kosi Dairy Project, Purnea	6.29	7.13	15.55	20.98	29.24	51.5
Ranchi/ Bokaro /Jamshedpur Dairy	4.95	4.76	6.34	10.24	14.10	32.3
Total	1101.38	1074.93	1244.75	1495.02	1690.24	12.6

Source: COMFED, GOB

Table 4.15 : Milk Procurement per Functional Dairy Cooperative Society

(Kl. per day)

Union/Unit	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (Up to Sept, 2015)
Patna	136.47	101.5	97.37	122.17	108.88	119.88
Barauni	300.07	213.1	210.4	229.62	206.2	241.17
Muzaffarpur	91.17	87.6	87.91	119.73	100.24	91.80
Samastipur	250.64	216.5	202.28	243.44	177.17	187.87
Shahabad	102.02	78.8	90.02	105.39	108.49	103.26
Bhagalpur	116.83	84.3	74.83	84.95	86.26	87.65
Magadh	29.9	18.8	23.64	40.41	35.17	31.18
Ranchi Dairy	130.3	212.5	140.89	213.55	306.52	326.30
Kosi	34.75	23.5	34.02	45.9	30.78	38.97
Total	1192.15	1036.6	961.36	1205.16	1159.71	1227.69

Source : COMFED, GOB

Table 4.16 : Activities by COMFED

Indicators	2010-11	2011-12	2012-13	2013-14	2014-15
Cooperative Societies					
Organised	9760	11638	13691	16675	18385
Operational	6937	8823	10524	12654	14189
Registered	3651	3917	4943	5420	5754
No. of Members (lakh)	5.33	6.29	7.59	8.73	9.42
Collection of Milk					
Collection of Milk (lakh kg/day)	11.01	10.75	12.45	14.94	16.90
Marketing of Products					
No. of Retail Outlets	7677	8388	9558	10944	12299
Milk (lakh litres/day)	7.21	8.17	9.20	10.76	11.52
Ghee (metric tonnes)	1270	1329	1717	1638	1756
Lassi (metric tonnes)	4094	3242	6426	5846	4412
Peda (metric tonnes)	770	745	1242	1273	1173
Paneer (metric tonnes)	1936	2090	3022	3087	3284
Dahi (metric tonnes)	2857	3252	4628	6003	6492
Gulab Jamun (metric tonnes)	463	566	1105	1331	1160
Ice-Cream (metric tonnes)	585	841	1083	1321	1702
Services					
No. of Artificial Insemination Centres	1783	2021	2329	2897	3110
Artificial Insemination (lakh)	11.34	11.85	15.66	18.44	20.30
Vaccination (lakh)	14.97	16.25	17.73	22.81	15.53
De-worming (lakh)	8.37	8.75	12.92	11.67	12.92
Seed Distribution (million tonnes)	205.36	488.19	757.14	885.61	930.93
Cattle Feed Distribution (million tonnes)	59297	61097	61088	54285	56143

Source: COMFED, GOB

Tea

Since the nineties, tea has emerged as a new agro-based industry in Bihar. The tea industry is growing fast in the state, as tea is presently cultivated in more than 25 thousand acres, mostly in Kishanganj district. Pothia block, in the district, alone accounts for 50 percent of the area under tea cultivation, followed by Thakurganj (40 percent) and Kishanganj (10 percent). More than 4000 tonnes of tea is grown every year in Bihar. There are 7 tea processing plants in Kishanganj, with an annual output exceeding 2300 tonnes. Thus, there is still a scope for more tea processing

plants in Kishanganj. If new plants are established, the tea cultivators need not ferry the tea leaves to the neighbouring north Bengal. A tea promotion policy for the advancement of the tea industry is being finalised by the state government. The state government has announced subsidies and incentive package for new tea processing plants.

4.5 Non-Agro-Based Industry

Handloom

Despite various schemes of the state government, the production in handloom sector is continuously declining in Bihar. There are more than 1.32 lakh weavers in Bihar who are completely dependent on this sector for their livelihood. There are 1089 primary handloom weavers societies, with nearly 34 thousand handlooms operating under them. It is worth noting that bulk of the weavers are operating outside the cooperative fold. There are two apex-level marketing organisations, viz., Bihar State Handloom Cooperative Union and Bihar State Wool and Sheep Union. There are 6 Regional Handloom Unions located in Nalanda, Sitamarhi, Siwan, Madhubani, Purnea and Bhagalpur. Certain districts of the state have handloom concentration in respect of specific products, as presented in Table 4.17.

Table 4.17 : Handloom Concentrated Districts in Bihar

District	Products
Bhagalpur	Silk, Cotton, Furnishing cloth, Staple chadar, Exportable Silk and cotton cloth.
Banka	Tasar Silk, Exportable Silk Cloth
Gaya	Cotton and Silk Cloth
Nalanda	Ornamental Curtain, Bed Cover, Interior decoration material and ornamented cloth
Nawada	Tasar Silk and ladies dress material
Darbhanga, Madhubani, Sitamarhi	Fine Cotton long cloth, dhoti, shirting
Aurangabad, Rohtas	Woolen Blanket, Woolen Carpet and Sari
Kaimur	Woolen Carpet, Banarasi Sari
Patna, Siwan	Cotton cloth and Furnishing Cloth
Purnea, Katihar	Jute bags, Jute-blended material, Interior decorative material

Source: Department of Industries, Handloom, GOB

The IL&FS was mandated by the Department of Industries for a diagnostic survey of seven handloom clusters in Gaya, Patna, Darbhanga, Madhubani, Bhagalpur, Siwan and Biharsharif. The study revealed that most of the weavers were still operating on a very small scale, which is not commercially viable. Since the weaver cooperatives have, by and large, failed to deliver, it is necessary to federate the weavers and bring their operations to a sustainable scale. The study also brings out the fact that only 54 percent of the weavers owned their handlooms and the remaining

46 percent were provided handlooms by traders. The weaving was found to be the main source of income for about 62 percent of the weavers. More than 50 percent of weavers reported non-availability of work for 10-12 days in a month.

There are 8 state government institutions for imparting training and capacity building of the handloom weavers in the state. They are located at Chakand (Gaya), Amarpur (Banka), Obra (Aurangabad), Patna town (Patna), Baran (Bhagalpur), Kako (Jehanabad), Jhinganagar (Nalanda) and Purnea town (Purnea). During the training, a sum of Rs. 800 per month is paid to the trainees. The targets and achievements of the training programme are presented in Table 4.18.

Table 4.18 : Targets and Achievements of Training Programmes

No. of Trainees	2010-11	2011-12	2012-13	2013-14	2014-15
Target	204	204	204	204	204
Achievement	162	164	180	163	160
Achievement Percentage	79.4	80.4	88.2	79.9	78.4

Source : Department of Industries, Handloom, GOB

The main problems confronting the handloom sector in Bihar are : (a) scarcity of raw material; (b) lack of training in taking up new products; (c) absence of proper pricing methodology; (d) non-availability of credit facilities; and (e) inadequate market linkages. In this background, various schemes have been launched during the last three years for the development of the handloom sector. An ambitious scheme — Mukhyamantri Integrated Handloom Development Scheme — was started in 2012-13 under plan fund. Under this scheme, the following facilities are being provided to the weavers — (a) Rs. 15,000 per handloom weaver for purchasing new loom; (b) Corpus money of Rs. 5000 per weaver for purchasing material; (c) Rs. 40,000 per weaver for construction of workshed; (d) Establishment of 40 common facility centers for Intensive Handloom zone; (e) Establishment of Bunkar Hatt in Bhagalpur (100 stalls), Gaya, Aurangabad, Madhubani, Patna and Siwan (50 stalls each) for marketing assistance, and (f) Provision of a Corpus fund for Yarn Depot in Bhagalpur and Banka. Besides, there is Bunkar Stipend Yojana also.

Powerloom

There are 14,000 powerlooms in the state, concentrated mainly in Bhagalpur, Gaya and Banka districts and their main products are staple chadar, furnishing clothes, etc. There is a training centre at Nathnagar (Bhagalpur), run by the Ministry of Textiles of the central government, where 120 powerloom weavers are trained each year. For power loom workers electricity subsidy of Rs. 3/- per unit is being provided for production of cloth.

Sericulture

Bihar possesses a great potential for sericulture. In order to provide employment in the rural areas, the Chief Minister Tassar Development scheme was started in 2012-13. Under this, a sum of Rs. 170.90 crore has been approved under State Plan for Tassar Area Development in the districts of Banka, Munger, Nawada, Kaimur, Jamui and Gaya, and some water-logged areas in north Bihar where plantation of Arjun and Asan trees is feasible. The scheme will be completed during the Twelfth Plan period. The main programmes under this scheme include :

- (i) Plantation of Tassar Food Plant in 10,200 hectares, and seed production and rearing through 408 SHGs under the leadership of Resham Mitra,
- (ii) Formation of 155 SHGs for the production of yarn through Common Facility Centre (CFC),
- (iii) Strengthening of Pilot Project Centre, and
- (iv) Establishment of Cocoon Bank.

Table 4.19 : Achievements in Sericulture

Year	Type of Silk	Plantation (Hectare)	DFLs Rearing (Lakh)	Total Cocoon Production	Raw Silk (tonnes)
2012-13	Mulberry	92.31	4.09	100.51 (MT)	12.34
	Tassar	768.00	2.41	91.01 (LAKH)	7.30
	Castor	191.50	0.40	3.17 (MT)	2.38
2013-14	Mulberry	117.00	5.07	122.73 (MT)	15.08
	Tassar	608.00	7.10	386.94 (LAKH)	37.89
	Castor	575.00	0.81	6.50 (MT)	5.20
2014-15	Mulberry	184.00	5.04	162.16 (MT)	19.50
	Tassar	5198.00	7.48	293.88 (LAKH)	32.95
	Castor	232.00	1.19	10.20 (MT)	8.16

Source : Department of Industries, Sericulture, GOB

Note : DFLs – Disease Free Layings

To promote production of mulberry in the districts of Saharsa, Supaul, Madhepura, Araria, Kishanganj, Katihar and Purnea, the Mukhyamantri Kosi Mulberry Scheme has been approved at a cost of Rs. 118.04 crore, which will be operational till 2016-17. Under this, the mulberry plantation will be taken up in a total of 2900 acres of private land with MGNREGS fund. The state government will make available the facilities like training, study tour, economic assistance, etc. for silk worm rearing. The assistance will also be provided for the production of yarn and clothings. For the production of yarn, two reeling units will be established in each of the districts identified. The yarn produced will be marketed under the brand name of 'Koshiki'. The weavers of Bhagalpur will be assisted for the purchase of improved new looms and upgradation of existing handlooms. The mulberry plantation in 114 acres of private land in Saharsa, Supaul and Madhepura districts have been completed till date.

Towards improving the skill of persons engaged in sericulture, the Bihar Institute of Silk & Textiles at Nathnagar, Bhagalpur was established in 1922, construction work for establishing one textile testing lab and one Computer Aided Design (CAD) unit at the institute is in progress. Presently, the Institute is imparting a vocational course in Silk Technology of 2-year duration. There are also two Mulberry Reeling Training centres in Kishanganj and Bhagalpur. These centres impart training in mulberry silk reeling and spinning to 40 persons every year. There are 8 Mulberry Extension-cum-Training centres which impart training in mulberry cultivation and rearing to 80 persons every year.

The data on achievements in sericulture in the state has been presented in Table 4.19. From the table, it is quite apparent that there has been a steady increase in the production of mulberry, tassar and castor. The increase was particularly high for tassar. Compared to a production of 7.30 tonnes in 2012-13, it was 32.95 tonnes in 2014-15.

Bhagalpur Mega Handloom Cluster

Bhagalpur Mega Handloom Cluster is being implemented in Bhagalpur & Banka districts. Weavers under this scheme will get benefit under many components. Under this scheme j10 Blocks level cluster has been approved under which 10 Common Facility Center (CFC), two dye house & one design studio & product development centre has been sanctioned by Ministry of Textile. In each CFC, pre-loom/post-loom/dyeing/designing etc. facilities will be available. National Institute of fashion Technology, Patna is Cluster Monitoring and Technical Assistant (CMTA) for this scheme. Govt. of Bihar will contribute 10 to 25% share in different components.

Jute Park

A Jute park is being establishing in Maranga, Purna with investment cost Rs. 42.36 crore, by registered SPV M/S Punrasar Jute Park Ltd. Under PPP mode. State Govt. has provided 44.30 acres land as equity and Rs. 2.00 crores (two crores) as a grant. In Jute Park, Two units M/S Tirupati Commodities Private Ltd. & M/S Punrasar Jute Park training centre has been established & functional. They are producing Jute yarn, Jute twin, Jute cloths & other Jute Products. Approx. 481 peoples has been employed directly and 800 peoples has been indirectly employed as yet.

Leather Industries

Accounting for around 8 percent of the country's total bovine population, Bihar has substantial potential for leather industries. Again, the goat population, in Bihar accounts for nearly 12.1 percent of the country's total goat population, ranked third in the country, next only to West Bengal and Rajasthan. Buffalo and sheep account for 4.2 and 1.9 percent, respectively, of the country's total population of those animals. According to a recent survey conducted by Central Leather Research Institute (CLRI), Chennai, Bihar annually produces 2.64 million bovine hides and 5.09 million bovine skins. The state is known for best quality goat skins, cow hides and buffalos calf skins. Goat skins are smaller in size and the best material for the production of glazed kid leather products, which are mostly exported.

For hides and skins, there are seven main markets in the state — Patna, Ara, Aurangabad, Munger, Muzaffarpur, Katihar (Pabai) and Purnea. In case of buffalo hides, Ara is the biggest market, whereas Muzaffarpur is the major market for buffalo calf skin. Patna is the major market for goat skin. According to a rough estimate, three trucks loaded daily with 7-8 thousand pieces of goat skins and 2-3 thousand pieces of cow hides are transported from Muzaffarpur to other destinations. Some of the important companies like Tamilnadu Tanners collect hides and skins from the important markets in Bihar through their own agents. The local tanning industries are confined to a few working tanneries in Muzaffarpur and Bata Tannery at Mokama Ghat. As a result, most raw materials find their ways to Kolkata, Kanpur and Chennai, depriving Bihar of the benefits.

Khadi and Village Industries

The Khadi and Village Industries Commission (KVIC) is a statutory organisation under the Ministry of MSME as the single national nodal agency for the sector. At the state level, the KVIC functions through State KVIC Directorates and State KVI Boards. Its activities include skill development, transfer of technology, research and development, marketing, etc. and it helps in generating employment opportunities in the rural areas. In case of village industries, KVIC is implementing the Prime Minister's Employment Generation Programme (PMEGP). As a nodal agency, KVIC also implements cluster development activities for traditional products of khadi and village industries, under the Scheme of Fund for Regeneration of Traditional Industries (SFRTI).

The total employment in the KVI sector is estimated to have increased to 140.38 lakh persons (10.98 lakh in Khadi and 129.40 lakh in village industries) in 2013-14, as against 124.76 lakh persons (10.71 lakh persons in Khadi and 114.05 lakh in village industries) in the previous year. The aggregate performance of KVI sector in respect of production, sales and employment at all India level during 2011-12 to 2013-14 is given in Table 4.20.

Table 4.20 : Aggregate Performance of KVI Sector at all-India

Year	Production (value in Rs. crore)		Sales (value in Rs. crore)		Employment (in lakh persons)	
	Khadi	V.I	Khadi	V.I	Khadi	V.I
2011-12	716.98	21135.06	967.87	25829.26	10.45	108.65
2012-13	761.93	23262.31	1021.56	26818.13	10.71	114.05
2013-14	809.70	25298.00	1079.24	30073.16	10.98	129.40

Source : Ministry of MSME, GOI

In order to help the weavers of the state, a 10 percent additional rebate is allowed on the sale of Khadi products, the benefits of which may be availed by the institutions/ societies registered under the State KVI Board. For the financial year 2013-14, a sum of Rs. 543.36 lakh has been sanctioned for Khadi rebate.

4.6 Support Institutions

To promote industrial development in the state, the state government has constituted various support institutions. Some of these institutions, with the passage of time, have become weak, but the state government is making efforts to rehabilitate them, considering their importance in improving the industrial climate. Some new institutions are also being set up to attract investments both from within and outside the state.

Udyog Mitra

The institution of Udyog Mitra has been constituted under the Department of Industries, to help prospective entrepreneurs. The Udyog Mitra also prepares monitoring reports of the schemes being implemented through the District Industries Centre (DIC). During 2013-14, a total of 583 entrepreneurs were benefited by helping them to prepare project profiles, or through in provision of data and information. During 2014-15, 664 entrepreneurs were also benefited. The physical and financial achievements of Udyog Mitra since 2010-11 are given in Table 4.21.

Table 4.21 : Physical and Financial Achievements of Udyog Mitra

Year	Amount Allotted (Rs. lakh)	Amount spent (Rs. lakh)	No. of Entrepreneurs benefited
2010-11	66.00	66.00	630
2011-12	100.00	67.48	753
2012-13	104.00	78.73	596
2013-14	120.00	101.13	583
2014-15	73.60	73.60	664

Source : Udyog Mitra, GOB

The Udyog Mitra has prepared the District Profile for all the districts in the state, and completed the land-mapping work. The Udyog Mitra has also been nominated as an implementing agency for the National Mission for Food Processing, a scheme launched by the central government. Under the Cluster Development scheme of the central government, the work on the development of 13 clusters is being taken up by the Udyog Mitra. This work includes training through soft and hard interventions, establishment of 'Suvidha Kendras', marketing, and redressal of the problems faced by the entrepreneurs. M/S Dara Shaw & Co. Patna has been appointed as consultant to help Udyog Mitra in this cluster development work.

District Industries Centre

The District Industries Centres (DIC) were established with a view to render all possible help in setting up of industries, particularly the medium, small and micro units in different districts. The DICs are also involved as a major agency in the implementation of Prime Minister Employment Generation Programme (PMEGP) and they account for more than 80 percent of the total

disbursement of money to the beneficiaries. In 2014-15, the DICs disbursed a sum of Rs. 28.39 crore to 2051 entrepreneurs (Table 4.22).

Table 4.22 : Achievements of DIC under MSME

Year	Target (Nos.)	Achievement		
		Nos.	Amount Loans/ Investments (Rs. lakh)	Achievement as % of target
Establishment of MSME				
2010-11	8000	4835	18556.77	60.44
2011-12	8000	3962	38563.91	49.53
2012-13	8000	3737	24173.19	46.71
2013-14	8000	3133	31558.97	39.16
2014-15	8000	2051	2839.29	25.63

Source : Department of Industry, GOB

Bihar Industrial Area Development Authority (BIADA)

The BIADA was constituted under the statutory provision of Bihar Industrial Area Development Act, 1974 with a mission to promote industrialisation of the state. BIADA is a pioneering agency for acquiring land to be allotted to the investors for establishing the units after developing necessary infrastructures like roads, power, water, etc. This programme is carried out through its four regional offices at Patna, Darbhanga, Muzaffarpur and Bhagalpur. Till 2013-14,

Table 4.23 : Region wise Details of BIADA Activities (2013-14)

Regional Office	Land Acquired (in acres)	Total Land Allotted		Total Vacant Land (in acres)	No. of Running Units
		Land (in acres)	Land Reserved for Infrastructure, Administrative Blocks, Roads etc. (in acres)		
Patna	2732.89	126.80	259.36	43.17	587
Bhagalpur	1347.29	19.68	101.42	10.98	238
Dharbhanga	411.96	0.00	55.16	27.06	252
Muzaffarpur	1026.74	24.39	183.22	47.62	298
Total	5218.88	170.87	599.16	128.83	1375

Source : BIADA, GOB

BIADA has acquired a total of 5519 acres of land, of which 170.87 acres could be allotted to the investors (Table 4.23). After allowing the land for infrastructure etc., 128.83 acres of land remained vacant. As on March 2014, 1375 units were in a running condition.

APPENDIX

**Table A 4.1 : Value of output and Net value added of selected agro and non-agro based industries (2012-13)
(Bihar and India)**

(Rs. crore)

NIC 2008	Industrial Group	Value of Output			Net Value Added		
		India	Bihar	Bihar's Percentage Share	India	Bihar	Bihar's Percentage Share
Agro-Based							
10+11+12	Food Products/Beverages/ Tobacco Products	783349	10520	1.34	80818	2199	2.72
13+14	Textiles/Wearing Apparel	400646	145	0.04	64262	27	0.04
15	Leather & Leather Products	41277	53	0.13	5672	5	0.09
16+31	Wood & Wood Products / Furniture	33373	189	0.57	4848	34	0.69
17+18+58	Paper & Paper Products/ printing and Reproduction of Recorded Media/Publishing Activities	109930	370	0.34	18489	46	0.25
	Sub Total	1368575	11276	0.82	174088	2311	1.33
Non- Agro Based							
19	Coke and Refined Petroleum Products	1054341	33057	3.14	112853	-2042	-1.81
20	Chemicals and Chemical products	472968	329	0.07	76665	37	0.05
21	Basic Pharmaceutical Products	190282	76	0.04	55622	19	0.03
22	Rubber and Plastic Products	194189	263	0.14	25410	12	0.05
23	Non-Metallic Mineral Products	195287	1268	0.65	43111	425	0.99
24+25	Metals/ Fabricated Metal Products Except Machinery and Equipment	930889	1785	0.19	111886	77	0.07
27+28+33	Electrical Equipment/ Machinery and Equipment NEC/Repair and Installation of machinery equipment	477139	350	0.07	98121	81	0.08
29+30	Motor vehicle, Trailer, Semi-Trailer/ Other Transport Equipment	530766	30	0.01	79186	11	0.01
	Others (including 32 other manufacturing)	438427	3244	0.74	51704	372	0.72
	Sub-Total	4484287	40404	0.90	654558	1035	0.16
	Grand Total	5852862	51680	0.88	828645	1304	0.40

Source : Annual Survey of Industries, 2012-13

Table A 4.2 : Structure of Industries in Bihar (2012-13)

Industrial Group	No. of factories		Factories in operation (No.)		Fixed Capital (Rs.Crore)		Persons Engaged (No.)	
	India	Bihar	India	Bihar	India	Bihar	India	Bihar
Agro based								
Food Products/ Beverages/ Tobacco Products	40592	820 (2.0)	33627	702 (2.1)	164313	3055 (1.9)	2117725	26129 (1.2)
Textiles/Wearing Apparel	27743	28 (0.1)	19794	25 (0.1)	142912	40 (0)	2331619	3376 (0.1)
Leather & Leather Products	4055	7 (0.2)	3027	7 (0.2)	7278	7 (0.1)	285393	915 (0.3)
Wood & Wood Products / Furniture	5660	207 (3.7)	4619	200 (4.3)	11014	36 (0.3)	142254	2721 (1.9)
Paper & Paper Products/ printing and Reproduction of Recorded Media/Publishing Activities	11307	79 (0.7)	9106	71 (0.8)	60646	184 (0.3)	428041	2134 (0.5)
Sub Total	89357	1141 (1.3)	70173	1005 (1.4)	386163	3322 (0.9)	5305032	35275 (0.7)
Non-agro based								
Coke and Refined Petroleum Products	1536	61 (4)	1182	59 (5)	161189	1615 (1)	99774	2455 (2.5)
Chemicals and Chemical products	11426	43 (0.4)	9167	35 (0.4)	148024	51 (0)	633659	1386 (0.2)
Basic Pharmaceutical Products	4907	26 (0.5)	4224	26 (0.6)	69263	14 (0)	532015	807 (0.2)
Rubber and Plastic Products	12677	51 (0.4)	10057	50 (0.5)	60794	46 (0.1)	539155	809 (0.2)
Non-Metallic Mineral Products	25253	1559 (6.2)	21375	1364 (6.4)	201777	403 (0.2)	891917	64872 (7.3)
Metals/ Fabricated Metal Products Except Machinery and Equipment	28083	156 (0.6)	22843	136 (0.6)	531427	237 (0)	1653629	4543 (0.3)
Electrical Equipment/ Machinery and Equipment NEC/Repair and Installation of machinery equipment	20346	53 (0.3)	16555	50 (0.3)	113124	454 (0.4)	1205515	1772 (0.1)
Motor vehicle, Trailer, Semi-Trailer/ Other Transport Equipment	7957	10 (0.1)	6761	10 (0.1)	167712	8 (0)	1058498	693 (0.1)
Others (including 32 other manufacturing)	13207	247 (1.9)	10938	211 (1.9)	311532	316.14 (10.1)	685687	3787 (0.6)
Sub-Total	125392	2206 (1.8)	103102	1941 (1.9)	1764841	3144.56 (0.2)	7299849	81124 (1.2)
Grand Total	214749	3347 (1.6)	173275	2946 (1.7)	2151003	6466.37 (0.3)	12604881	116399 (0.9)

Source : Annual Survey of Industries

Note : In Table A 3.1 & A 3.2 (Appendix) the total may not match All India total as the total here denotes total based on NIC codes included in Bihar

Figures in parentheses represent Bihar's share to India.

Table A 4.3 : Micro/ Small/ Medium Enterprises Registered in 2014-15

Division	District	Micro	Small	Med.	Total
Patna	Patna	175	50	4	229
	Nalanda	54	0	1	55
	Bhojpur	86	9	7	102
	Buxar	70	9	0	79
	Kaimur	20	4	1	25
	Rohtas	76	7	1	84
Munger	Munger	32	0	0	32
	Jamui	17	0	0	17
	Sheikhpura	42	0	0	42
	Lakhisarai	33	0	1	34
	Begusarai	73	15	0	88
	Khagaria	25	0	0	25
Bhagalpur	Bhagalpur	25	3	0	28
	Banka	4	0	0	4
Purnea	Purnea	53	2	0	55
	Araria	25	1	0	26
	Kishanganj	28	1	0	29
	Katihar	34	2	0	36
Magadh	Gaya	24	1	1	26
	Nawada	31	1	0	32
	Aurangabad	13	1	0	14
	Jehanabad	17	0	0	17
	Arwal	14	0	1	15
Darbhanga	Darbhanga	65	2	0	67
	Madhubani	40	0	0	40
	Samastipur	34	1	0	35
Kosi	Saharsa	47	0	0	47
	Supaul	16	0	0	16
	Madhepura	89	0	0	89
Tirhut	Muzaffarpur	173	12	1	186
	Vaishali	115	11	0	126
	W.Champaran	25	5	0	30
	Sitamarhi	22	1	0	23
	E.Champaran	77	9	2	88
	Sheohar	27	0	0	27
Saran	Gopalganj	46	1	0	47
	Siwan	96	1	1	98
	Saran	36	1	1	38
	Total	1879	150	22	2051

Source: Department of Industry, GOB

CHAPTER V

INFRASTRUCTURE

A sound infrastructural base is a key for economic development. The availability of adequate infrastructure not only promotes rapid industrialization, it also improves the quality of life of the people. Therefore, the state government is very much focused on development of high quality infrastructure in Bihar. The public investment in infrastructure has increased manifold in the state, with increased private sector participation. In the sectors of construction, communication, and transportation, private sector participation is increasing in recent years. In development of infrastructure, problems like delays in getting approvals, land acquisition, and environmental clearance sometimes pose serious bottlenecks. This needs to be addressed speedily. The time overruns in the implementation of the projects also need to be avoided which generally cause escalation of costs. Equally important is their proper maintenance of infrastructure, in the absence of which their utility and life get reduced. The infrastructure encompasses the whole spectrum of vital services such as roads, railways, civil aviation, telecommunications, postal facilities, energy sector and urban development. The Energy and Urban Development have been discussed in separate chapters of this Economic Survey. The remaining components are covered in this Chapter.

5.1 Roads

The transportation network is one of the primary factors that promotes development. At one end, the extensive road network integrates the rural economy with the relatively prosperous urban centres and, on the other hand, it improves people's access to such facilities like schools, hospitals and markets. Therefore, the state government has resolved to expand the road network so extensively that the capital city of Patna can be reached in less than five hours from any place in the state. To achieve this goal, the network of roads and bridges has expanded considerably in recent years. The state government is also developing a Road Construction Vision 2020 to ensure smooth road connectivity throughout the state. The public investment in road and bridges has increased substantially in recent years. However, the state still continues to remain far behind other states in terms of road length per lakh of population. In 2012-13, Bihar reported only 190 kms. of road length per lakh of population, as against 358 for all-India (Table 5.1). All major states are much ahead of Bihar in terms of road length per lakh of population, except Jharkhand and Haryana. But Jharkhand and Haryana have very low population density. However, in terms of road density, Bihar has 210 kms. of road length per 100 sq.kms., ahead of other states, except Kerala and West Bengal.

Table 5.1 : Statewise Road Length per Lakh of Population and per 100 sq.km. (2013)

State	Road length per lakh of population (km)				Road length per 100 sq. km. (km.)			
	NH Road	SH Road	Other Road	Total Road	NH Road	SH Road	Other Road	Total Road
Andhra Pradesh	5.9	12.7	290.8	309.4	1.8	3.9	89.4	95.1
Bihar	4.0	4.3	181.2	189.5	4.4	4.8	200.3	209.5
Chhattisgarh	9.0	20.5	319.9	349.3	1.7	3.9	60.4	66.0
Gujarat	6.3	30.6	237.1	274.1	2.0	9.4	73.0	84.4
Haryana	6.4	9.5	151.6	167.5	3.7	5.5	86.9	96.1
Jharkhand	7.2	5.9	99.2	112.4	3.0	2.5	41.1	46.5
Karnataka	7.6	34.0	458.4	500.0	2.4	10.8	146.0	159.3
Kerala	4.4	13.0	536.5	553.9	3.8	11.2	461.3	476.2
Madhya Pradesh	7.0	15.1	293.0	315.1	1.7	3.5	69.0	74.2
Maharashtra	4.0	34.5	486.2	524.7	1.5	12.6	177.6	191.6
Odisha	10.5	8.6	642.4	661.5	2.8	2.3	173.2	178.3
Punjab	5.6	5.3	343.9	354.8	3.1	2.9	189.4	195.5
Rajasthan	10.5	15.3	304.1	329.9	2.1	3.1	60.9	66.1
Tamil Nadu	6.9	14.9	308.1	329.9	3.8	8.3	170.9	183.0
Uttar Pradesh	3.9	3.9	210.4	218.2	3.2	3.2	174.5	181.0
West Bengal	2.9	4.3	332.0	339.3	3.0	4.5	341.5	348.9
All	6.5	14.0	337.3	357.8	2.4	5.1	124.2	131.8

Source: Basic Road Statistics of India, 2012-13

Table 5.2 : Length of Roads in Bihar

Type of Road	(kms.)			
	2001	2005	2010	2015 (up to September)
National Highway (NH)	3410	3629	3734	4595
State Highway (SH)	2383	2177	3787	4253
Major District Road (MDR)	7739	8891	8965	10634

Source: Departments of Road Construction, GOB

Table 5.2 shows the progress of National Highways (NH), State Highways (SH) and Major District Roads (MDR) during 2001-2015. Total length of NH has increased substantially from 3410 kms. (2001) to 4595 kms. (2015). As may be observed, the highest increase in the length of NH by 861 kms. was registered between 2010 and 2015. The length of SH has also increased from 2383 kms. (2001) to 4253 kms. (2015), with the highest increase of 1610 kms. between 2005 and 2010. During 2001 to 2015, MDR has also increased significantly from 7739 kms. to 10,634 kms.

The district-wise status of road network in Bihar during 2013, 2014 and 2015 is given in Table A 5.1 (Appendix), which highlights the inter-district variation in three types of roads — NH, SH and MDR. In terms of road length of total road (NH, SH and MDR) per 100 sq. km. area, Patna (36.5 kms.), Jehanabad including Arwal (35.4 kms.) and Supaul (35.3 kms.) are three leading districts. The three most deficient districts are — West Champaran (10.7 kms.), Munger (10.9 kms.) and Kaimur (13.2 kms.). As regards road length per lakh population, Supaul (38.0 kms.), Sheikhpura (32.1 kms.) and Jahanabad including Arwal (30.5 kms.) are the leading districts, whereas Munger (11.2 kms.), Vaishali (12.0 kms.) and East Champaran (12.4 kms.) are the lagging districts.

There are four categories of roads according to width, comprising single (3.75 m.), intermediate (5.50 m.), double (7.00 m.) and multiple lanes (more than 7.00 m.). Though the highest proportion of National Highways (67.3 percent) and State Highways (65.5 percent) belong to the category of double or multiple lane, a large proportion (54.0 percent) of Major District Roads were single lane (Table 5.3).

Table 5.3 : Status of Highways in Bihar (September 2015)

Category of Road	National Highways		State Highways		Major District Roads	
	Length (km.)	Percentage share	Length (km.)	Percentage share	Length (km.)	Percentage share
Single Lane (3.75 m width)	675	14.7	845	19.9	5737	54.0
Intermediate Lane (5.50 m width)	795	17.3	623	14.7	3273	30.8
Double Lane (7.00 m width)	1803	39.2	2741	64.5	1440	13.5
Multiple Lane (More than 7.00 m width)	1289	28.1	44	1.0	184	1.7
Missing Link	34	0.7	—	—	—	—
Total	4595	100.0	4253	100.0	10634	100.0

Source : Department of Road Construction, GOB

National Highways (NH)

The National Highways connect Bihar with other states for transportation of goods and passengers, promoting the growth of its economy. As on September, 2014, a total of 35 NHs, measuring 4321 kms were there in Bihar. With the addition of 3 more NHs during the year, the total length of NH has become 4595 kms. Around 68 percent of NH are double and multiple lane roads and the rest 32 percent single and intermediate lane roads.

The NH is fully financed and maintained by the central government. The trend of expenditure on NH development in Bihar is an indicator of the attitude of the central government towards the development needs of the state. It is clear from Table 5.4 that only 4.9 percent of the total length of NH in India lies in Bihar (2013-14). The expenditure made by the central government is only 1.0 percent of total national expenditure on development of NH and only 7.9 percent of the total maintenance expenditure. For total expenditure (development plus maintenance), Bihar's share is only 1.4 percent, although Bihar accounts for 8.6 percent of country's population. This shows the

negligence of the central government towards Bihar. The state government is very sensitive about this matter and it has spent Rs. 969.77 crore for maintenance and upgradation of 2232 kms. of NH from its own exchequer.

Table 5.4 : Road Length and Expenditure on Development and Maintenance of National Highways

	NH (in kms.)		Expenditure on NH Development (Rs. crore)		Expenditure on NH Maintenance (Rs. crore)		Total Expenditure on NH (Rs. crore)	
	2010-11	2013-14	2010-11	2013-14	2010-11	2013-14	2010-11	2013-14
Bihar	3642	4539	250	280	37	142	287	423
India	70934	92851	19617	27987	1920	1794	21538	29781
Bihar share in India	5.1	4.9	1.3	1.0	1.9	7.9	1.3	1.4

Source : Planning –II, Ministry of Road Transport & Highways.

Note : Expenditure of NHAI is not included in Bihar's figure

State Highways (SH)

The State Highways (SH) are the arterial roads in a state for inter-district movements. They traverse the length and breadth of the state, connecting the state capital, district headquarters and important towns and cities and link up with the NH and adjacent SH. The total length of the SH in Bihar in 2015 was 4253 kms. Around 65 percent of it were double-lane roads, 20 percent single-lane roads, and 15 percent intermediate-lane roads. The multiple-lane roads with more than 7-meter width constituted only 1.0 percent of the SH.

Table 5.5 : Progress of Work under Conversion of State Highways

Agencies	No. of districts	Total Approved Length (kms.)	No. of Packages	Revised Approved Fund (Rs. crore)	Released Fund (Rs. crore)	Physical Progress
CPWD	33	1760	35	2727.80	2716.95	Completed
IRCON	5	354	17	888.79	880.03	Completed
Total	38	2114	52	3616.59	3596.98	

Source : Department of Road Construction, GOB

The development of SH in Bihar is presently being done under Rashtriya Sam Vikas Yojana (RSVY). Under an agreement between the state and central government, this programme is being implemented by two agencies — Central Public Works Department (CPWD) and M/s IRCON International. The CPWD is implementing the project in 33 districts, and IRCON in remaining 5 districts. The CPWD has converted 1760 kms. of roads into SH at a cost of Rs. 2727.80 crore, and IRCON has converted 354 kms. of roads into SH at a cost of Rs. 888.79 crore. The district-wise details under this road development are given in Table A 5.2 (Appendix). In addition to the above work, with the fund saved, the CPWD has taken up the work of widening SH-79 (44.40 kms. of Dumraon-Bikramganj Road) and IRCON started similar work on SH-104 (23.40 kms of Dighwara-Bheldi-Amnaur Road).

Table 5.6 : Status of Roads under different projects (As on Sept. 2015)

SH No.	Name of State Highways	Approved Length (kms.)	Administrative Approval (Rs. crore)	Financial Progress (in percent)	Remarks
Aided by Asian Development Bank					
68	Shivganj-Baidrabad	82.25	252.38	77.53	In progress
69	Dumaria–Rani Talab	152.80	442.27	73.24	In progress
70	Gaya - Rajauli	58.23	144.19	100.00	Work Completed
71	Jehanabad-Islampur	85.20	234.80	100.00	Work Completed
73	Siwan-Shitalpur	88.00	290.34	100.00	Work Completed
74	Hajipur –Kesaria- Areraj	87.06	269.28	100.00	Work Completed
75	Darbhanga –Kamtaul- Madhwapur	46.75	211.57	100.00	Work Completed
76	Araria-Supaul-Bhaptiahi	121.00	436.36	100.00	Work Completed
77	Kursaila-Raniganj-Forbesganj	102.93	348.67	100.00	Work Completed
Total		824.22	2629.86		
Upgradation of Roads under BSHP-II					
78	Bihta-Chandi-Sarmera (Bihta – Daniyanwan 0 to 46.70 kms) & Chandi-Sarmera (46.70 to 94.2 kms)	104.40	1117.58	39.22	In progress
81	Sakkadi-Nasriganj Sakkadi-Sahar (km. 0 to km 47.55) & (Sahar-Nasariganj(km. 47.55 to km 86.80)	83.40	307.66	17.63	In progress
90	Mohammadpur-Chhapra (Mohammadpur - Karankudariya (km. 0 to km 20.00) & (Karankudariya Chhapra (20.00 to km 64.70)	64.700	361.54	31.40	In progress
91	Birpur- Udakishunganj	106.388	592.28	54.67	In progress
89	Siwan-Siswan	33.065	167.96	43.69	In progress
Total		387.49	2547.02		
Work under Additional Financing under BSHP – II					
83	Bagi-Barbigha	37.65	170.32	46.00	In progress
86	Saraiya-Motipur	28.2	210.88	33.26	In progress
87	Runnisaipur-Nanpur-Pupri -Sursand-Bhiswa	67.76	443.02	24.18	In progress
88	NH-103 BarunaPul- Rasiyari	120.9	834.47	22.82	In progress
Total		254.51	1658.69		

Source : Department of Road Construction, GOB

Table 5.6 presents the status of road projects in Bihar in September 2015 aided by the Asian Development Bank (ADB) and under Bihar State Highway Project (BSHP). The ADB has approved 824.22 kms. of SH, at a cost of Rs. 2629.86 crore. Out of 9 projects under ADB, 7 projects have been completed, while 2 are in progress. Under BSHP II, a total length of 387.49 kms. of SH is to be upgraded, at a cost of Rs. 2547 crore. This work is also under progress. Finally, a road length of 254.51 kms. were to be made double lane, through additional financing under BSHP-II. The approved cost for this part of the road project is Rs. 1658.69 crore and the work is in its early stage.

Major District Roads (MDR)

The Major District Roads are the branch roads of the State and National Highways and serve as roads for intra-district movement. They traverse the length and breadth of a district to connect the villages to the urban centres. There was 10,634 kms. of MDR in the state as on September, 2015, with a major portion (54 percent) having a width of 3.75 meters. This width is quite inadequate for the present transport density in the state. Out of the total length of MDR, 4897 kms have been converted into intermediate or 2-lane width. Those roads which are yet to be converted into wider roads, have undergone surface renewal or repaired work. In future, they will be converted into intermediate or 2-lane roads.

The various works on MDR are being financed from State-Plan, NABARD (RIDF), Central Road Fund, Left Wing Extremism-Affected Area Fund, Indo-Nepal Border Road Development Programme, Roads of Economic Importance, Roads of International Importance, and Finance Commission grants. In addition to the running schemes, an amount of Rs. 2890.34 crore has been approved for upgradation of 1810 kms. of MDR and SH during 2014-15. There is a target of completing the work on 1165 kms. of roads during 2015-16.

Development of Roads in Left Wing Extremism-affected Area Scheme

There are 5 extremism-affected districts (Arwal, Aurangabad, Gaya, Jamui and Jehanabad) which have been selected under the Road Requirement Plan-I (RRP-I). A total cost of Rs. 616.30 crore for 674.3 kms. of roads (71.8 kms of NH, 68.1 kms of SH and 534.4 kms of MDR) has been approved under 41 projects of this scheme. By the end of September 2015, a total of 655.60 kms. (65.7 kms of NH, 64.60 kms of SH and 525.30 kms of MDR) have already been completed under 39 projects, with an expenditure of Rs. 531.48 crore. Under Road Requirement Plan-II (RRP-II), proposals for 68 more road projects (7 under SH and 61 under MDR) have been submitted to the central government and approval is awaited.

State Plan Schemes

There are 4253 kms. of SH and 10,634 kms. of MDR under State Plan Schemes. The Construction-cum-Maintenance Bidding approach has been adopted for these roads. Under this bidding package, a sum of Rs. 28.45 crore per 100 kms. of road length is approved. For proper

maintenance of roads, the state government has adopted the policy of a long term performance-based Road Assets Maintenance Contract System. This ensures proper maintenance of roads for a relatively longer period (normally 5 years). During 2014-15, the upgradation and strengthening of 1015.23 kms. of MDR were completed. During 2015-16, a sum of Rs. 1329.00 crore was allotted under MDR sector, and a sum of Rs. 242.81 crore was allotted for the roads in scheduled caste-dominated areas. Presently, the work on 1828 kms. of road at a cost of Rs. 3051.97 crore is under progress.

Rural Roads

Rural roads serve as the feeder roads as well as the roads for inter-village movements. They pass through the rural areas, connecting the village to one-another and to the nearest road of higher category (MDR, SH and NH). It helps the rural economic activities like local trade and business, and enables farmers to take their agricultural produce to more profitable markets nearby. It also helps the surplus labour available in the farm sector to move to the nearest work station for more fruitful economic activities. During 2014-15, a total of 50,596 kms. of rural roads were constructed with an expenditure of Rs. 26,233 crore in all the seven schemes, mentioned in Table 5.7. However, Mukhya Mantri Gram Sadak Yojna, Apki Sarkar Apke Dwar Yojna, Special Component Programme for Schedule Caste Mahadalit Yojana (SCP) and Border Area Development Programme have now been discontinued. These four schemes together covered 14.4 percent of financial expenditure and 16.3 percent of road construction in 2014-15. The Pradhan Mantri Gram Sadak Yojana alone had provided 63.4 percent finance for 66.3 percent of rural roads.

Table 5.7 : Programme-wise Length of Rural Roads Constructed (2014-15)

SI No.	Name of the Scheme	Roads Constructed (km)	Bridge Constructed (No)	Expenditure (Rs. crore)	Remarks
1	Mukhya Mantri Gram Sadak Yojana	6706.18		2939.00	Plan Stopped
2	Apki Sarkar Aapke Dwar Yojana	738.06		336.19	Plan Stopped
3	Minimum Needs Programme	4397.98	39	1724.24	
4	Special Component Programme for Schedule Caste Mahadalit Yojana (SCP)	760.42		473.07	Plan Stopped
5	R.I.D.F NABARD Scheme	2604.66	119	2146.15	
6	Border Area Development Programme	60.27		23.67	Plan Stopped
7	Pradhan Mantri Gram Sadak Yojana	33540.8	48	16644.01	
8	Mukhya Mantri Gram Sampark Yojana	1787.86		1947.6	
	Total	50596.23	206	26233.93	

Source : Department of Rural Works, GOB

Under an Integrated Action Plan (IAP) scheme in PMGSY, 11 districts were identified for providing connectivity to all habitations having a population of 250 and above. Later, Mukhya Mantri Gram Sampark Yojana was started in 2013-14 for covering 27 districts which were not covered under PMGSY. Under this scheme, 1787.86 kms. rural roads have been constructed at an expenditure of Rs. 1948.00 crore.

Road Vision 2020

To sustain the economic growth of Bihar, there should a matching infrastructure. For sound infrastructural investment plans, one needs to anticipate the future requirement and capacity. Otherwise, the infrastructure becomes inadequate in a few years leading to the same gap as before. The commitment of the state government to improve and expand infrastructure in the state is reflected in the investment in infrastructure during the last decade. The state government is preparing Road Vision 2020 for expansion of road network and removal of congestion in traffic.

Major objectives of Road Vision 2020

- Ensuring connectivity from Patna to farthest districts within 5 hours
- 2-laning of all State Highways (SH)
- Single lane MDR to be converted into intermediate lane MDR
- Replacement of narrow, old and screw pile bridges with wider RCC bridges
- Use of latest technology for safer and comfortable journey
- Ensuring connectivity of all SH with NH
- Ensuring connectivity with commercial centres and places of tourist importance

Major Works Planned during 2016-20

- 5 major road projects (Noorsarai-Silao Road, Anisabad-Aurangabad-Hariharganj Road (NH 98), Dehri-Nasariganj-Bikramganj-Dinara Road (SH 15), Darbhanga-Samastipur Road (SH 50) to Sobhangram (NH 57), Dighwara-Bheldi-Amnour-Taraiya-Panapur to Semari Mandir (SH 104) and 5 major bridge projects (4-Lane bridge on river Ganga connecting Arrah and Chhapra, Rail-cum-Road Bridge over river Ganga between Digha and Sonapur, Bridge between Gandaul and Biraul bridge between Gaya and Manpur on river Falgu, Flyover between Mithapur ROB round about to Chiraiyatanr bridge via Station Road and extension of Exhibition Road arm of Chairaiyatanr bridge up to Gandhi Maidan, Bishunpur bridge between Bettiah and Gopalganj over river Gandak) will be completed in calendar year 2016.

- 7 major road projects (Bihta-Sarmera Road – SH 78, Nalanda-Islampur Road, Nagarnausa-Chhatighat -Kalyan Bigha Chero - Bahadur PWD road, Chandi to Chhabilapur SH-71 via Tharthari-Parwalpur-Andwas, Didarganj-Bakhtiyarpur road – SH 106, road of Dhanha Ratwal bridge over river Gandak in West Champaran, Supaul – Galgalia – NH 327E (Galgalia – Bariahi) and 4 major bridge projects (AIIMS-Digha elevated corridor, Bangraghat (bridge) between Muzaffarpur and Saran, Bridge between Daudnagar and Nasariganj on river Sone, Sattarghat Bridge on river Gandak) will be completed by 2017.
- 4 major road projects (road along Indo-Nepal Border in Bihar, Fatuha-Harnaut-Barh Section – NH 30A, Birpur - Bihpur Section – NH 106, Sheohar - Sitamarhi - Jainagar - Narahiya Section – NH 104) and 2 major bridge projects (Ganga Path, 4-Lane Ganga Bridge between Bakhtiyarpur and Tajpur, Mithapur flyover to Chiraiyatn bridge via Karbigahiya) will be completed in the year 2018.
- 1 major bridge project (4-lane bridge over river Ganga connecting Sultanganj and Aguwani Ghat) will be completed in 2019.
- 1 major bridge project (6-lane bridge over river Ganga connecting Kachchi Dargah and Bidupur) will be completed by the end of 2020.

Bihar Rural Road Maintenance Policy was introduced for strengthening and maintenance of rural roads. Up to June 2015, a total of 11,000 kms. of rural road have been maintained at an expenditure of Rs. 2200.00 crore. The single road connectivity has now been given to 60,284 habitations, out of 1,08,591 habitations in the state, on the basis of a state core-network, prepared by the Department of Rural Works. The Bihar Rural Road Development Agency was established for monitoring of rural roads.

5.2 Bridges Sector

During 2005-06 to 2015-2016 (up to January 2016), the construction of 1013 major and minor bridges under Mukhyamantri Setu Nirman Yojna and 710 mega, major and minor bridges under other different heads have been completed. The mega bridge over river Sone between Arwal-Sahar (Rs. 163.00 crore), Balauaha Ghat Bridge over river Kosi under district Saharsa (Rs. 531 crore), bridge over river Gandak between Dhanha-Ratwal under West Champaran (Rs. 358.67 crore), bridge over river Kosi at Vijay Ghat of Nawgachia under District Bhagalpur (367.81 crore), flyover between Sheikhpura more to Jagdeopath on Bailey Road in Patna (Rs. 298.70 crore) and 6 Lane RCC HL bridge over river Falgu under district Gaya have been completed.

Besides these, under Rural Infrastructure Development Fund (RIDF) of NABARD, the work for the construction of High level RCC bridge on Gandak river at Bishanpur (Gopalganj) and High level RCC Bridge over river Gandak in Chakia-Kesharia-Sattarghat road (East Champaran) are under progress. Similarly, bridge over Kamla river with culverts and guide bunds on approach road between Gandaul (Saharsa) and Hathi Kothi near Biraul (Darbhanga), a 4-lane high level

bridge on Sone river between Daudnagar (Aurangabad) and Nasriganj (Rohtas), bridge over river Gandak at Bangra Ghat under District Gopalganj and bridge over river Ganga at Aguanighat between Khagaria and Bhagalpur District (Rs. 1710 crore) are in progress. Under Plan head, the work for the construction of bridge over river Ganga between Arah via Babura to Doriganj (Rs. 676 crore) and approach of rail-cum road bridge of Digha- Patna, Saran side (Rs. 245 crore) are in progress.

The construction of several flyovers including Mithapur to Chiraiyatand flyover via Station road and extension of Exhibition road arm upto Gandhi Maidan in Patna (Rs. 167.90 crore) flyover connecting Bhikhari Thakur (Yarpur) flyover and Mithapur flyover via R-Block in Patna (Rs 166.15 crore), flyover connecting Mithapur flyover and Chiraiyatand flyover via Karbigahia in Patna (Rs. 121.86 crore), Lohia Path Chakra at Bailey road Patna between Lalit Bhawan and Vidyut bhawan (Rs. 391.48 crore) are also in progress.

Under RIDF (XIV to XX), a total amount of Rs. 7462.30 crore was approved for 297 projects in different district of Bihar. Out of these projects, 90 projects have been completed. The maximum number of 93 projects were approved under RIDF- XIX; however, the maximum amount of Rs. 2890.28 core was approved under RIDF-XX.

Table 5.8 : Status of Selected Projects for Implementation under RIDF-XIV to XX

RIDF	No. of Districts	No. of Projectes	Approved Amount (Rs. crore)	Progress (In Percent)	No. of Projects Completed
XIV	3	3	1219	66.7	2
XV	8	24	470.27	100	24
XVI	15	25	543.21	68	17
XVII	12	22	438.69	63.6	14
XVIII	16	86	1130	23.3	20
XIX	21	93	770.85	14	13
XX	7	4	2890.28	--	--

Source : Bihar Rajya Pul Nirman Nigam Ltd, GOB

Road Overbridge (ROB)

Under the tripartite agreement made in 2005, the construction of road overbridges at 22 railway crossings in the state was taken up on cost sharing basis. The work on 14 of these road overbridges was undertaken, out of which 10 have been completed and rest 4 are under various stages of completion. Besides, 8 road overbridges on Major District Roads and approach road to these roads have been completed at a total cost of Rs. 242.00 crore. The work for 11 new road overbridge on railway crossing are also under progress, for which the share of railway is Rs. 257 crore and that of the state is Rs. 609 crore. Under Central Road Fund (CRF), 76 projects have been approved, out of which 66 have been already completed and rest 10 are in various stages of completion.

Mukhyamantri Setu Nirman Yojana

The state government has started the Mukhyamantri Setu Nirman Yojana in order to provide all weather connectivity to remote rural areas. Under this programme, works up to Rs. 25 lakh are implemented by the district administration, and schemes costing higher amounts are given to the Bihar Rajya Pul Nirman Nigam Limited (BRPNN). Under this yojana, a total of 85 projects have been completed in 2014-15 and 70 in 2015-16 (upto January, 2016)

Bihar Rajya Pul Nirman Nigam Limited

The Bihar Rajya Pul Nirman Nigam Limited is functioning under the Road Construction Department. It was established as a public limited company in November, 1974. The Nigam has been entrusted with the responsibility of constructing bridge having an estimated cost of more than Rs. 25 lakh. Between 2010-11 and 2015-16 (upto January, 2016) BRPNN has constructed a total of 1023 bridges at a total cost of Rs. 5618.17 crore (Table 5.9)

Table 5.9 : Number of Completed Bridges

Year	No. of Bridge	Expenditure
2010-11	195	797.70
2011-12	261	883.21
2012-13	136	787.87
2013-14	119	1151.81
2014-15	179	729.65
2015-16 (up to January, 2016)	133	1267.93
Total	1023	5618.17

Source : Bihar Rajya Pul Nirman Nigam, GOB

The BRPNN, a public sector undertaking, is a profit making corporation. Since 2010, BRPNN has been generating more than Rs. 100 crore of gross profit every year. This shows an efficient financial management, leading to higher total revenue, gross profit and net profit. It was actually a loss-making organization before 2007-08. But now it is a profit-making one and its net profit has increased from Rs. 35.58 crore in 2010-11 to Rs. 80.93 crore in 2014-15 (Table 5.10). The total cost of projects undertaken by the corporation has increased from Rs. 1158.42 crore in 2010-11 to Rs. 1739.32 crore in 2014-15.

Table 5.10 : Turnover of Bihar Rajya Pul Nirman Nigam Limited

Year	Total Expenditure on projects	Total Revenue	Personnel and Administrative Expenditure	Gross Profit	Net Profit
2010-11	1158.42	114.68	44.05	(+) 70.63	(+) 35.58
2011-12	1294.36	175.62	49.62	(+) 125.99	(+) 84.24
2012-13	1273.30	141.94	34.95	(+) 106.99	(+) 63.81
2013-14	1480.85	159.22	39.03	(+) 120.18	(+) 72.54
2014-15	1739.32	183.22	44.12	(+) 139.10	(+) 80.93
2015-16 (Estimated)	1750.00	188.00	45.00	(+) 143.00	(+) 85.00

Source : Bihar Rajya Pul Nirman Nigam, GOB

5.3 Road Transport

The road transport is the most preferred mode of transport, compared to rail and air transport for both freight and passengers. It plays an important part in propelling economic development and social integration of the state. The number of registered motor vehicles in the state has increased rapidly, at an annual rate of 12.2 percent during the last five years (2010-15). As per the Year Book of Road Transport 2013, Bihar was the second fastest growing state in India (16.2 percent) in terms of registration of vehicles during 2009-13. However, the state still continues to remain at the bottom among all the major states in terms of number of vehicles per thousand of population. Till 2013, Bihar reported only 36 vehicles per thousand of population, compared to 149 for all states. With 282 vehicles per thousand of population, Tamil Nadu stays at the top (Table 5.11).

Table 5.11 : Total Registered Motor Vehicles in Major States of India (March, 2013)

(No. of vehicles in '000)

	Multi-axled/ Articulated Vehicles/ Trucks and Lorries	Light Motor Vehicle (Goods)	Buses	Tractors	Cars	Two Wheelers	Others	Total Vehicles	CAGR (2009-13)	No. of Vehicles /1000 person
Andhra Pradesh	253	301	74	188	1078	9592	1200	12688	13.19	252
Bihar	90	13	26	250	185	2592	461	3617	16.23	36
Chhattisgarh	98	58	13	129	176	2769	195	3437	12.90	138
Gujarat	319	499	71	526	1602	11500	1255	15772	9.58	260
Haryana	308	138	43	545	1135	4147	285	6600	10.75	251
Jharkhand	210	203	14	54	240	2042	655	3417	12.36	106
Karnataka	248	259	70	386	1421	8575	1105	12064	13.77	199
Kerala	79	364	404	12	1331	4465	1202	7858	12.81	224
Madhya Pradesh	131	112	41	578	493	6878	528	8760	10.13	118
Maharashtra	402	740	110	462	2593	15457	1724	21488	10.54	186
Odisha	135	133	23	92	214	3312	307	4216	12.86	102
Punjab	126	76	30	518	617	4730	167	6263	7.15	221
Rajasthan	402	76	89	769	660	7466	611	10072	11.69	144
Tamil Nadu	493	404	156	205	1669	15337	968	19232	10.67	282
Uttar Pradesh	186	214	41	1088	1205	13724	590	17048	12.41	82
West Bengal	194	243	52	102	878	4258	385	6111	18.94	67
All India	4121	4277	1391	6111	17647	126029	12996	172572	12.56	149

Source: Road Transport Year Book (2012-13), Government of India

The registration of vehicles has been increased to 614 thousand in 2014-15 from 387 thousand in 2010-11 (Table 5.12). This implied an annual growth rate of 12.2 percent during the period. During the first six months of 2015-16 (April-September), around 2.87 lakh new vehicles have been registered. The number of vehicles increased by more than 1.5 times during the last five years. During the same period, the growth rate was in double digit for Auto Rickshaw (18.6 percent), Truck (13.5 percent), Tractor (13.4 percent) and Two Wheeler (12.9 percent). The district-wise information on registration of vehicles is presented in Table A 5.3 (Appendix). From the table, one can see that Patna and Muzaffarpur accounted for 28 percent of new vehicles in 2014-15. This information on registration of new vehicles can also be used as an indicator of relative economic prosperity of the different districts.

Table 5.12 : Number of Registered Vehicles

(No. in '000)

Year	Truck	Bus	Car	Taxi	Jeep	Auto	Two Wheeler	Tractor	Trailer	Others	Total
2010-11	7	1	19	5	10	17	293	21	11	2	387
2011-12	10	1	23	9	9	21	331	23	11	1	440
2012-13	10	2	24	14	10	30	362	30	11	2	497
2013-14	11	2	23	12	9	35	420	31	8	2	554
2014-15	13	2	28	7	9	31	477	34	12	2	614
2015-16, Sept. 2015	6	1	11	3	4	12	228	14	7	1	287
CAGR	13.5	4.9	7.9	8.0	-0.9	18.6	12.9	13.4	-1.0	3.4	12.2

Source : Department of Transport, GOB

The collection of tax on vehicle constituted around 5 percent of the state's own revenue. During the 2010-11 to 2014-15, there has been a phenomenal increase (more than two and a half times) in the revenue collected by the Department of Transport (Table 5.13). These tax collections are high in spite of the 100 percent tax exemptions allowed by the state government for women holding commercial licenses. These exemptions are allowed for three wheelers, motor cab and maxi cab. Further, disabled persons are also entitled to 100 percent tax exemptions.

In recent years, the state government has undertaken a number of initiatives strides towards smooth transportation in the state. Some of these initiatives are listed below.

Table 5.13 : Revenue Collection of Department of Transport

	2010-11	2011-12	2012-13	2013-14	2014-15
Collection (Rs. crore)	444.1	557.5	669.3	835.3	966.5
Annual Growth (Percentage)	19.1	25.5	20.1	24.8	15.7

Source : Department of Transport, GOB

Construction of Integrated Check Posts: For augmentation of the revenue collection and prevention of illegal plying of vehicles, the Integrated Check Posts have been established on entry points of the state — Dobhi (Gaya), Rajauli (Nawada), Karmnasha (Kaimur), Jalalpur (Gopalganj), Buxar and Dalkola (Purnea). All these check posts function under the Department of Commercial Taxes. Due to the establishment of these check posts, the revenue collection has increased substantially from Rs. 64 crore in 2010-11 to Rs. 126 crore in 2013-14.

System of e-payment of Vehicles Taxes : E-payment has been introduced in 11 districts for tax payment of commercial vehicles to ensure convenience and transparency. For other services, internet banking is in progress with the assistance of NIC.

Upgradation of Vahan and Sarathi Softwar : Vahan and Sarathi software has been upgraded in Vahan Web – 2 in 6 districts. The remaining districts will be provided with the facility very soon through BSNL and NICNET.

Implementation of Right to Public Service (TRS) Act : At present, 18 services of the Department of Transport have been included under RTS Act. A total 12.5860 lakh applications were disposed out of 12.5865 lakh applications during the period of April 2014 to January 2015.

Driver Training cum Research Institute: A modern driver training cum research institute is under construction at a cost of Rs. 20 crore in Aurangabad for providing training to the drivers belonging to the state.

Bihar State Road Transport Corporation (BSRTC)

The BSRTC, established in 1959, is a statutory commercial body for providing safe and adequate bus services to the people. In order to achieve its objectives and strengthen its financial status, the Corporation started the scheme of Public-Private Partnership (PPP) in 2009-10. Currently 450 buses are running under PPP mode and corporation has also started 12 luxury buses. The scheme of operating inter-state buses from Bihar to the neighbouring states of West Bengal, Jharkhand and Uttar Pradesh is expected to be operational soon.

As a result of various endeavours made by the Corporation, the number of passengers carried by its buses has increased substantially, from 89.53 lakh in 2010-11 to 152.26 lakh in 2013-14. There was, however, a marginal declined in the number of passengers in 2014-15 (Table 5.14).

Table 5.14 : Number of Passengers Carried by BSRTC

Particular	2010-11	2011-12	2012-13	2013-14	2014-15
Amount of Fines collected (Rs. crore)	64.06	94.17	114.97	125.69	114.11
No. of Passengers carried (lakh)	89.53	137.67	146.61	152.26	110.64

Source : Bihar State Road Transport Corporation, GOB

The BSRTC has initiated work to provide modern facilities in the 39 major bus stands in the state. For this, Bihar Urban Development Corporation has prepared an estimate of Rs. 160 crore and BSRTC has already approved the amount. In addition to this, 14 bus stands has been planned for renovation and beautification in view of tourism potential of the adjoining area.

5.4 Railways

Heavy industries, major cities and large markets are linked by rail route network. The railways also provides a less costly mode of transport for both goods and passengers. The share of rail transport in Gross State Domestic Product (GSDP) of Bihar has declined from 2.1 percent (2005-06) to 1.2 percent (2014-15). The rail transportation network in major states of India is shown in Table 5.15. The share of broad gauge lines in Bihar is 84 percent, compared to 87 percent for whole of India. The Rail Route Density per 1000 sq. km is 38 kms in Bihar, compared to 20 kms in all-India. However, only 0.04 km rail route exist in Bihar per thousand population. This is less than 0.05 km for India and less than half of Gujarat (0.09 km).

Table 5.15 : Rail Route Network in Indian Major States (March, 2012)

State	Share of Broad Gauge	Route Kilomet- rage (numbers)	Rail Density (per 1000 sq. km)	Rail Density (Per 1000 Population)	State	Share of Broad Gauge	Route Kilomet- rage (numbers)	Rail Density (per 1000 sq. km)	Rail Density (Per 1000 Population)
Andhra Pradesh	100	2459	31	0.08	Madhya Pradesh	80	4954	16	0.07
Bihar	84	3598	38	0.04	Maharashtra	90	5602	18	0.05
Chhattisgarh	93	1187	9	0.05	Odisha	100	2469	16	0.06
Gujarat	67	5257	27	0.09	Punjab	99	2155	43	0.08
Haryana	99	1553	35	0.06	Rajasthan	82	5822	17	0.08
Jharkhand	100	2040	26	0.06	Tamil Nadu	82	3943	30	0.06
Karnataka	100	3090	16	0.05	Uttar Pradesh	82	345	1	0
Kerala	93	1050	27	0.03	West Bengal	94	4000	45	0.04
					India	87	64600	20	0.05

Source: Infrastructure Statistics -2014, Government of India

5.5 Airways

As an infrastructure segment, airways plays vital role in facilitating the growth of business and economy. A robust civil aviation set-up is a key to seamless flow of investment, trade and tourism, with significant multiplier effects on the growth of the economy. The number of aircraft movement increased from 9900 in 2013-14 to 11,054 in 2014-15. Over these two years, the number of passengers increased from 10.5 lakh to 12.0 lakh and freight also increased from 4849 tonnes to 5198 tonnes.

Table 5.16 : Aircraft Movements, Number of Passengers and Freights at Patna Airport

Year	No of aircraft movements	Passengers (in lakh)	Freight (in tonnes)
2010-11	9547	8.39	3279
2011-12	10369	10.22	3425
2012-13	9972	10.03	2251
2013-14	9900	10.45	4849
2014-15	11054	11.97	5198
2015-16, Sept., 2015	9090	8.49	2216

Source: Airport Authority of India, Patna

5.6 Telecommunication

The Indian telecom sector has registered a phenomenal growth during the recent past and has the second largest telephone network in the world, next only to China. The low cost of handsets and the innovative telecom network have lowered the barrier to entry of consumers to the network. The increase in tele-density has mainly been driven by the increase in mobile phones. The majority of investment over the decade has come from the private sector. Bihar also registered a tremendous growth in the telecom sector during the last decade. The number of telephone connections increased more than 15 times from 42.14 lakh in 2005-06 to 661.69 lakh in 2014-15. This expansion in the telecom sector is mainly driven by the private network, with the share of BSNL showing a decline. The private players covered almost 96 percent of telephone connections in Bihar. The private connection has been increased 44 times from 14.18 lakh connections in 2005-06 to 632.56 lakh subscribers in 2014-15.

Table 5.17 : Telephone Connections in Bihar

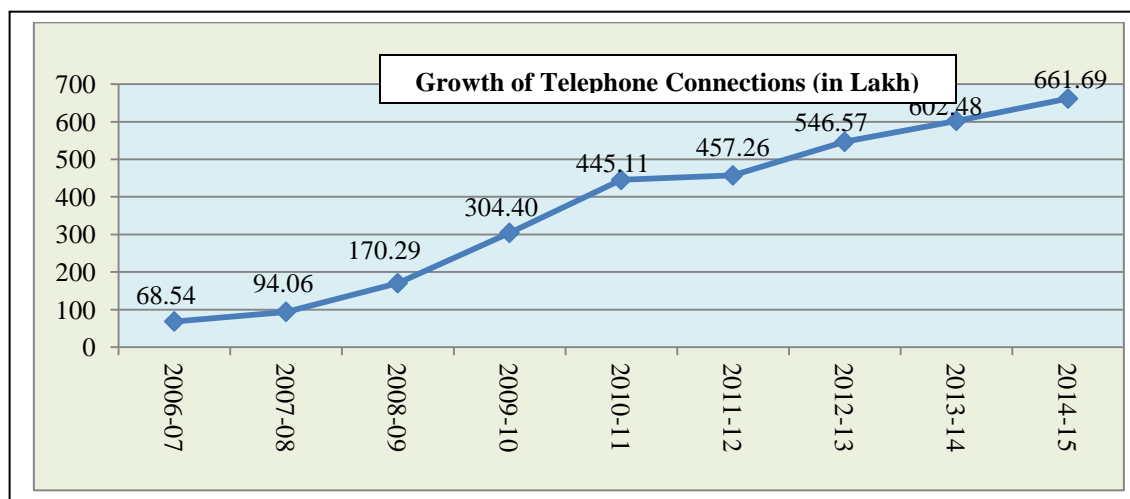
(In lakh)

Year	BSNL			Private Operators			Total
	Landline	Mobile	Total	Landline	Mobile	Total	
2005-06	17.38	9.28	27.96	—	14.18	14.18	42.14
2006-07	9.86	12.68	22.54	—	34.50	46.00	68.54
2007-08	9.73	16.30	26.03	—	68.03	68.03	94.06
2008-09	9.63	26.92	36.55	0.05	133.69	133.74	170.29
2009-10	9.61	43.44	53.05	0.01	251.25	251.35	304.40
2010-11	9.66	55.82	65.48	0.13	379.50	379.63	445.11
2011-12	3.80	41.47	45.27	0.01	411.89	411.99	457.26
2012-13	2.17	42.23	44.40	0.15	502.02	502.17	546.57
2013-14	2.08	21.37	23.45	0.18	578.85	579.03	602.48
2014-15	3.39	25.74	29.13	0.20	632.36	632.56	661.69

Source: TRAI Reports

Note: For Mobile, only GSM figures have been used

Chart 5.1 : Telephone Connections in Bihar



Tele-density

Bihar has witnessed a substantial increase in its tele-density in the recent past, measured in terms of number of telephones per 100 population. It has increased from 1.15 to 51.17 per hundred population during 2001 to 2015. However, the rural tele-density of Bihar is still the lowest among all the major states of India. In case of urban areas, the situation is much better, only four states (Andhra Pradesh, Karnataka, Kerala and Odisha) enjoying a higher tele-density.

Table 5.18 : Tele-density of Major Indian States

State	2001	2005	2010	2014			2015		
	All	All	All	Rural	Urban	All	Rural	Urban	All
Andhra Pradesh	4.10	9.48	57.23	45.53	167.61	79.52	49.04	174.94	84.15
Bihar	1.15	2.36	37.96	29.41	150.96	46.10	33.14	164.13	51.17
Gujarat	5.37	12.73	58.46	57.44	137.63	90.54	61.86	143.01	95.61
Haryana	4.25	10.83	59.70	59.77	121.39	81.44	59.62	124.23	82.66
Karnataka	4.70	12.19	67.81	46.24	167.2	92.45	49.02	174.88	97.52
Kerala	7.51	18.77	80.36	64.34	189.65	96.19	67.18	179.09	95.57
Madhya Pradesh	1.81	5.21	45.23	33.67	116.34	56.04	36.85	123.16	60.36
Maharashtra	6.60	10.01	50.30	56.37	129.66	91.30	61.07	128.37	93.41
Odisha	1.52	3.96	39.30	39.87	161.14	60.90	44.46	172.11	66.85
Punjab	6.95	21.94	75.44	71.67	154.73	107.22	71.96	145.38	103.78
Rajasthan	2.57	6.12	52.76	48.58	160.01	75.39	53.55	153.93	77.76
Tamil Nadu	5.91	11.37	74.31	74.02	138.16	111.14	82.75	141.81	117.52
Uttar Pradesh	1.66	4.06	38.54	35.55	131.53	57.27	40.70	127.71	60.51
West Bengal	2.67	3.00	34.81	44.37	132.96	69.72	50.19	140.40	76.05
All-India	3.53	8.95	52.74	43.96	145.78	75.23	48.37	149.70	79.38

Source : Telecom Regulatory Authority of India;

5.7 Postal Network

The postal communication system had been the main method of communication in India for nearly a century and a half. India Post has the largest postal network in world, with 1.55 lakh post offices, out of which 89.6 percent are located in rural and remote areas. The rural India has a total of 1.39 lakh post offices, as against only 15,700 in urban areas.

As on March 2014, a total of 9064 post offices were in existence in Bihar, out of which 8591 (95 percent) were in rural areas and 473 (5 percent) in the urban areas. In terms of share in the all-India postal network, the 6.2 percent of rural post offices in Bihar is rather less, since Bihar accounts for 11.1 percent of country's for rural population. Top five states (Uttar Pradesh, Andhra Pradesh, Tamil Nadu, Maharashtra and Rajasthan) constituted 45 percent of the post offices. In terms of letter boxes, the top five states are Maharashtra, Andhra Pradesh, Tamil Nadu, Madhya Pradesh and West Bengal; they account for 41 percent of the letter boxes (Table 5.19).

Table 5.19 : Postal Facilities in Bihar (As on March 31, 2014)

(In number)

State	Total Post Offices			Letter Box		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	14815 (10.6)	1335 (8.5)	16150 (10.4)	37376 (8.5)	9304 (9.8)	46680 (8.7)
Bihar	8591 (6.2)	473 (3.0)	9064 (5.9)	22705 (5.2)	2891 (3.0)	25596 (4.8)
Chhattisgarh	2878 (2.1)	266 (1.7)	3144 (2.0)	12338 (2.8)	2715 (2.9)	15053 (2.8)
Gujarat	8193 (5.9)	788 (5.0)	8981 (5.8)	20522 (4.7)	4518 (4.8)	25040 (4.7)
Haryana	2329 (1.7)	344 (2.2)	2673 (1.7)	6730 (1.5)	1706 (1.8)	8436 (1.6)
Jharkhand	2829 (2.0)	270 (1.7)	3099 (2)	11901 (2.7)	1274 (1.3)	13175 (2.5)
Karnataka	8607 (6.2)	1072 (6.8)	9679 (6.2)	16624 (3.8)	12434 (13.1)	29058 (5.4)
Kerala	4209 (3.0)	858 (5.5)	5067 (3.3)	12342 (2.8)	3602 (3.8)	15944 (3.0)
Madhya Pradesh	7476 (5.4)	842 (5.4)	8318 (5.4)	34077 (7.8)	6092 (6.4)	40169 (7.5)
Maharashtra	11559 (8.3)	1297 (8.3)	12856 (8.3)	40824 (9.3)	8883 (9.4)	49707 (9.3)
Odisha	7570 (5.4)	596 (3.8)	8166 (5.3)	18113 (4.1)	2566 (2.7)	20679 (3.9)
Punjab	3408 (2.4)	445 (2.8)	3853 (2.5)	11984 (2.7)	2735 (2.9)	14719 (2.8)
Rajasthan	9668 (6.9)	662 (4.2)	10330 (6.7)	24102 (5.5)	4174 (4.4)	28276 (5.3)
Tamil Nadu	10265 (7.4)	1801 (11.5)	12066 (7.8)	31841 (7.3)	10337 (10.9)	42178 (7.9)
Uttar Pradesh	15747 (11.3)	1933 (12.3)	17680 (11.4)	9685 (2.2)	1844 (1.9)	11529 (2.2)
West Bengal	7955 (5.7)	1111 (7.1)	9066 (5.9)	34760 (7.9)	5920 (6.2)	40680 (7.6)
All States	139182 (100)	15700 (100)	154882 (100)	438961 (100)	94802 (100)	533763 (100)

Source: Annual Report 2014-15, Department of Posts, India

Note: Figure in parenthesis represents share from All- States

Competing with the mobile and internet in the modern era, the communication through postal network is now facing a massive challenge. The volume of mail traffic handled during 2013-14 and 2014-15 in Bihar is indicated in Table 5.20. With an increasing use of internet and mobile services, the number of postal articles has increased only marginally in 2014-15 over the previous year. However, the speed post articles and foreign postal unregistered articles have registered a high growth of around 9 percent. It is worth mentioning that 26 thousand letters under speed post are being booked every day from the state, of which Patna alone booked 13 thousands. The revenue earned from speed post letters was Rs. 28.1 crore in Bihar Circle. As on November 2015, Core Banking System (CBS) has been rolled out in 31 head post offices and 99 sub-post offices in Bihar.

Table 5.20 : Postal Traffic in Bihar

Sl. No.	Articles	2013-14	2014-15	Percentage Change	2015-16 (up to Sept., 2015)
1	Registered (000)	4254.6	4343.9	2.1	2171.9
2	Unregistered (crore)	6.3	6.3	0.5	4.0
3	Speed Post (000)	17365.4	18976.5	9.3	9707.9
4	International Speed Post (000)	1.1	1.1	2.4	0.5
5	Foreign Postal Unregistered (000)	3514.2	3827.4	8.9	1665.9
	(i) To Foreign Counters (000)	1772.2	1874.2	5.8	1143.0
	(ii) From Foreign Counters (000)	1832.6	1836.7	0.2	1002.9

Source : Chief Postmaster General, Bihar Circle

The Department of Posts provides postal services to the public through a large nationwide network of post offices. Besides providing purely postal services, post offices also provide financial services like saving bank, payment of pension, sale of cash certificates etc. Competing with modern banking system, India Post has also reformed its financial services through the required IT infrastructure. It has implemented core banking in all departmental post offices. Banking solutions through mobile application and hand-held devices have also been provided to the rural post offices. The post office are also providing facilities of ATM banking, internet banking and mobile banking to the consumers.

The outstanding balance in post offices across India under different deposits, investment and schemes in post office was around Rs. 5.47 lakh crore at the end of March 2014 (Table 5.21). The share of Bihar was — Deposits (5.5 percent), Investment (3.6 percent), Monthly Income Scheme (MIS) (3.5 percent) and MGNREGA (43.0 percent).

Table 5.21 : Outstanding Balances and Number of Accounts in Post Offices

(As on March 2015)

State	Outstanding Balance (Rs. in crore)					No. of Accounts (lakh)					
	Deposits*	Investment #	MIS	MGNREGA	Total	Deposits*	Investment #	MIS	Sukanya Samridhi Account	MGNREGA	Total
Andhra Pradesh	9418	1523	11575	1297	23813	193	1	12	0.06	194	446
Bihar	9849	1846	7142	48986	67823	158	1	11	0.00	67	236
Chhattisgarh	3035	587	1904	9098	14624	35	0	1	0.00	54	90
Gujarat	11012	6150	18277	4370	39809	122	3	22	0.51	24	171
Haryana	6301	1859	3708	108	11976	58	1	5	1.30	1	67
Jharkhand	2047	48	5164	4939	12199	52	0	4	0.00	37	94
Karnataka	8428	2316	6899	181	17824	159	1	7	0.00	18	173
Kerala	7741	489	2693	1296	12219	116	0	5	0.00	3	124
Madhya Pradesh	7917	1022	4319	3825	17083	210	1	7	11.08	20	247
Maharashtra	13429	7754	29465	3984	54632	300	5	22	0.53	34	360
Odisha	4436	309	3310	2041	10097	100	0	5	0.23	19	123
Punjab	10400	4458	6956	173	21987	46	2	8	0.32	2	59
Rajasthan	9053	3313	6311	7440	26117	146	2	9	1.61	67	195
Tamil Nadu	11424	3196	11017	0	25638	228	2	9	0.18	0	238
Uttar Pradesh	22592	3616	17334	198	43740	290	2	20	3.69	4	320
West Bengal	19651	2642	48252	10924	81469	173	2	58	0.00	66	298
All States	180313	50757	202084	114034	547188	2594	27	220	20.01	642	3491

Source: Annual Report 2014-15, Department of Posts, India;

Note: *-Deposits includes saving accounts, recurring deposits, term deposits and Senior citizen's deposits and
#-Investment includes Public Provident Fund and National Saving Schemes;

Under Digital India Programme, the Postal Department is digitizing all its 1.55 lakh post offices, including 1.29 lakh Gramin Dak Sewak Post Offices. The digitized post office may work as multi-service centre for dissemination of information on government policies, disbursement of social security benefits, and financial inclusion of the rural mass.

5.8 Irrigation

Irrigation provides the basic infrastructure for the agricultural economy. It is an important input for enhancing agricultural productivity. Bihar's agricultural economy depends mostly on monsoon rain which is quite uncertain. Bihar is endowed with abundant water resources and also receives a high rainfall of 1009 mms per annum. However, neither the rainfall nor the distribution of the water resources is uniform across the state, causing uneven exploitation of irrigation potential in the state. Therefore, Bihar needs artificial watering in the fields.

The proportion of irrigated area and the cropping intensity are much higher in several states of the country, compared to Bihar. The inadequate availability and inefficient utilization of water resources in Bihar can be ascribed mainly to the continued neglect of the operation and maintenance (O&M) of canals and water bodies in the past. The other important reason is the lack of participation of the beneficiary farmers in the management of irrigation resources. In recent years, Bihar has witnessed some noteworthy examples of participatory management of irrigation; however, their replication throughout the state has been rather slow, mainly because the water users, associations have not been transferred the responsibility of managing the water resources.

Irrigation Potential

The ultimate irrigation potential in the state is estimated to be around 117.54 lakh hectares, including major, medium and minor irrigation schemes. This irrigation potential includes both surface and ground water sources. While major and medium irrigation schemes have an ultimate potential of 53.53 lakh hectares, the minor irrigation has a potential of 64.01 lakh hectares. If ultimate potential is exploited fully, it will be far more than the total demand of irrigation water in the state. Till date, the created potential of 67.46 lakh hectares is 57.4 percent of the ultimate potential of 117.54 lakh hectares. The utilised potential of 57.63 lakh hectares is 49.0 percent of ultimate potential.

Table 5.22 : Ultimate Created and Utilised Irrigation Potential in Bihar

(Area in lakh ha.)

Type of Irrigation Potential	Ultimate Potential	Created Potential (2007-15)	Utilised Potential
(a) Major and Medium Irrigation	53.53	29.25	19.42
(b) Minor Irrigation	64.01	38.21	38.21
(i) Surface Irrigation	15.44	7.20	7.20
(ii) Ground Water	48.57	31.01	31.01
Total	117.54	67.46	57.63

Source: Department of Minor Water Resources and Department of Water Resources, GOB

As may be observed, out of the total created potential of 29.25 lakh hectares through the major and medium sources, the utilized potential is only 19.42 lakh hectares; thus, an irrigation potential of 9.83 lakh hectares is lost, which needs to be restored. In minor irrigation sector, though the entire created potential is utilized, yet a substantial proportion of ultimate potential is yet to be created. Under Agriculture Road Map II, the state government plans to create an additional irrigation potential of 59.51 lakh hectares under minor irrigation during 2017-22. The distribution of this additional irrigation potential will be — surface irrigation (13.47 lakh hectares) and ground water (46.04 lakh hectares).

It is seen from Table 5.23 that during 2012-13 to 2014-15, a total of 41.6 thousand hectares of irrigation potential in major and medium irrigation sector has been created as against the total ultimate potential of 53.53 lakh hectares.

Table 5.23 : Creation of Irrigation Potential under Major and Medium Irrigation

Sl. No.	Name of Scheme	Created Irrigation Potential (in '000 ha.)
2012-13		
1	Western Kosi Canal Scheme	7.0
2	Jamania Pump Canal Scheme	8.7
3	Sammat Bigha Morhar Scheme	3.8
4	Kachnama Weir Scheme	0.3
5	Mor Weir Scheme	0.7
6	Solhanda Weir Scheme	0.2
Total		20.7
2013-14		
1	North Koel Reservoir Scheme	2.0
2	Jamania Pump Canal Scheme	0.75
3	Kachnama Weir Scheme	2.8
4	Mor Weir Scheme	0.7
5	Solhanda Weir Scheme	0.3
6	Sugarwey Weir Scheme	1.4
Total		7.9
2014-15		
1	Jamania Pump Canal Scheme	0.1
2	Kachnama Weir Scheme	0.1
3	Mor Weir Scheme	1.0
4	Solhanda Weir Scheme	0.3
5	Durgawati Reservoir Scheme	1.6
6	Construction of Barrage on Dardha river near village Lavaich Rampur	10.0
Total		13.0
Grand Total		41.6

Source : Department of Water Resources, GOB

Along with the creation of new irrigation potential, it is necessary to ensure that the already created irrigation potential is fully utilised. Due to heavy sedimentation and breach in the irrigation canal system, the created irrigation potential is sometimes not utilised fully. Thus, the state government is making efforts to rehabilitate the irrigation potential that was already created but lost. The extent of re-creation of lost irrigation potential during the last four years has been — 55.00 thousand hectares (2011-12), 702.66 thousand hectares (2012-13), 444.34 thousand hectares (2013-14) and 129.86 lakh hectares (2014-15).

Major and Medium Irrigation

An additional irrigation potential of 3.06 lakh hectare has been created during the year 2004-05 to 2014-15 through major and medium irrigation schemes. Thus, the total created irrigation potential of 26.19 lakh hectare has increased to 29.25 lakh hectares in 2014-15. According to the Agriculture Road Map II, the irrigation intensity in Bihar will increase to 158 percent by 2017 and 209 percent by 2022. This will ensure that irrigation could be provided in 99.00 lakh hectares by 2017 and 130.90 lakh hectares by 2022.

The utilisation efficiency of major and medium irrigation schemes is indicated by the ratio actual irrigation and the created irrigation potential. During the last decade, this utilisation efficiency has varied between 41.8 percent in 2009-10 to 72.6 percent in 2013-14 (Table 5.24). During 2014-15, it was at a modest level of 66.4 percent. On an average, the utilisation efficiency is 57.5 percent.

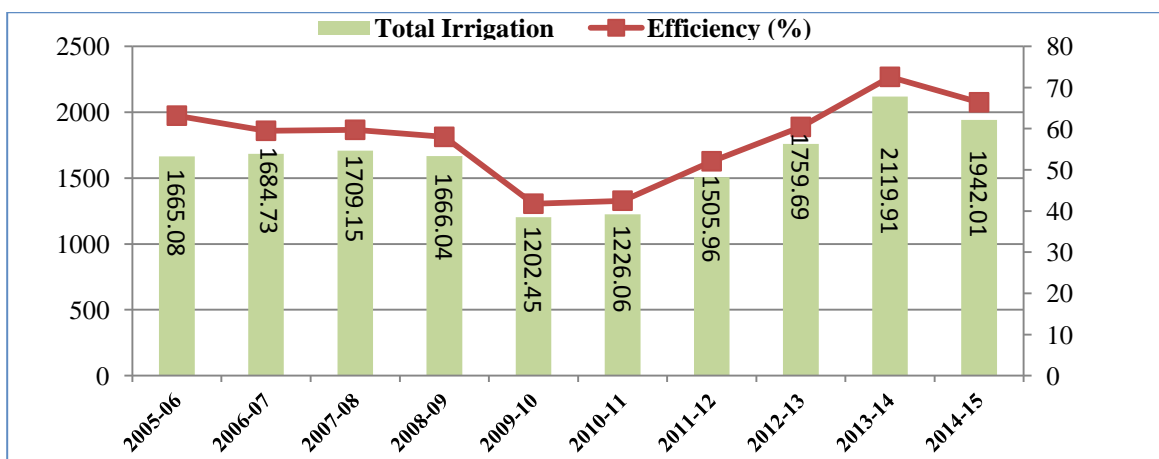
Table 5.24 : Water Utilisation Efficiency of Major and Medium Irrigation Schemes

(Figures in '000 ha)

Year	Created Irrigation Potential	Kharif		Rabi		Hot Weather		Total Irrigation	Efficiency (%)
		Target	Irrigation	Target	Irrigation	Target	Irrigation		
2005-06	2637	1643	1253	513	400	13	12	1665	63.1
2006-07	2833	1389	1221	478	453	12	11	1685	59.5
2007-08	2863	1441	1245	478	453	12	11	1709	59.7
2008-09	2873	1480	1275	443	389	13	2	1666	58.0
2009-10	2880	1451	885	385	318	0	0	1202	41.8
2010-11	2886	1365	907	409	319	0	0	1226	42.5
2011-12	2893	1305	1169	395	337	0	0	1506	52.1
2012-13	2913	1491	1394	439	366	0	0	1760	60.4
2013-14	2921	1865	1614	567	491	15	15	2120	72.6
2014-15	2925	1865	1628	373	314	0	0	1942	66.4

Source : Department of Water Resources, GOB

Chart 5.2 : Pattern of Water Utilisation Efficiency of Major and Medium Irrigation



Participatory Irrigation Management (PIM)

In accordance with the National Water Policy, the management of all the completed canal systems is to be transferred to the beneficiary societies in a phased manner, under the Participatory Irrigation Management Programme. Out of 79 registered societies in the state which have already given their consent, the management of irrigation system has been transferred to 53 societies and the process of transfer is on-going for 26 remaining societies. The status of other farmers' societies is presented in Table 5.25.

Table 5.25 : Status of Farmers Societies

Status	Number
Management of irrigation System Transferred	53
Societies ready for transfer of system	26
Applied for Registration	26
Registered Societies in the process of giving consent	07
Under the process of motivation	510
Total	622

Source : Department of Water Resources, GOB

Minor Irrigation

The ultimate potential of minor irrigation is around 64.01 lakh hectares, of which 15.44 lakh hectares are through surface irrigation and 48.57 lakh hectares through ground water. Out of a total of 64.01 lakh hectares of irrigation potential, 38.21 lakh hectares (60 percent) has already been created, of which 7.20 lakh hectares is under surface irrigation and 31.01 lakh hectares under ground water irrigation (Table 5.26). It may also noted that, of the total ground water irrigation, a substantial proportion (76 percent) comes from the private tubewells. According to the Fourth Minor Irrigation Census (2006-07), there were 56112 dug wells, 5,71,871 shallow tubewells, 23,259 deep tubewells, 7396 surface flow schemes and 4731 surface lift schemes in Bihar.

Table 5.26 : Status of Minor Water Resources in Bihar

Irrigation Sources	Ultimate Potential	(Potential in lakh ha.)	
		Created Potential (2007-15)	Utilized Potential (2007-15)
1. Surface Irrigation	15.44	7.20	7.20
(i) Ahar / Pynes/ Irrigation Tanks		2.65	2.65
(ii) Lift Irrigation		2.40	2.40
(iii) Surface minor Irrigation Bear/ Slice Gates		2.16	2.16
2. Ground Water Irrigation	48.57	31.01	31.01
(i) State Tubewells		7.42	7.42
(ii) Private Tubewells		23.59	23.59
Total	64.01	38.21	38.21

Source : Department of Minor Water Resources, GOB

The additional area under minor irrigation was 2.82 lakh hectares (2012-13), 1.42 lakh hectares (2013-14) and 0.38 lakh hectares (2014-15) (Table 5.27). Due to heavy sedimentation and breach in the irrigation canal system, the created irrigation potential is sometimes not exploited fully.

Table 5.27 : Irrigated Area through Minor Irrigation Sources

(Area in ha.)

Source	2012-13	2013-14	2014-15
Surface Canal	36315	26086	9310
Tanks (including Ahars and Pynes)	59407	41591	10930
Tubewells (Private and State)	161962	64251	16610
Other Sources (Lift Irrigation) and Barge Lift Irrigation	24220	9627	2564
Total	281904	141555	38418

Source : Department of Minor Water Resources, GOB

The state government plans to create an additional irrigation potential of 25.29 lakh hectares and rehabilitate the lost irrigation potential of 5.07 lakh hectares by 2017. It is proposed to create 10.25 lakh hectares of additional potential through surface irrigation, 7.23 lakh hectares through Ahars and Pynes, 2.02 lakh hectares through construction of sluice gates and bears, and 1.0 lakh hectares through lift irrigation. As regards rehabilitation of lost irrigation potential, 2.83 lakh hectares of surface irrigation potential has already been created and the remaining 2.24 lakh hectares of lost potential will be rehabilitated by 2017. Thus, by 2017, a total of 30.36 lakh hectares of irrigation potential will be available under minor irrigation schemes.

Ahars and Pynes

Ahars and Pynes system is an indigenous irrigation technology. On the basis of physical features, Bihar can be divided into two regions — the north Bihar plains and the south Bihar plains. Ahar-Pyne system of indigenous irrigation is historically the most important source of irrigation in south Bihar and even today they provide a good example of participatory irrigation management. There are three factors which are responsible for the wide prevalence of this mode of irrigation in this region. The region is characterised by (i) scanty rainfall, (ii) a sharp slope which allows water to quickly run away, and (iii) the nature of soil, which is either stiff clay or loose sand, both equally unreceptive of moisture. Most of the places in the south Bihar region receive an average annual rainfall of about 1009 mms which may be just sufficient for other crops, but not adequate for cultivating paddy. Under Accelerated Irrigation Benefit Programme (AIBP) in drought prone districts, 60 projects in Jamui has been completed which created 23,466 hectares of irrigation potential. Another 161 projects (147 projects in Jamui and 14 in Nawada) were also undertaken, of which 101 projects has been completed creating 5515 hectares of irrigation potential. Besides, 21 projects in various districts have been completed under the Pilot Project of Repair, Renovation and Restoration (RRR) of water bodies, which created an additional irrigation potential of 17,163 hectares. Under the State Plan and the RIDF, there are 498 schemes, of which

214 have been completed by 2015 creating an irrigation potential of 1,16,786 hectares. Out of a total of 459 Lift Irrigation Schemes, 315 have already been completed, leading to restoration of irrigation potential of 36,880 hectares. During 2014-15, a total of 510 Ahars/Pynes/Ponds in the state were made functional, spread over 18 districts of south Bihar (Table 5.28).

Table 5.28 : District-wise Number of Ahars, Pynes and Ponds made functional under Different Programmes

Sl. No.	District	Number of System Made Functional				Total
		RIDF	State Plan	AIBP	RRR of Water Bodies	
1	Patna	9	21		12	42
2	Nalanda	40	26			66
3	Bhojpur	3	7			10
4	Buxar	3	6			9
5	Kaimur	5	4		1	10
6	Gaya	27	36		1	64
7	Jehanabad	8	20		1	29
8	Arwal		5			5
9	Nawada	20		14		34
10	Aurangabad	5	3			8
11	East Champaran	1	7			8
12	Sitamarhi	3				3
13	Madhubani	1	4			5
14	Munger	3	5			8
15	Sheikpura	7	14			21
16	Lakhisarai	9	8			17
17	Jamui		10	147		157
18	Bhagalpur	7	7			14
	Total	151	183	161	15	510

Source : Department of Minor Water Resources, GOB

Interlinking of Rivers

The scheme of interlinking of rivers is being envisaged mainly for protecting the agricultural land from flood and drought. This will first require identifying the rivers to be interlinked and then preparing Detailed Project Reports (DPR) for execution. These schemes will be formulated in such a way that they do not cross state or international boundaries. In future, however, these could be extended to or coordinated with the inter-state or international schemes as per the requirements of the state. The DPR of Budhi Gandak-Noon-Baya-Ganga link scheme has been prepared by the National Water Development Authority (NWDA) and sent to the Central Water Commission (CWC) for approval. On completion of the scheme, 1.26 lakh hectares of irrigation potential will be created in the districts of Samastipur, Begusarai and Khagaria. This scheme will

also protect these districts from floods caused by river Budhi Gandak. Under inter linking of rivers scheme, the DPR for interlinking of Sakri river and Nata river has been approved by the CWC. After the execution of this scheme, irrigation facility will be ensured to 68,000 hectares in the districts of Nawada, Nalanda and Shekhpura. The DPR of Kosi-Mechi Interlinking Scheme has also been prepared by National Water Development Authority (NWDA) and has been submitted to CWC for its approval. After the completion of this scheme, 2,11,400 hectares of additional irrigation potential will be created in the districts of Araria, Saharsa, Supaul, Kishanganj and Purnea.

The state government has been making sincere efforts in water management to protect the different regions of the state from the natural disasters like flood and droughts. Some of these steps are enumerated below:

- (i) The work for strengthening of Eastern and Western Kosi embankment in different stretches are continuing. Under Bihar Kosi Flood Recovery Project (Kosi-I), Sanjay dhar, Haiya dhar and Bochaha dhar have been strengthened. Further, under Bihar Kosi Basin Development Project (Kosi II), a road length of 8 kms. has been constructed.
- (ii) Construction of 57 kms. length of new embankments under Bagmati Flood Management Phase II has been completed.
- (iii) In order to enhance the irrigation potential, 8 Irrigation Schemes have been completed — Bachharaja Weir Scheme-Madhubani (2530 hectares), Kachnama Weir Scheme (Jehanabad) (3240 hectares), Restoration of Navagadh Weir Scheme (Jehanabad) (576 hectares), Sammat Bigha Weir Scheme (Jehanabad) (3800 hectares), Sesamba Weir Scheme (Jehanabad) (1700 hectares), Esarvey Check Dam (Gaya) (850 hectares), Bhetaura Dam (Gaya) (1880 hectares) and Restoration of Kadahar Weir Scheme (Gaya) (840 hectares).
- (iv) Two stretches of 105 kms. and 50 kms. of old embankment under Bagmati Management Scheme (Phase I and Phase II) have been raised and strengthened.
- (v) The river closure work of Durgawati Reservoir Scheme in Kaimur district has been completed and irrigation facility is being provided to farmers since 2014-15.
- (vi) Against a target of 374, raising and strengthening of 332 small embankments in different districts have been completed. Presently, the work for raising and strengthening of 17 small embankments are in progress.

Programme of Command Area Development

There are 7 on-going and 2 new schemes in the state under the Command Area Development and Water Management (CADWM) Programme. Under this programme, field channels have been constructed in 2,26,185 hectares and in another 1,01,096 hectares, field and intermediate link drains have been constructed, during 2005-06 to 2014-15. Under major and medium irrigation schemes, CADWM programme will be executed through four Command Area Development

Agencies (CADA) in the state. This programme is funded through Accelerated Irrigation Benefit Programme (AIBP), a centrally sponsored scheme.

Table 5.29 : Command Area Development Programme under Agriculture Road Map II

Name of Scheme	During 2012-17		During 2017-22	
	Area (lakh ha.)	Amount (Rs. crore)	Area (lakh ha.)	Amount (Rs. crore)
Command Area Development and Water Management Programme (CADWM)	4.44	1672.00	4.96	1867.00

Source: Agriculture Road Map, GOB

Other Irrigation Programmes

- (i) Under NABARD (Phase XI), 31,200 hectares irrigation potential has been created through 775 tubewells. A total of 10,242 state tubewells which were constructed under the NABARD (Phase-III), NABARD (Phase-VIII) and NABARD (Phase-XI), are to be soon energized. Besides, 2871 state tubewells have been energized by the end of 2014-15. Again, Rs. 85.39 crore was sanctioned for renovation of 2397 state tubewells which were energized during NABARD (Phase-III) and NABARD (Phase-XI).
- (ii) A Water Regulatory Authority has been established under Bihar State Water Policy, 2015 by Department of Water Resources. A proposal to keep the Ground Water Authority as a subsidiary of the Water Regulatory Authority has been submitted to Department of Water Resources.
- (iii) Under the Integrated Action Plan, a total of 184 projects for Irrigation Channels, Ahars, Tanks, Water Harvesting Structure, etc. have been completed at a total expenditure of Rs. 20.24 crore.
- (iv) To encourage the installation of private tubewells by farmers, the state government has two ambitious schemes — Million Shallow Tube Wells Programme (MSTP) and Bihar Ground Water Irrigation Scheme (BGWIS). An irrigation potential of 2.78 lakh hectare has been created through installation of 99,570 private tubewells under BIGWIS during 2009-10 to 2012-13.
- (v) A new scheme named ‘Bihar Shatabdi Niji Nalkup Yojana’ has been launched by the state government, which is a subsidy-based scheme. Under this scheme, two types of tubewells will be installed — shallow tubewells (70m depth) and medium depth tubewell (70m to 100m depth). For the installation of shallow tubewells, the maximum subsidy is Rs. 15,000 and, for the medium tubewells, it is Rs. 35,000. There is also a programme of giving a maximum subsidy of Rs. 10,000 for pump sets or half the market rate price, whichever is less.

Table 5.30 : Proposal for Implementation of Schemes during the 2017–2022

	Schemes	Number	Irrigation Potential (in lakh ha.)	Required Money (Rs. in crore)
A	Ground Water Utilisation Scheme			
(i)	6” diameter Community/Private deep tube-well (electricity operated in South Bihar and in sugarcane producing areas)	12700	5.08	1500.00
(ii)	Shallow Private Tube-well of 4” diameters under Bihar ground water irrigation Schemes under 90% government subsidy.	800000	16.00	5040.00
	Total	812700	21.080	6540.00
B	Rehabilitation of Ground Water irrigation			
(i)	Lift irrigation renovation Scheme	385	0.385	200.00
C	Schemes for use of Ground Water for irrigation			
(i)	Tubewell Renovation	1250	1.00	400.00
(ii)	Non working Private Tube-well under Bihar ground water irrigation Schemes under 90% government subsidy.	250000	5.00	1200.00
	Total	251250	6.00	1600.00
D	Ground Water Management			
(i)	Water Management Cum irrigation check dam/ Surface Water Storage Schemes	3350	1.68	241.20
(ii)	Investigation wells for ground wells management, irrigation well, acufier test etc.	0	0	55.53
	Total	3350	1.68	296.73
E	Enhancement of 10% Capacity development technology Scheme detailed project , controlling quality etc.			863.27

Source: Department of Minor Water Resources, GOB

APPENDIX

Table A 5.1 : District-wise Road Network in Bihar

(Length in km)

Districts	2013			2014			2015 (up to September)		
Categories	NH	SH	MDR	NH	SH	MDR	NH	SH	MDR
Patna	394.90	162.16	458.41	394.90	199.31	495.59	394.90	204.25	565.21
Nalanda	177.07	172.00	318.26	177.07	172.00	389.95	177.07	186.11	444.90
Bhojpur	85.00	152.80	258.28	85.00	152.80	250.00	85.00	177.25	281.64
Buxar	55.00	78.50	126.39	55.00	78.50	126.60	55.00	77.95	126.60
Rohtas	145.24	234.80	398.41	145.24	234.80	415.11	145.24	231.00	365.71
Kaimur	52.24	99.40	232.60	52.24	99.40	239.29	99.04	91.09	263.97
Gaya	119.50	218.60	351.33	119.50	218.60	600.92	119.50	246.80	628.46
Arwal/Jehanabad	134.23	104.30	203.21	134.23	104.30	279.99	134.23	66.10	358.25
Nawada	84.30	170.33	136.60	84.30	170.33	158.10	84.30	185.25	157.41
Aurangabad	137.23	150.50	258.73	137.23	150.50	245.13	137.23	156.99	256.31
Saran	180.50	201.80	262.08	180.50	201.80	219.24	180.50	196.45	200.34
Siwan	54.00	159.40	328.66	54.00	159.40	250.01	54.00	157.35	292.14
Gopalganj	96.43	81.64	312.21	96.43	52.64	321.69	96.43	55.60	352.64
W. Champaran	112.00	101.60	317.01	112.00	101.60	298.56	112.00	115.00	293.88
E. Champaran	94.00	144.05	309.84	94.00	144.05	330.45	94.00	131.20	408.53
Muzaffarpur	258.23	70.33	394.24	259.40	70.33	431.02	259.40	76.20	455.50
Sitamarhi	136.00	49.30	222.36	167.82	49.30	286.51	167.82	94.26	213.89
Sheohar	22.00	13.64	33.00	22.00	13.64	33.00	22.00	11.75	101.43
Vaishali	127.61	151.20	177.30	127.61	151.20	177.35	127.61	113.20	179.41
Darbhanga	49.80	198.06	402.75	49.80	198.06	372.70	49.80	224.02	412.46
Madhubani	207.75	131.95	314.63	207.75	131.95	371.20	235.91	99.39	380.81
Samastipur	65.51	221.90	321.45	65.51	221.90	384.65	65.51	194.32	411.37
Begusarai	95.89	42.00	201.63	95.89	42.00	246.58	95.89	42.50	245.59
Munger	96.91	11.06	45.20	72.97	35.00	53.00	72.97	34.00	46.00
Shekhpura	12.00	52.90	108.51	12.00	52.90	126.83	45.73	22.305	137.26
Lakhisarai	45.21	58.84	58.29	45.21	58.84	87.45	50.71	49.40	91.00
Jamui	88.36	133.09	183.78	112.35	109.15	198.21	197.22	62.79	207.90
Khagaria	92.30	15.00	129.05	92.30	15.00	212.07	92.30	18.00	242.59
Bhagalpur	146.00	81.05	252.96	146.00	81.05	265.27	146.00	72.00	263.64
Banka	-	215.21	264.49	10.96	204.25	206.29	85.79	169.49	200.06
Saharsa	78.70	134.75	357.52	92.80	120.65	332.33	92.80	96.55	279.04
Supaul	204.60	150.38	469.79	215.50	139.49	546.59	215.50	133.28	498.15
Madhepura	109.00	99.48	73.98	109.00	99.48	87.46	109.00	100.04	103.45
Purnea	120.20	161.48	269.05	115.50	148.98	256.90	115.50	141.28	227.48
Kishanganj	68.00	49.06	233.50	67.87	49.95	286.17	67.87	48.60	289.50
Araria	153.50	94.65	252.29	153.50	93.65	240.99	153.50	69.07	376.08
Katihar	101.50	115.98	363.62	157.61	99.63	304.36	157.61	102.51	275.30
Total	4200.71	4483.19	9401.40	4320.99	4426.43	10127.56	4594.88	4253.35	10633.87

Source: Department of Road Construction, GOB

Table A 5.2 : District-wise approved length and physical achievement of State Highways under RSVY (2014-15)

Name of the Districts	Implementing Agency	Approved Length (km)	Physical Achievement (km)
Patna	CPWD	79.40	78.30
Nalanda	CPWD	39.50	38.80
Bhojpur	CPWD	47.00	47.40
Buxar	CPWD	78.84	78.84
Rohtas	CPWD	207.36	207.36
Kaimur	CPWD	52.29	51.70
Gaya	CPWD	68.22	68.22
Arwal/Jehanabad	CPWD	3.50	3.50
Nawada	CPWD	45.45	45.00
Aurangabad	CPWD	37.10	35.59
Saran	IRCON	24.00	20.35
Siwan	CPWD	54.60	54.60
Gopalganj	CPWD	24.90	24.90
W. Champaran	CPWD	35.85	35.25
E. Champaran	CPWD	102.51	103.45
Muzaffarpur	CPWD	NA	NA
Sitamarhi	CPWD	26.54	26.54
Sheohar	CPWD	12.00	12.00
Vaishali	IRCON	31.01	31.01
Darbhanga	IRCON	96.77	97.87
Madhubani	IRCON	105.86	105.86
Samastipur	IRCON	97.17	97.45
Begusarai	CPWD	41.30	41.30
Munger	CPWD	34.00	33.70
Sheikhpura	CPWD	38.54	38.50
Lakhisarai	CPWD	58.98	58.74
Jamui	CPWD	151.86	150.90
Khagaria	CPWD	NA	NA
Bhagalpur	CPWD	46.35	46.33
Banka	CPWD	167.06	165.20
Saharsa	CPWD	24.10	24.10
Supaul	CPWD	33.10	33.10
Madhepura	CPWD	27.77	27.77
Purnea	CPWD	91.40	91.00
Kishanganj	CPWD	79.59	78.00
Araria	CPWD	30.50	30.50
Katihar	CPWD	19.71	19.85
Total		2114.13	2102.98

Source : Department of Road Construction, GOB

Table A 5.3 : Statistics of Registered Vehicles in Bihar During 2014-15

(in No.)

District Name	Truck	Bus	Car	Taxi	Jeep	Three Wheeler	Two Wheeler	Tractor	Trailer	Other	Total
Patna	3383	601	13643	776	1538	4171	74335	2028	806	18	101299
Nalanda	415	83	221	184	140	615	11881	1136	334		15009
Bhojpur	228	55	154	171	441	994	9868	1079	876	87	13953
Buxar	104	24	104	44	106	374	5180	750	745	71	7502
Rohtas	132	29	245	31	58	711	2319	1308	664	9	5506
Kaimur	28	26	96	27	70	217	4508	798	330	36	6136
Gaya	682	140	1059	792	698	1860	22703	1224	683	3	29844
Jehanabad	168	19	31	21	33	399	2183	496	354	61	3765
Arwal	1	3		19	25	83	652	318	125	4	1230
Nawada	23	30	71	87	135	280	3345	1037	472	116	5596
Aurangabad	153	34	91	107	392	952	10714	1167	407	213	14230
Saran	73	85	321	381	364	974	11287	842	87		14414
Siwan	365	39	228	201	610	775	23448	1153	5		26824
Gopalganj	249	28	57	141	687	412	12533	960	61	25	15153
W. Champaran	272	21	142	549	299	785	13817	923	462	46	17316
E. Champaran	511	28	126	388	707	994	13039	1989	217		17999
Muzaffarpur	1704	178	3468	619	776	2283	57757	1344	72		68201
Sitamarhi	39	19	36	36	107	1166	13117	993	102		15615
Sheohar	3	3		8	35	49	1868	129	39	3	2137
Vaishali	481	47	1126	141	117	1201	21164	1167	476	617	26537
Darbhanga	750	24	911	669	465	2350	17913	935	265	18	24300
Madhubani	47	3	100	116		575	8662	635	140	15	10293
Samastipur	249	17	77	75	55	1107	19898	1265	580		23323
Begusarai	658	35	748	342	158	675	12892	919	507		16934
Munger	71	24	69	58	53	248	4921	217	162		5823
Shekhpura	15	12	11	40	31	123	1870	406	318	8	2834
Lakhisarai	191	1	17	56	48	12	2599	347	348		3619
Jamui	82	6		64	115	505	4367	456	451		6046
Khagaria	74	2	24	38	7	379	6411	562	236	170	7903
Bhagalpur	106	37	1182	17	556	1455	10826	467	416	158	15220
Banka	46	4	148	7	30	35	3118	243	139	3	3773
Saharsa	164	22	218	93	88	338	3983	814	248		5968
Supaul	35	13	43	19	55	146	5670	766			6747
Madhepura	44	5	1298	45	84	634	14273	1153	491	36	18063
Purnea	929	35	987	282		2649	7277	1593	201		13953
Kishanganj	7	4	123	77	1	137	13055	348	87	16	13855
Araria	2	3	163	40	53	441	5126	860	216	9	6913
Katihar	48	7	219	33		154	18754	880	272		20367
Total	12532	1746	27557	6794	9137	31258	477333	33707	12394	1742	614200

Source: Department of Transport, GOB

CHAPTER VI

ENERGY SECTOR

Economic growth depends upon the availability of adequate, reliable and quality power at a competitive rate. Electricity now has become necessary for all the facets of life and has been recognized as a basic human need. It is a key to accelerate economic growth, generation of employment, elimination of poverty, and human development. Bihar's economy is now growing at a fast rate; however, there is an apprehension about sustainability of this growth due to the shortage of power. To address this challenge, the state government has given the highest priority to the power sector during last couple of years, and there has been significant improvement in power availability.

6.1 Availability of Power

The power problem in Bihar can be understood better in the context of its demand. As is apparent from Table 6.1, the peak deficit in power has been around 30 percent for several years till 2012-13. In 2013-14 and 2014-15, this deficit was reduced to around 20 percent. Due to increased availability of power from an average of 6-8 hours to 14-16 hours in rural areas and from 10-12 hours to 20-22 hours in urban areas, the per capita consumption of the state has risen from 145 kwh in 2012-13 to 203 kwh in 2014-15, implying a growth of about 40 percent in two years, which is the highest in the country.

Table 6.1 : Power Scenario (2010-11 to 2014-15)

Characteristic	2010-11	2011-12	2012-13	2013-14	2014-15
Peak Demand (MW)	2300	2500	2650	3150	3500
Peak Met (MW)	1664	1712	1802	2335	2831
Peak Deficit/ Surplus (MW) (-/+)	-636	-788	-848	-815	-669
Peak Deficit/ Surplus (%) (-/+)	-27.7	-31.5	-32.0	-25.9	-19.11
Energy Requirement (MU)	13298	14454	15321	18212	22226
Energy Availability (MU)	10978	12145	13267	15045	18731
Energy Deficit/ Surplus (MU) (-/+)	-2320	-2309	-2054	-3464	-3495
Energy Deficit/ Surplus (%) (-/+)	-17.4	-16.0	-13.4	-19.0	-15.7

Source : Department of Energy, GOB

6.2 Projection of Power Requirement

With a view to provide electric connections to all rural and urban households and for providing power throughout the 24 hours by 2018-19, a vision document has been prepared by the state government, encompassing all the components of the power sector — Generation, Transmission

and Distribution. The existing electrification status of rural and urban household in the state is presented at Table 6.2.

Table 6.2 : Status of Electrification of Rural and Urban Household

(Figures in lakh)

Category of Households	2001	2011	CAGR	Projections for December, 2015
Total Households	139.83	189.41	3.08	213.85
Rural Households	126.60	169.27	2.95	190.12
Urban Households	13.23	20.14	4.29	23.82
Total Electrified Households	14.33	30.98	8.01	53.35
Rural Electrified Households	6.50	17.55	10.45	32.58
Urban Electrified Households	7.84	13.44	5.54	20.76
Total Un-electrified Households	125.49	158.42	2.36	160.51
Rural Un-electrified Households	120.11	151.72	2.36	157.54
Urban Un-electrified Households	5.39	6.70	2.21	3.06

Source : Department of Energy, GOB

There will be a quantum jump in power demand in the state in the coming years, mainly due to large scale release of service connection in rural areas towards full electrification, quantum increase in agriculture consumers, rise in demand of existing consumers (because of widespread use of electrical gazettes), and industrialization of the state. Table 6.3 presents the estimated annual energy requirement for the rural and urban households for the period 2015-16 to 2018-19.

Table 6.3 : Annual Energy Requirement for Rural and Urban Households

(Figures in MU)

Category of Households	2015-16	2016-17	2017-18	2018-19
Existing Electrified Households	5692	6807	7542	8278
Unelectrified Households when Electrified	2333	5525	9158	13557
New Household when Electrified	514	1246	2150	3252
Total Domestic Requirement	8539	13578	18850	25087
Consumers other than Domestic (Growing annually at 20 percent)	6467	7760	9312	11175
New Agricultural Connections	1128	2739	4888	7573
Total	16134	24077	33050	43835

Source : Department of Energy, GOB

Table 6.4 shows the projected energy requirement at the state periphery, considering distribution losses and intra-state transmission loss trajectory. The expected power demand of Bihar by 2018-19 shall be of the order of 8774 MW, with an annual energy requirement of 61,750 MU.

Table 6.4 : Annual Energy and Peak Demand Requirement at State Periphery

	2015-16	2016-17	2017-18	2018-19
Energy requirement as per demand projections (MU)	16134	24077	33050	43835
Distribution losses (Percentage)	38.71	34.26	30.18	26.23
Intrastate transmission losses (Percentage)	3.92	3.87	3.82	3.77
Energy requirement at state periphery (MU)	27398	38100	49215	61750
Peak demand at 0.734 Load Factor (Including Agricultural load upto 50% only) (MU)	4112	5588	7088	8774
Peak demand at 0.734 Load Factor (MU)	4261	5925	7654	9604

Source : Department of Energy, GOB

The power capacity availability in the state was 3704.63 MW in March, 2015. In order to meet the increased demand, the state has already planned for increased capacity of 6521.30 MW from different sources in a phased manner by 2018-19. These sources are — own generating stations, renewable energy sources, central generating stations, and long/ medium term Power Purchase Agreements (PPA) through competitive bidding. The source-wise details of this increased capacity is presented in Table 6.5.

Table 6.5 : Yearwise and Sourcewise Details of Capacity Expansion

(Figures in MW)

Sources	March 2015	Cumulative Proposed Capacity			
		2015-16	2016-17	2017-18	2018-19
State Sector					
State Thermal	—	470	720	720	720
State Small Hydro	55	55	88	88	208
Central Generating Stations Share					
CGS Thermal	2414.10	2843.17	3346.50	3561.20	3722.40
CGS Hydro	469.53	469.53	469.53	1344.53	1344.53
IPPs Projects (Case1)	460	460	460	460	960
JV / Partnership (Thermal)	220	534	584	1500	2873
NCE / RNES	86	139	248	398	398
Total	3704.63	4970.70	5916.03	8071.73	10225.93

Note : IPP = Independent Power Producer; JV = Joint Venture;
NCE = Non-Conventional Energy; RNES = Renewable Energy Source

As per the present Generation Plan, the additional capacity of 6521.30 MW is expected to be added by 2018-19 (either from new projects, or from those which are under construction, or from those old projects which are being renovated or modernised). Out of this addition, about 312 MW shall be from non-conventional energy sources and 6209.30 MW from conventional sources. As such, the total available capacity for Bihar by 2018-19 is expected to be 10,226 MW, of which 9828 MW will be conventional and the remaining 398 MW non-conventional.

Table 6.6 : Estimated Availability of Power and Energy (2015-16 to 2018-19)

Year	Total Capacity (MW)	Estimated Peak Availability at State Periphery (MW)	Estimated Energy Availability at State Periphery (MU)
2015-16	4970.70	3494	27780
2016-17	5916.03	4510	36684
2017-18	8071.73	6093	47292
2018-19	10225.93	8093	63299

Source : Department of Energy, GOB

However, even with the availability of additional generation capacity, the state would still be facing a shortfall in terms of peak demand during 2015-16 (15.02 percent) to 2018-19 (7.76 percent). There will be a surplus in energy availability during 2015-16 (1.4 percent) and 2018-19 (2.5 percent), whereas during 2016-17 and 2017-18 the state will be facing a shortfall of about 4 percent in terms of energy availability (Table 6.7).

Table 6.7 : Projected Surplus/ Deficit in Power and Energy (2015-16 to 2018-19)

Power Supply Position	2015-16	2016-17	2017-18	2018-19
Estimated Peak Requirement with 50% agriculture load (***) only (MW)	4112	5588	7088	8774
Estimated Peak Availability as per State Generation Plan (MW)	3494	4510	6093	8093
Peak demand Surplus(+)/ Deficit(-) (MW)	(-) 618	(-) 1078	(-) 995	(-) 681
Peak demand Surplus/Deficit (Percentage)	(-) 15.02	(-) 19.29	(-) 14.04	(-) 7.76
Estimated Energy Requirement at State Periphery (MU)	27398	38100	49215	61750
Estimated Energy Availability at State Periphery as per State generation Plan (MU)	27780	36684	47292	63299
Energy Surplus(+)/ Deficit(-) (MU)	382	(-)1416	(-) 1923	1549
Energy Surplus (+)/ Deficit (-) (Percentage)	1.39	(-) 3.72	(-) 3.91	2.51
(***) -50% agriculture load will be supplied in rotation				

Source : Department of Energy, GOB

6.3 Institutional Structure of Power Sector

In April, 1958, the Bihar State Electricity Board (BSEB) was originally constituted under Section 5 of the Electricity (Supply) Act, 1948 and was mandated for the management of generation, transmission, distribution and other electricity-related activities in Bihar. Under the new Bihar State Electricity Reforms Transfer Scheme 2012, the BSEB has been unbundled into five companies in November, 2012 — (i) Bihar State Power (Holding) Company Limited (BSPHCL), (ii) Bihar State Power Generation Company Limited (BSPGCL), (iii) Bihar State Power Transmission Company Limited (BSPTCL), (iv) South Bihar Power Distribution Company Limited (SBPDCL) and (v) North Bihar Power Distribution Company Limited (NBPDCCL). The responsibilities of the newly-formed companies are briefly described below.

Bihar State Power (Holding) Company Limited (BSPHCL) : This Company will own shares of the newly-incorporated, reorganized four companies — Bihar State Power Generation Company Limited, Bihar State Power Transmission Company Limited, South Bihar Power Distribution Company Limited, and North Bihar Power Distribution Company Limited. It is vested with the assets, interest in property, rights and liabilities of the erstwhile Bihar State Electricity Board (BSEB). The Company will primarily be an investment company. It will co-ordinate the activities other companies, handle disputes and provide all necessary support to them.

Bihar State Power Generation Company Limited (BSPGCL) : This company is responsible for coordinating and advising other companies and concerns, including subsidiaries, engaged in the generation of electricity. The coordination and advisory roles include all matters concerning the construction, operation and maintenance of generating stations and associated facilities. It is also responsible for procuring fuel and its transportation to various sites and settling pending disputes.

Bihar State Power Transmission Company Limited (BSPTCL) : This company is responsible for the transmission of electricity and is vested with the transmission assets, interest in property, and rights and liabilities of the erstwhile BSEB. Besides planning and coordination activities, this company is expected to develop an efficient system of intra-state transmission lines for electricity, connecting load centres to the generating stations.

North and South Bihar Power Distribution Companies Limited (NBPDCCL and SBPDCL): These two companies undertake the activities of distribution to all consumers, trading of electricity, and implementation of rural electrification schemes — under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), special Backward Region Grant Fund (BRGF), Restructured Accelerated Power Development and Reform Programme (R-APDRP), State Plan, and schemes funded by Asian Development Bank (ADB), the last one being an Externally Aided Project (EAP). The introduction of open access in distribution as per the Electricity Act 2003 and the directions of the regulator is also the responsibility of these two companies. They also tender, finalise and execute Power Purchase Agreements (PPA) and other agreements for sale or purchase of electricity.

The allocation of fund for BSPHCL and its subsidiary companies, Bihar Renewable Energy Development Agency (BREDA) and Bihar State Hydroelectric Power Corporation (BSHPC) was Rs. 3110.92 crore in 2013-14, which increased to Rs. 4189.92 crore in 2014-15. The outlay for 2015-16 is Rs. 3663.49 crore. The breakup of this amount under various heads is given in Table 6.8.

Table 6.8 : Allocation of Funds under BSPHCL

(Rs. crore)

Years	BRGF	State Plan						BSHPC (RIDF)	EAP	Total
		BSPHCL	Genera- tion	Transmi- ssion	Distribu- tion	BREDA	BSHPC			
2013-14	2125.00	367.346	25.00	25.00	215.00	50.00	15.00	63.57	225.00	3110.92
2014-15	1650.00	369.214	61.68	661.00	1099.18	20.00	38.93	69.92	220.00	4189.92
2015-16	2274.00	64.430	181.01	448.99	486.00	60.00	15.00	67.80	66.26	3663.49

Source : Department of Energy, GOB

6.4 Distribution Companies

The distribution is an extremely important component of the whole electricity supply chain, as this is the only arm that generates revenue. This revenue enables the state government to improve the entire supply chain, by purchasing more electricity from the central sector. Thus, a major challenge of the power sector reforms lies in the efficient management of the distribution sector. The distribution system in Bihar is being served by two distribution companies — North Bihar Power Distribution Company Limited (NBPDC) and South Bihar Power Distribution Company Limited (SBPDCL). These companies are serving more than 70 lakhs of electricity consumers.

At the end of October 2015, the distribution network in Bihar consisted of 1,33,491 circuit km low tension lines, 11 kV lines with 73,359 circuit km network, and 33 kV lines with 9815 circuit km network. There are 641 power substations (33/11 kV) and 1,00,842 distribution substations (11/0.4 kV).

Table : 6.9 : Category-wise Number of Effective Consumers (As per billing data)

Year	Domestic	Commercial	Industrial (LT)	Industrial (HT)	Public Lighting	Traction	Agriculture	Public Water Works	Total
Category-wise Number of Consumers									
2012-13	3773077 (91.30)	279879 (6.77)	18816 (0.45)	1317 (0.03)	399 (0.01)	17 (neg.)	57838 (1.39)	1098 (0.03)	4132441 (100.0)
2013-14	3900733 (91.89)	273466 (6.44)	15851 (0.37)	1422 (0.03)	389 (0.01)	19 (neg.)	51989 (1.2)	1192 (0.03)	4245061 (100.0)
2014-15	5174585 (92.45)	346375 (6.19)	19599 (0.35)	1582 (0.03)	511 (0.01)	19 (neg.)	52980 (0.94)	1302 (0.02)	5596953 (100.0)

Source : Department of Energy, GOB

Note : Figures in bracket indicate percentage shares.

The two distribution companies are already implementing several schemes for expanding and strengthening their distribution networks. These ongoing schemes include transformer replacement, procurement of new transformers, replacement of old conductors of existing high tension (HT) and low tension (LT) lines, and construction of new HT and LT lines, Power System Stabilisers (PSS) and bays.

During the recent years, the demand for electricity has been increasing continuously in the state, because of both fast economic growth and the growth of population. This has resulted in high AT&C (Aggregate Technical and Commercial) loss, specially due to large scale rural electrification. In 2014-15, it was as high as 43.82 percent. Earlier, it was even higher — 46.33 percent (2013-14) and 54.63 percent (2012-13). The new distribution companies have been trying to address this issue by improving the billing and collection system, along with the metering of all consumer connections. Energy accounting and auditing at feeders and distribution transformers (DT) are essential for reducing these losses, and the distribution companies have already started this exercise.

6.5 Operational and Financial Status

The generation and purchase of power (net of central transmission loss) in Bihar increased from 10,883 MU in 2010-11 to 17,418 MU in 2014-15. With increase in sales, the revenue collection has increased. The cost coverage has also risen from 69 percent in 2010-11 to about 89 percent in 2014-15, thus bringing down financial loss from 31 percent to 11 percent. The financial status of BSPHCL is described in Table 6.10.

Table 6.10 : Financial Status of Power Sector

Item	2010-11	2011-12	2012-13	2013-14		2014-15	
				NBPDCL	SBPDCL	NBPDCL	SBPDCL
Generation and Purchase (MU)	10883	11966	12614	5380.87	8620.56	7029.41	10388.18
Sales (MU)	6139.14	6694.93	7213.00	3604.82	4636.66	5003.92	5814.24
Losses (Percentage)	43.59	44.05	42.82	33.01	46.21	28.82	44.03
Average Revenue (Rs./Unit)	3.87	4.64	4.58	4.17	4.86	4.19	4.37
Sale of Power (Rs. crore)	2376.00	3109.00	3307.00	1503.66	2254.77	2095.00	2540.28
Total Income (including subsidies) (Rs. crore)	3617.61	5421.00	6480.56	2723.69	4190.81	3559.74	4610.37
Total Cost (Rs. crore)	5240.47	7798.78	7707.55	2797.95	4459.50	3856.53	5357.92
Cost Coverage (Total Income/Total cost) (Percentage)	69.03	69.51	84.08	97.35	93.97	92.30	86.05
Financial Loss (Percentage)	30.97	30.49	15.92	2.65	6.03	7.70	13.95

Source : Department of Energy, GOB

6.6 Programmes for Electrification and Distribution Schemes

Three important programmes of the central government for expanding the coverage of electricity supply are — Integrated Power Development Scheme (IPDS) (Earstwhile Restructured Accelerated Power Development and Reforms Programme — R-APDRP), Din Dayal Upadhyay

Gram Jyoti Yojana (DDUGJY) (Earstwhile Rajiv Gandhi Grameen Vidyutikaran Yojana - RGGVY), and Special Plan (Backward Region Grant Fund). The progress of these programmes are presented below:

Integrated Power Development Scheme (IPDS)

The scheme of R-APDRP, as approved by the central government for continuation in Twelfth and Thirteenth Plans, has been subsumed in the newly launched Integrated Power Development Scheme (IPDS) in December, 2014. It has several components — IT enablement of distribution sector, strengthening of distribution network for completion of targets, strengthening of sub-transmission network in urban areas, and metering of distribution transformer/feeders/consumers in the urban areas.

Under Part-A of the erstwhile R-APDRP scheme, the work in 67 towns (excluding 4 franchise towns) is under progress. The distribution system is being strengthened under Part-B of the scheme in 60 towns and under the ADB-funded scheme in 7 towns. The work in 7 towns under the ADB-funded scheme is on the verge of completion. The aim is to provide real-time monitoring and control, minimizing loss, balancing load, and improving voltage profiles. The details of capital expenditure under R-APDRP are presented in Table 6.11.

Table 6.11 : Capital Expenditure of R-APDRP

Project Component under R-APDRP	Outlay (Rs. crore)
R-APDRP—Part A	253.68
R-APDRP—Part B	1155.21
R-APDRP—SCADA	36.00
Total	1444.89

Source : Department of Energy, GOB

Village Electrification

The central government has launched Deen Dayal Upadhyaya Gram Jyoti Yojna (DDUGJY) in December, 2014 with the following objectives :

- (i) Separation of agriculture and non-agriculture feeders, facilitating judicious restoring of supply to agricultural and non-agriculture consumers in the rural areas.
- (ii) Strengthening and augmentation of sub-transmission and distribution infrastructure in rural areas, including metering of distribution transformers/feeders/consumers.
- (iii) Rural electrification for completion of the targets laid down under RGGVY under Twelfth and Thirteenth Plans by carrying forward the approved outlay of RGGVY to DDUGJY.

The scheme of RGGVY as approved by the central government for continuation in Twelfth and Thirteenth Plans has been subsumed in this scheme as a separate rural electrification component.

Bihar, with 88.7 percent of its population living in rural areas (2011 census), remains the most ruralised state in India, the national average being around 68.9 percent. Thus, improving connectivity of rural areas to the power grid is of great importance. In view of this, the rural electrification work is being carried out in all the 38 districts of the state under DDUGJY (erstwhile RGGVY). The progress of Rural Electrification under DDUGJY is presented in Table 6.12.

Table 6.12 : Progress of Work under DDUGJY (Erstwhile RGGVY)

(Figures for no. of villages)

Agencies / Targets / Achievements	Tenth Plan	Eleventh Plan		Twelfth Plan	Total
		Phase I	Phase II		
Electrification of Unelectrified Villages (EUV)					
Target					
NBPDCL	5954	4118	384	1450	11906
SBPDCL	10627	697	765	345	12434
Total	16581	4815	1149	1795	24340
Achievements					
NBPDCL	5954	4103	384	452	10893
SBPDCL	10627	697	744	284	12352
Total	16581	4800	1128	736	23245
Intensive Electrification of Partially Electrified Villages (PEV)					
Target					
NBPDCL	-	5864	3510	14511	23885
SBPDCL	-	106	9435	7547	17088
Total	-	5970	12945	22058	40973
Achievements					
NBPDCL	-	5860	1670	1356	8886
SBPDCL	-	106	3041	258	3405
Total	-	5966	4711	1614	12291

Source : Department of Energy, GOB

Special Plan (BRGF)

The Backward Regions Grant Fund (BRGF) of the central government is designed to redress regional imbalances in development. This is a fully funded scheme of the central government. The fund provides financial resources for supplementing and converging existing developmental inflows into identified backward districts. It aims to bridge critical gaps in local infrastructure and other development requirements that are not being adequately met through existing inflows. The fund will facilitate participatory planning, decision making, and implementation and monitoring, reflecting the local felt needs. It also helps to improve the performance of critical functions by the state government. The scheme is divided into four parts — Phase-I, Phase-II, Phase-II (Part-C) and Rural Electrification (RE). The estimated cost of the above schemes is Rs. 5818.19 crore. Till November 2015, the expenditure incurred is around Rs. 1856.85 crore.

In 2014-15, there were about 160.50 lakhs un-electrified households in the state — 157.54 lakhs in the rural areas and 3.06 lakhs in urban areas. For 157.54 lakhs un-electrified rural households, a target has been set to electrify all those households by extending supply from the grid in a phased manner by 2018-19. Keeping in view of the fast growth of households in the urban areas due to migration from rural to urban, a target has been set to release connections to 1.58 lakh households in 2015-16, and 1.47 lakh households in 2016-17. Thus, by the end of 2016-17, every urban household will be electrified.

6.7 Transmission

Power is supplied to various categories of consumers through a transmission network, which also involves the transformation of high voltage power to lower voltage. The transmission network serves as an important link between the generation and distribution of electricity. The challenges pertaining to the transmission process are, thus, mostly related to the growing needs of the other two segments — generation and distribution. To meet the growing demand of power, a robust and reliable transmission network is required, for both inter-state and inter-state transmission. The existing transmission system is, therefore, being strengthened with proper planning to cater to the demand for 24 hour availability of power by all types of consumers.

Presently, about 9307 circuit km EHV (Extra High Tension) transmission line, 98 grid sub-stations with total transformation capacity of 6700 MVA and evacuation capacity of 5360 MW comprise the its transmission system in Bihar. The projection for 2017-18 is 13,900 circuit km transmission line, 152 grid sub-stations with 12,830 MVA at 220/132 KV level and 13,020 MVA at 132/33 KV transmission capacity. The required capacity for 24 hour power supply for the period 2015-16 to 2018-19 has been projected, as presented in Table 6.13. The plan of action to meet the projected demand in 2017-18 and 2018-19 has been shown in following Table 6.14. The power availability during the peak period was 2831 MW in 2014-15, which increased to 3459 MW in October 2015, implying an increase of 23 percent.

Table 6.13 : Projected Required Capacity for Power (2015-16 to 2018-19)

Demand / Capacity	2015-16	2016-17	2017-18	2018-19
Peak Demand (MW)	4112	5588	7088	8774
Transformation Capacity needed to meet Peak Demand (MW)	7710	10477.5	13290	16452
Available Capacity (MW) (MVA) at 220/132/33 KV level	8999/11870	11230/12620	12830/13020	12830/13020

Source : Department of Energy, GOB

Table 6.14 : Plan of Action for Strengthening Transmission

Year	Nos. of New Grid Sub-Stations	New Transmission Lines (Circuit km)
2017-18	<ul style="list-style-type: none"> ▪ 400/220 kv-01 No. ▪ 220/132/33kv-03 Nos. 	<ul style="list-style-type: none"> ▪ 400 kv-150 ▪ 220 kv-360 ▪ 132 kv-240
2018-19	<ul style="list-style-type: none"> ▪ 400/220 kv-04 Nos. ▪ 220/132/33 kv-10 Nos. ▪ 132/33 kv-10 Nos. 	<ul style="list-style-type: none"> ▪ 400 kv-600 ▪ 220 kv-1200 ▪ 132 kv-800

Source : Department of Energy, GOB

6.8 Generation

The state government has several plans for improving the power scenario of the state. To achieve the objectives envisaged in the document '24x7 Power to All' and National Power Policy, the state government has initiated actions for extensive expansion of generation capacity through coal based power plants, hydro power generation and renewable energy generation. The BSPGCL has embarked on an ambitious plan to add substantial generating capacity in the next few years. It is targeting to achieve a total generating capacity of 1330 MW by 2016-17, 3310 MW by 2017-18 and 7270 MW by 2021-22. In order to turn its vision into reality, BSPGCL has entered into Joint Ventures with reputed companies in the power sector, like National Thermal Power Corporation (NTPC) and National Hydro Power Corporation (NHPC).

The total generation capacity availability of power as on March 2015 for the state was 3704.63 MW. Out of this, 83.5 percent is from coal based thermal power, 14.12 percent from hydro power, and the balance 2.3 percent from renewable energy sources. In terms of ownership, central sector has the largest share of 77.9 percent, followed by the private sector/IPPs (14.7 percent), and state sector (7.4) percent. The details of existing generating capacity in Bihar are shown at in Table 6.15.

Table 6.15 : Existing Generation Capacity (March 2015)

(Figures in MW)

Ownership / Sector	Thermal				Nuclear	Hydro (Renewable)	RES (MNRE)	Grand Total
	Coal	Gas	Diesel	Total				
State	220	0	0	220	0	55	0	275
Private/ IPPs	460	0	0	460	0	0	86	546
Central	2414.10	0	0	2414.10	0	469.53	0	2883.63
Total	3094.10	0	0	3094.10	0	524.53	86	3704.63

Note : RES = Renewal Energy Sources; MNRE = Ministry of New and Renewable Energy;
IPP = Independent Power Producers

As per the Generation Plan, capacity of 6521.30 MW is expected to be added by 2018-19, either from new projects, or from those under construction, or from those under renovation and modernisation (R&M). Out of this, about 312 MW shall be from non- conventional energy sources and 6209.30 MW from conventional sources. As such, the total available capacity for Bihar by the end of 2018–19 is expected to be 10,226 MW — 9828 MW conventional and 398 MW renewable.

The present status of the three generating units that remained in Bihar after the bifurcation of the state in 2000 is as below :

(1) Barauni Thermal Power Station (BTPS)

Although BTPS has 7 different units, 5 of them have already run through their working life and are not in service anymore. The renovation and modernization work of remaining two units of 110 MW each is in progress. The construction works of two new units of 250 MW each is also going on under the extension programme. With consistent efforts of the state government, the coal linkage and environmental clearance have been obtained for these two new units.

(2) Kanti Bijlee Utpadan Nigam Limited (KBUNL)

The KBUNL is a joint venture of NTPC and BSPGCL, having equity partnership ratio of 65:35. It has two units of 110 MW each. The power production has started in both the units after renovation and modernization last year. The construction work of two new units of 195 MW each is also going on under the extension programme.

(3) Kosi Hydrel Power Station (KHPS)

The Kosi Hydro Power Station (Kataiya), Birpur, consisting of 4 units of 4.8 MW each was commissioned during 1970-78. This project was handed over to Bihar State Hydroelectric Power Corporation (BSHPC) in November, 2003. The renovation work of 3 out of 4 units has been completed and power generation has started.

At present, the work is in progress for four more generating units in Bihar. On completion of all these projects, the dependence of Bihar on the central sector for power will be lessened. The details of these new projects are presented below:

- (1) Nabinagar Stage-1 Plant : This project is located in Aurangabad district. For this power project, the construction works of three units of 660 MW each in progress. Due to sustained efforts of the state government, coal linkage has been allotted by the Ministry of Coal of the central government for starting own production in the state.
- (2) Power Projects in Buxar, Bhagalpur and Lakhisarai : The agreement has been signed with Satluj Hydro Electric Corporation for the construction of greenfield power projects at Chausa (Buxar), having two units of 660 MW each. In addition, agreement has also been signed with NHPC and NTPC for the construction of two greenfield thermal power plants

of 660 MW each. The plant in Pirpainti (Bhagalpur) will be constructed by NHPC and that in Kajara (Lakhisarai) by NTPC.

- (3) Ultra Mega Power Project (Banka) : A proposal has been sent for the establishment of a power project in Banka (approximately 4000 MW), for which 2500 acres of land has been identified. The Central Water Commission has given consent for 120 cusecs of water from the Ganga river. The Power Finance Corporation (PFC) has incorporated two Special Purpose Vehicles (SPV) for carrying out the pre-award project activities. The Ministry of Power of the central government has allotted Barhat and Dhulia Nala Coal Block having a reserve of 731 MT. 2000 MW has been allocated to Bihar.

Table 6.16 : Details of Existing and Planned Generation Units

Thermal Plan	2014-15 (Present Status)	2015-16 (Under Progress)	2016-17 (Under Progress)	2017-18 (Under Progress)	2018-19	By 2022 (Upcoming Projects)	Beyond 2022
KANTI TPP (2x110 MW) (2x195 MW)	220 MW		390 MW U# 3, Oct 16 and U#4, Dec.' 2016 (195 MW each)	---	---	---	---
BARAUNI TPP (2x110 MW) (2x250 MW)	---	110 MW U# 7 Feb.' 2016	610 MW U# 8 & 9 Dec' 2016 (250 MW each) U# 6 June 2016 110 MW	---	---	---	---
NABINAGAR TPP (3x660 MW) 1980 MW	---	---	---	1980 MW U# 1 May- 2017 U# 2 Sep' - 2017 U# 3 Mar' - 2018	---	---	---
BUXAR TPP (2x660 MW) SJVN	---	---	---	---	---	MoU signed on 20.11.15 1320 MW	---
BANKA UMPP (4000 MW)	---	---	---	---	---	---	4000 MW
Total Installed Capacity	220 MW	330 MW	1,330 MW	3,310 MW	3,310 MW	4630 MW	8,630 MW

Source : Department of Energy, GOB

Note : Memorandum of Understanding (MoU) for Pirpainti Thermal Power Project (PPP) (2×660MW) with NHPC and for Lakhisarai Thermal Power Project (TPP) (2×660MW) with NTPC are to expire on 22.02.2016.

6.9 Recent Developments in Power Sector

The state government, as already mentioned before, has prepared a document '24x7 Power to All', presenting a roadmap for the development of power sector. Some of the recent developments under this roadmap have been :

- (a) The idea of new service connection by organizing special camps in September, October and December 2014 and in February and August 2015 have resulted in 7.78 lakhs of new service connections.
- (b) Adequate number of engineers (at Executive, Assistant and Junior levels) have been posted at district level for proper monitoring of projects.
- (c) For revenue monitoring on day to day basis, monthly training programme for field officers are being organized.
- (d) For facilitation of new connections and redressal of grievances regarding high tension (HT) connections, online facility has been started.
- (e) For payment of electricity bills, provision has been made for alternatives like ATM, Sahaj Vasudha Kendra, ATP Machine, Net Banking, Mobile Phone and Grameen Banks. In addition, services of mobile vans have also been provided to the consumers for bill payment at their doorsteps.
- (f) A '24x7 Fuse Call Centre' has been established for providing uninterrupted power supply and redressal of consumer grievances.
- (g) Revenue-Linked Supply scheme has been launched in four districts of the state for increasing the revenue. Under this scheme, power would be supplied in proportion to the revenue obtained.

6.10 Bihar Renewable Energy Development Agency (BREDA)

Most of Bihar's installed generation capacity is concentrated in thermal power plants. This leads to a concern not only about the clean generation of electricity, but also puts a fiscal burden on the state, given that the prices of coal may be very volatile. Thus, aside from promoting hydel power projects, the state government has also created an agency called Bihar Renewable Energy Development Agency (BREDA), which is responsible for the development of projects that would use non-conventional energy sources for production of electricity. The state government provides funds to BREDA for expenditure on subsidies for the schemes and also for the expenditure on establishments.

Table 6.17 : Achievements of BREDA

Schemes	Physical Achievement	Financial Outlay
2012-13		
A. Solar Photovoltaic Scheme		
Distribution of Solar Lanterns (across all districts)	2000 nos.	Rs. 0.30 crore
Distribution of Solar Lanterns (across all districts amongst SC/ST)	4000 nos.	Rs. 0.60 crore
B. BEE (Bureau of Energy Efficiency) Schemes		
LED street light installation in various places in Patna by Patna Nagar Nigam	240	Rs. 71.88 lakh
LED bulbs and street lights in Nepura, Pilkhi, Sarilchak and Jahanabad (Nahub) villages	1152 nos.	Rs. 13.14 lakh
2013-14		
A. Solar Photovoltaic Scheme		
Solar Water Pumping Systems installation under Bihar Saur Kranti's irrigation scheme	493 nos.	Rs. 16.3 crore
Solar electrification of Honorable Chief Minister's House, Janata Durbar, and residential office	100 Kw	Rs. 4.50 crore
Distribution of Solar Lanterns (across all districts)	5000 nos.	Rs. 0.99 crore
Distribution of Solar Homelights	4900 nos.	Rs. 2.94 crore
B. BEE (Bureau of Energy Efficiency) Schemes		
LED street light installation in various places in Patna by Patna Nagar Nigam	366 nos.	Rs. 30.52 crore
LED street light installation in various places at Bodh Gaya by Bodh Gaya Nagar Panchayat	200 nos.	Rs. 16.68 crore
2014-15 (Upto September, 2015)		
A. Solar Photovoltaic Scheme		
Solar Water Pumping Systems under <i>Mukhyamantri Naveen & Naveekarniya</i> irrigation scheme	989 nos.	Rs. 29.39 crore
Solar electrification at Buxar Open Jail	100 kW	Rs. 1.55 crore
Solar electrification at Abhilekh Bhavan	50 kW	Rs. 0.775 crore
Solar electrification at Vidyut Bhavan	50 kW	Rs. 0.67 crore
Solar Electrification at Chief Justice House	40 kW	Rs. 0.62 crore
Solar electrification at District Collectorate, Hospital, Guest House of 25 kWp	78 nos.	Rs. 35.33 crore
Solar electrification at District Collectorate, Hospital, Guest House of 8-25 kWp	24 nos.	Rs. 11.397 crore
Solar Electrification at BBRA university, Muzaffarpur	100 kW	Rs. 1.55 crore
Solar Electrification at JP University, Chapra	100 kW	Rs. 1.55 crore
Solar Electrification at Apna Ghar, Patna	50 kW	Rs. 0.59 crore
B. BEE (Bureau of Energy Efficiency) Schemes		
LED street light installation in various places in Patna by Patna Nagar Nigam	400 nos.	Rs. 0.32 crore
LED street light installation in various places in Patna, Biharsarif, Darbanga, and Gaya	1023 nos.	Rs. 1.36 crore

Source : Department of Energy, GOB

6.11 Bihar State Hydroelectric Power Corporation Limited

Aside from thermal power, Bihar also has potential for generating power from water resources and, presently, this is being exploited to some extent. The Bihar State Hydroelectric Power Corporation Limited (BSHPC) was established to oversee expansion of hydroelectric power projects in the state. During the Tenth Plan, BSHPC started exploring possibilities for major hydel projects, besides its earlier mandate for minor hydel projects, There are 13 minor hydel projects that are currently operational in the state, with a total installed capacity of 54.3 MW. Presently, BSHPC is also engaged in exploring the possibilities of more minor hydel power projects in the state. There are 17 such schemes where the exploration work is in progress

CHAPTER VII

RURAL DEVELOPMENT

The agenda of rural development is very important for the Indian economy, since nearly 70 percent of its population live in rural areas, earning their livelihood mainly from agriculture. For Bihar, this agenda is even more important. No less than 90 percent of Bihar's population live in rural areas. The challenge of development of the rural economy assumes greater significance in Bihar, as the density of population in the state is very high, putting enormous pressure on its land resources. The rural Bihar also sends a large number of migrants, either within or outside the state, underlining the limited scope of employment in the rural economy.

For rural development, the state government has several programmes like extending irrigation network, improving road connectivity of the rural areas, increasing the availability of power, and a number of schemes to help the farmers to improve the technological base of agriculture. Some of these programmes to strengthen the rural economy are also supported by the central government. In addition, the state government has also made several interventions in the field of health and education to promote social development in the rural areas. All these programmes are aimed at strengthening the rural economy at one hand and promoting human development in the rural area. This chapter, however, is focused on some of the rural development programmes that directly help the rural population. These programmes include — Bihar State Rural Livelihood Mission, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Indira Awas Yojana (IAY) and Public Distribution System (PDS). Later, the chapter also presents the functioning of Panchayati Raj Institutions (PRI), Land Distributions, Disaster Management System, and Environment.

7.1 Poverty

In order to attain sustainable development, the vicious circle of poverty should be overpowered by economic drivers. For measuring poverty, the Planning Commission has adopted the Tendulkar Committee estimates which, apart from the caloric consumption, include expenditure on health and education as part of expenditure on non-food items.

Table 7.1 presents the poverty ratios in Bihar and India, for the years 2004-05 and 2011-12, as estimated by the Tendulkar Committee. The poverty ratio for Bihar is 34.1 percent for rural and 31.2 percent for urban households in 2011-12, implying an overall poverty ratio of 33.7 percent. These poverty ratios are much higher than that for India. From the table, it is also seen that, between 2004-05 and 2011-12, the poverty ratio declined by 20.7 percentage points for Bihar, as against 15.3 percentage points for all-India. The pace of reduction of rural poverty has been faster than that of the urban poverty, in both Bihar and India. Although Bihar accounts for 8.6 percent of India's population, its share in the poverty-stricken population is much higher at 13.3 percent (Table A 7.1) (Appendix). A second indicator of poverty is the average Monthly Per Capita Expenditure (MPCE), collected by National

Sample Survey Organisation (NSSO). The 66th round of the NSSO survey reveals that, in 2011-12, the MPCE in rural areas in India is Rs 1287 and, for urban areas, it is Rs. 2477 (Table 7.2). The corresponding figures for Bihar is Rs 970 for rural and Rs 1397 for urban areas. In fact, the figures for Bihar is the lowest among all the major states. For rural areas, the MPCE in Bihar is only three-fourth of the all-India average; for urban areas, the gap is wider, the Bihar figure being a little more than half of the all-India average.

Table 7.1 : Poverty Ratio of Bihar and India

State	2004-05			2011-12			Reduction in Poverty Ratio (in % Point)		
	Rural	Urban	Combined	Rural	Urban	Combined	Rural	Urban	Combined
Bihar	55.7	43.7	54.4	34.1	31.2	33.7	21.6	12.5	20.7
India	42.0	25.5	37.2	25.7	13.7	21.9	16.3	11.8	15.3

Source : Planning Commission, GoI.

Table 7.2 : Average Monthly Per Capita Expenditure (2011-12)

(Rs.)

	Rural	Urban
Bihar	970.4	1396.7
All-India	1287.2	2477.2

Source: NSSO 66th round

7.2 Rural Development Programmes

To alleviate poverty in the rural areas, the state government is presently implementing a number of rural development programmes. In the following sections, an attempt is made to review the implementation of important rural development programmes in the state, which are expected to generate additional income and expand livelihood options for its rural population.

Bihar State Rural Livelihoods Mission (JEEVIKA)

JEEVIKA is an initiative of the state government for poverty alleviation. It aims at social and economic empowerment of the rural poor by improving their livelihoods through developing institutions of the women, like Self-Help Groups (SHGs) and their federations to enable them to access better services and obtain credit for creating self-employment opportunities. The Ministry of Rural Development of the central government had launched the National Rural Livelihood Mission (NRLM) by restructuring Swarnajayanti Gram Swarozgar Yojana (SGSY), effective from April, 2013. The Bihar Rural Livelihoods Promotion Society (BRLPS) is functioning under the overall framework of NRLM, and implementing the JEEVIKA scheme.

By the end of September, 2015, 47 lakh poor households were mobilised into 4.40 lakh Self-Help Groups (SHGs). Out of these SHGs, 60 percent were federated into 21,529 Village Organisations (VO). These VOs were then amalgamated into 262 Cluster Level Federations. The project emphasizes on providing financial support to the SHGs by opening of saving

Table 7.3 : Progress of SHGs

Items	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
No. of SHGs formed	15542	16627	24193	81620	207993	440489
No. of SHGs with bank account	16497	14054	16106	37556	116783	271377
No. of SHGs credit linked with banks	8007	14555	20219	23527	51403	148722
Bank credit (Rs. crore)	39.6	76.4	104.6	149.3	283.5	809.5

Note: The figures for 2015-16 are as on September, 2015

Source: Jeevika, GOB

Table 7.4 : Extent of Livelihood Related Activities by SHGs

Activities	Number
Farms	
Number of farmers who undertook paddy cultivation	201702
Number of farmers who undertook SWI (System of Wheat Intensification)	193884
Number of farmers engaged in Vegetable Cultivation	141824
Number of farmers engaged in Kitchen Gardening	26563
Number of farmers producing Mentha Oil	625
Number of farm-based Producer Groups (PG)	982
Off- Farms	
Number of Mother Units opened (Poultry)	105
Number of households linked with poultry intervention	34704
Number of Producer Groups (PG) formed (Dairy)	446
Number of households linked with dairy	34081
Non-Farm	
Number of Producer Groups (PG) formed for non-farm products (sujani, sikki, madhubani, agarbatti etc.)	260
Number of households linked with non-farm PGs	14780
Skill Training	
Number of young people trained	68683
Number of young people placed or self -employed	51579
Vulnerability Reduction	
Number of Village Organisation (VO) participating in Food Security Intervention	8058
Number of Village Organisation (VO) participating in Health Risk Intervention	7462
Number of ANNAPURNA Centres (Community Health and Nutrition Care Centre)	203
Number of pregnant/lactating women benefited through ANNAPURNA	17081

Source : Jeevika, GOB

bank account in different banks and ensuring their credit linkage. Till date, 1.49 lakh SHGs have been linked with banks, and they were able to obtain a total loan of Rs. 809.49 crore (Table 7.3). These SHGs have undertaken a number of activities to promote self-employment on farms or off-farms or non-farm (Table 7.4). In addition, they have also arranged for extensive skill training. Till date, 68.7 thousand young people have been trained to acquire various skills, and 51.6 thousand of them have also been able to find either self-employment or wage employment. Yet another activity of these SHGs is participation in Food Security Interventions or Health Risk Interventions. They also organise ANNAPURNA centres which cater to community health and nutrition care.

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

In Bihar, the problem of employment insecurity is very serious because of the skewed land distribution in rural areas, resulting in a mass of agricultural labourers and marginal farmers in need of additional employment opportunities. The MGNREGS seeks to enhance the livelihood security of the households in rural areas by guaranteeing at least 100 days of wage employment in a year to every household whose adult members volunteer to do unskilled manual work. Simultaneously, the scheme is designed to create community assets for the benefit of the rural society. This is expected to decrease distress migration and have multiplier effect on the rural economy. The MGNREGS has become a powerful instrument for inclusive growth in rural areas through its impact on livelihood security and social protection.

The information about the performance of the programme is presented in Table 7.5. As regards the number of job cards issued, it has been very high, throughout the period of 2010-11 to 2014-15. In 2014-15, it was 131.22 lakh. However, the number of households provided with employment has been decreasing over the years and, in 2014-15; it was only 10.36 lakhs. To the advantage of the women workers, their share in total employment has been above 25 percent in all the years; in 2014-15, this share was as high as 37.3 percent.

Table 7.5 : Performance of MGNREGS

Year	2010-11	2011-12	2012-13	2013-14	2014-15
No. of Job Cards Issued (lakh)	130.5	133.8	133.5	131.9	131.2
No. of households provided with employment (lakh)	46.9 (35.9)	26.8 (20.1)	24.7 (18.5)	20.6 (15.6)	10.4 (7.9)
No. of Households obtaining 100 days of employment (lakh)	2.6 (5.6)	1.4 (5.1)	1.6 (6.3)	1.2 (6.0)	0.3 (3.0)
Employment generated (lakh persondays)	1597.5	866.4	965.4	862.2	352.7
Percentage share of women in total employment generated	29.6	28.2	29.9	35.0	37.3
Average employment per household (persondays)	34.1	32.3	39.2	41.9	34.1
Number of completed works	83593	54589	64846	104832	114425
Fund utilized (percentage)	82.7	65.0	82.9	81.8	74.4
No. of accounts opened (in lakh)	102.6	107.6	110.7	111.0	49.3

Note: Figures in parentheses denote percentages with respect to the previous row

Source: Department of Rural Development, GOB

The district-wise details about the implementation of MGNREGS is presented in Table A 7.2 (Appendix). In that table, one can observe a wide variation across the districts in the performance of MGNREGS. In 2014-15, the maximum number of job cards were issued in Muzaffarpur (6.28 lakhs), followed by East Champaran (5.96 lakhs) and Gaya (5.71). Less than one lakh job cards were issued in small districts of Sheohar (0.76 lakhs), Sheikhpura (0.90 lakhs) and Arwal (0.92 lakhs). The SC households represent 26.3 percent of the households with job cards. The percentage of households demanding employment was the highest in Katihar (21.6 percent), followed by Sitamarhi (18.3 percent); this figure was the lowest in Vaishali (5.2 percent). Nalanda ranked first (9.3 percent) as regards providing 100 days of employment to those who had demanded it, followed by Kaimur (7.3 percent), and Bhagalpur (6.3 percent). The districts reporting the highest participation of women were — Begusarai (57.9 percent), Darbhanga (47.4 percent) and Saharsa (46.7 percent), each one recording more than 40 percent participation of women in 2014-15. Less than 25 percent participation of women has been registered in Rohtas (21.0 percent), Kaimur (23.8 percent) and Siwan (24.5 percent). There is also wide inter-district variation as regards the total employment generation in 2014-15. Gaya (24.47 lakhs mandays) is the best district in employment generation, followed by Nalanda (17.93 lakhs mandays) and East Champaran (16.73 lakhs mandays). The two districts with the lowest employment generation in 2014-15 were Munger (2.23 lakhs mandays) and Arwal (2.33 lakhs mandays). The district-wise financial progress under MGNREGS is shown in Table A 7.3 (Appendix). Saharsa (99.7 percent) is the best district in the utilisation of fund in 2014-15. Lakhisarai (92.0 percent) and Jamui (91.7 percent), also utilized more than 90 percent of the MGNREGS fund.

Table 7.6 : Completed Works under MGNREGS

Year / Categories	2010-11	2011-12	2012-13	2013-14	2014-15
Water conservation	11424 (13.7)	6059 (11.1)	7009 (10.8)	6879 (6.6)	1937 (1.7)
Drought proofing	6609 (7.9)	5360 (9.8)	16246 (25.1)	29121 (27.8)	17963 (15.7)
Micro-irrigation works	7368 (8.8)	4605 (8.4)	4335 (6.7)	5618 (5.4)	1429 (1.2)
Provision of irrigation facility	1841 (2.2)	1902 (3.5)	1813 (2.8)	3210 (3.1)	4029 (3.5)
Renovation of traditional water bodies	7650 (9.1)	5065 (9.3)	6828 (10.5)	2428 (2.3)	592 (0.5)
Land development	4674 (5.6)	3229 (5.9)	4090 (6.3)	7654 (7.3)	2761 (2.4)
Flood control and protection	5072 (6.1)	2554 (4.7)	2265 (3.5)	1318 (1.3)	273 (0.2)
Rural connectivity	38955 (46.6)	25521 (46.8)	22056 (34.0)	28631 (27.3)	9410 (8.2)
Any other activity	0 (0.0)	294 (0.5)	204 (0.3)	19973 (19.1)	76031 (66.4)
Total Works Completed	83593 (100.0)	54589 (100.0)	64846 (100.0)	104832 (100.0)	114425 (100.0)

Note : Figures in the parentheses denote percent share to total works completed

Source : Department of Rural Development, GOB

Table 7.6 lists the category-wise completed works under MGNREGS, from 2010-11 to 2014-15. The projects for Drought Proofing and Rural Connectivity have dominated the scheme during this period. In 2014-15, these two categories together accounted for 23.9 percent of the total projects. The third most important category is Water Conservation, although provision of Irrigation Facility had the third highest share (3.5 percent) in 2014-15. Eventually, all these projects help in development of rural infrastructure and expansion of livelihood options for the rural people.

Indira Awas Yojana (IAY)

Shelter is a basic need of a citizen which is critical for the quality of life. A roof over the head endows a homeless person with an essential asset and improves his physical and mental well being. Hence, fulfilling the housing need, particularly for the rural poor, is an important component of the poverty alleviation efforts of the government. The Indira Awaas Yojana (IAY) is a flagship scheme of the Ministry of Rural Development for rural housing. Under the scheme, financial assistance is provided to the households living Below Poverty Line (BPL) in the rural areas for the construction of dwelling units. It has been in operation since 1985-86. The summary of the performance of IAY in Bihar over the last five years is presented in Table 7.7.

Table 7.7 : Performance of the IAY Scheme

(Figure in lakh)

Year	Annual Physical Target	Houses Completed		Percentage of Fund Utilisation
		Total	SC & ST	
2010-11	7.59	5.29 (69.8)	2.60 (49.1)	66.4
2011-12	7.37	4.50 (61.1)	2.00 (44.5)	68.0
2012-13	8.36	8.40 (100.4)	3.72 (44.3)	75.9
2013-14	6.06	6.95 (114.8)	3.12 (51.6)	66.4
2014-15	2.75	4.99 (181.5)	2.48 (90.2)	66.2

Note : Figures in parentheses denote percentages with respect to the previous column

Source : Department of Rural Development, GOB,

Since 2012-13, more than cent percent of physical targets were achieved in Bihar under IAY, compared to much lower achievements in previous years. The share of SCs and STs in the total houses completed was barely half up to 2013-14, but there has been a notable improvement in 2014-15 when the share was 90.2 percent.

Public Distribution System (PDS)

It is now well recognised that, to ensure food security, not only adequate foodgrains should be available, but the poor should have sufficient means to purchase food. The capacity of the poor to purchase food can be ensured in two ways – either by raising their incomes or through supplying foodgrains at subsidised prices. While the employment generation programmes attempt the first solution, the PDS is the mechanism for the second option. The PDS is a target group strategy to alleviate poverty, and it is extremely important for Bihar

where incidence of poverty is very high. Four essential commodities distributed through PDS outlets are — wheat, rice, sugar and kerosene oil.

The social background of PDS dealers is presented in Table 7.8. The total number of PDS dealers is 42,141. The share of backward and extremely backward castes among the dealers is about 37.0 percent, that of scheduled castes 16.4 percent, and general castes 19.4 percent. The distribution of PDS dealers by their social background in different districts is presented in Table A 7.4 (Appendix). The ownership pattern of PDS outlets at the district level is nearly the same as in the state level.

Table 7.8 : Social Background of PDS Dealers

Social Background of PDS Dealers	No of PDS Outlets		Percentage Share	
	2014	2015	2014	2015
Scheduled Caste	6857	6891	16.3	16.4
Scheduled tribes	323	327	0.8	0.8
Backward Caste	12445	12463	29.9	29.6
Extremely Backward Caste	3068	3109	6.8	7.4
Minority	3036	2812	7.1	6.7
Women	3387	3361	7.7	8.0
Women Self Help Groups	202	209	0.5	0.5
Other Self Help Groups	118	105	0.4	0.2
Co-operative Society (Ex-Army Personnel)	4579	4494	10.7	10.7
Handicapped	177	180	0.3	0.4
General	8259	8190	19.4	19.4
Total	42451	42141	100.0	100.0

Source : Department of Food and Consumer Protection, GOB

Till 2012-13, PDS was implemented under three schemes, namely (i) BPL, (ii) Antyoday and (iii) Annapurna. After the enactment of National Food Security Act, February 2014, the PDS is run under two schemes — (1) Antyoday – providing 35 kgs of foodgrains per month to extremely poor BPL families (21 kgs of rice and 14 kgs of wheat) and (2) Priviledge Household (PHH) scheme — in which eligible members of a family are provided 5 kgs of foodgrains each month (3 kgs. of rice and 2 kgs. of wheat). These foodgrains are provided at a subsidised rate — Rs. 3 per kg. for rice and Rs. 2 per kg. for wheat. As per Socio Economic Caste Census (SECC) survey list, 7.60 crore persons are being presently provided with the subsidised food grains in Bihar.

The operational details of PDS in Bihar for the last five years 2010-11 to 2014-15 are presented in Table 7.9. It shows that the lifting of both wheat and rice under Antyoday scheme has been close to 100 percent during the last five years. Under PHH scheme, the lifting percentage was less than 100 percent for both wheat and rice up to 2012-13. But, during the last two years, it has been close to 100 percent. For wheat, liftings were 94.8 percent (2013-14) and 95.0 percent (2014-15). For rice, the liftings were 96.4 percent (2013-14) and 97.0 percent (2014-15).

Table 7.9 : Allotment and lifting of wheat and Rice for BPL and Antyoday

(Figures in '000 tonnes)

Year	Wheat			Rice		
	Allotment	Lifting	Lifting Percentage	Allotment	Lifting	Lifting Percentage
	Antyoday					
2010-11	417.1	408.6	97.9	625.7	595.2	95.1
2011-12	420.2	395.7	94.2	630.2	573.5	91.0
2012-13	420.2	407.5	97.0	630.3	593.8	94.2
2013-14	385.2	378.9	98.4	577.7	573.0	99.2
2014-15	385.2	377.9	98.0	577.7	572.9	99.0
	PHH					
2010-11	610.8	559.6	91.6	1495.1	1217.0	81.3
2011-12	985.9	638.4	64.8	2187.7	1500.2	68.6
2012-13	1348.4	470.5	34.9	2022.6	1065.9	52.7
2013-14	1056.6	1002.1	94.8	1340.7	1291.9	96.4
2014-15	1056.6	1002.6	95.0	1340.7	1295.7	97.0

Note : Since February, 2014, Antyoday and PHH are the 2 PDS schemes running in the state.

Source : Department of Food and Consumer Protection, GOB

The district-wise information on allotment and lifting of wheat and rice during 2014-15 are presented in Tables A 7.5 (Appendix). For both the schemes, inter-district variation in terms of lifting of foodgrains lies between 80 to 100 percent. For wheat, 5 districts (Sheikhpura, Kaimur, Gaya, Nawada and East Champaran) top the list with 100 percent lifting percentage. Similarly, for rice, 8 districts (Nalanda, Kaimur, Gaya, Nawada, Aurangabad, Sheikhpura, Lakhisarai and Buxar) have 100 percent lifting percentage.

Intervention in the Public Distribution System

- From July, 2015 onwards, the distribution of foodgrains (both Antyoday and PHH) and kerosene is done through coupon.
- There is now a provision for vehicles loaded with foodgrains being fitted with GPS for monitoring their movements. Currently 72.4 percent vehicles are fitted with GPS.
- The action for end-to-end computerization is being taken for institutions like Bihar State Food Corporation (BSFC) and operation of PDS in order to strengthen the system. Under PDS computerization scheme, all supply offices of respective districts, subdivisions and blocks have been supplied with computers. One PMU (Project Management Unit) is being set up at the headquarters of the Department.

7.3 Panchayati Raj Institutions (PRI)

The three-tier Panchayati Raj system constitutes the foundation on which stands the entire edifice of rural development in India. The basic philosophy of Panchayati Raj system is that the villagers themselves should think, decide and act for their own collective socio-economic

interests. The three-tier Panchayati Raj Institutions in Bihar consist of a Gram Panchayat at the lowest level, Panchayat Samiti at the block level, and Zila Parishad at the district level. The Chairpersons of the Gram Panchayat, Panchayat Samiti and Zila Parishad are called Mukhiya, Pramukh and Adhyaksha, respectively. In response to the 73rd constitutional amendment, Bihar Panchayati Raj Act, 2006 was enacted to strengthen the three-tier panchayat system in the state. Presently, there are 38 Zila Parishads, 531 Panchayat Samitis, and 8398 Gram Panchayats. There is a provision of 50 percent reservation for women, including the reservation in single posts (Table 7.10).

Table 7.10 : Overviews of Panchayati Raj Institutions in Bihar

Item	No.	Item	No.
Zila Parishad	38	Gram Kachahari Members	115057
Panchayat Samiti	531	Gram Panchayat Secretary	5237
Gram Panchayat	8398	Nyaya Mitra	8398
Gram Panchayat Members	115057	Gram Kachahari Secretary	7474
Panchayat Samiti Members	11501	Zila Panchayati Raj Officers	38
Zila Parishad Members	1162	Block Panchayati Raj Officers	528

Source: Department of Panchayati Raj, GOB

The state government has taken numerous steps to fortify the PRIs:

- With the objective of making the three-tier PRIs inclusive, responsive and accountable, the Bihar Panchayat Strengthening Project is being implemented in 1304 Gram Panchayats of 91 Blocks in 6 districts of the state (Patna, Nalanda, Bhojpur, Saharsa, Supaul and Madhepura). The total project cost is 120 million US Dollars (Rs. 667.44 crore at the exchange rate of Rs. 55.62 per US Dollar). An agreement in this context has been signed with the World Bank.
- A sum of Rs. 1237.17 crore has been sanctioned for the construction of 1435 Panchayat Sarkar Bhawans. At present, 475 Bhawans have already been completed, and 211 Bhawans are in the last stage of completion. The rest is under process at different levels of execution.
- The honorarium of Gram Katchahary Nyayamitra has been enhanced from Rs. 2500 to Rs. 7000 per month. For Gram Katchahary Sachiv, it has been enhanced from Rs. 2000 to Rs. 6000 per month.
- The Training Modules have been prepared for elected representatives and functionaries of the Gram Panchayats. They mainly consist of subjects related to the functioning of Gram Sabha, Women Empowerment, Development Schemes, Financial Management, and Maintenance of Records and Cash Books.
- To promote transparency and accountability in the functioning of PRIs, e-Panchayat Mission Mode Project is being implemented to enable the Gram Panchayats under National e-governance programme.
- The representatives of the Panchayats were declared public servants under The Bihar Panchayat Raj Act, 2006.

- A total amount of Rs. 4972.93 crore for the period 2010-11 to 2014-15 was released to the PRIs in light of the recommendation of the Thirteenth Finance Commission. This sum is utilised for the construction of Aanganwadi Centres, Plain Cement Concrete (PCC) Roads, approach roads linking settlements with a population of less than 250 to the main road, and renovation/maintenance of government buildings in block levels. On the recommendation of the Fourteenth Finance Commission, a grant of Rs. 21017.83 crore has been sanctioned to the PRIs.
- A total amount of Rs. 2118.60 crore was provided to the PRIs for the period 2011-12 to 2014-15 under the Fourth State Finance Commission. A fund of Rs. 15.00 lakh, Rs. 1.00 lakh and Rs. 2.00 lakh was provided as untied grant to each Zila Parishad, Panchayat Samiti and Gram Panchayat respectively.

Table 7.11 : Overview of Financial Progress of PRIs

(Rs. crore)

Heads	2013-14			2014-15		
	Outlay	Expenditure	Expenditure as percentage of Outlay	Outlay	Expenditure	Expenditure as percentage of Outlay
Untied Grants under (BRGF)	745.61	555.14	74.4	936.17	379.44	40.5
MMGY	192.95	172.81	89.6	13.75	13.75	100.0
Capacity Building Under (BRGF)	5.00	0.00	0.0	38.00	18.01	47.4
Allowances for elected members of PRIs/G.K.	194.88	180.95	92.8	195.00	191.48	98.2
Rent for G.K. Bhawan	1.35	1.35	100.0	4.00	1.78	44.5
Total	1139.79	910.25	79.9	1186.92	604.46	50.9
Establishment of Headquarter	3.73	3.37	90.4	4.41	4.21	95.5
Establishment of District Panchayat	213.69	175.26	82.0	233.95	184.75	79.0
Establishment of Training Institute	3.09	2.62	84.8	3.03	2.47	81.5
Grants for Nyaymitra & G.K.	45.05	17.91	39.8	43.32	17.91	41.3
Matching Grant to Zila Parishad	-	-	-			
14 th State Finance Commission Grant	815.35	815.16	100.0	1005.09	50.54	5.0
13 th Finance Commission Grant	1566.77	1061.04	67.7	1802.32	1533.25	85.1
Total	2647.68	2075.36	78.4	3092.12	1793.13	58.0
Establishment of Election Commission Headquarter	2.16	1.99	92.1	2.10	1.77	84.3
Expenditure on Election of ZP/Panchayat Samiti & GP	10.00	3.42	34.2	20.00	4.46	22.3
Secretariat Economic Services	1.39	0.10	79.1	1.27	1.03	81.1
Total	13.55	5.51	48.0	23.37	7.26	31.1
Grand Total	3801.02	2991.12	78.7	4302.4	2404.85	55.9

Source: Department of Panchayati Raj, GOB

Most of the schemes implemented by PRIs were financed by the Backward Region Grants Fund (BRGF). However, as per the recommendations of the Fourteenth Finance Commission, 8 Schemes supported by BRGF have been delinked from the support of the central government with effect from 2015-16.

A total of Rs. 4302.41 crore was approved for the PRIs in 2014-15, with an increase of 13 percent over the preceding year (Table 7.11). The actual expenditure (Rs. 2408.85 crore) was 55.9 percent of the approved budget. In 2013-14, the financial performance was better, the extent of fund utilisation being 78.6 percent.

7.4 Land Distribution

Land reform usually refers to redistribution of land, acquired from those households who have land in excess of the legal ceiling. More broadly, it includes regulation of ownership, operation, leasing, sales, and inheritance of land. In Bihar, around 90 percent of the population reside in villages and 70 percent workforce are employed in agriculture and related works. The proportion of the landless or near landless among the rural households is steadily increasing. In an agrarian economy like Bihar, where density of population is very high and distribution of land is very unequal, resulting to a large mass of the rural population below the poverty line, there are compelling economic arguments for land reform.

Table 7.12 : Land Distribution Pattern

(Holdings in '000 and Area in '000 ha)

	All Social Groups			Scheduled Castes / Tribes		
	Male	Female	Total	Male	Female	Total
Marginal Holders						
Number	12623 (90.9)	2101 (92.4)	14724 (91.1)	1718 (94.5)	334 (95.2)	2052 (94.6)
Area	3128 (56.7)	534 (62.8)	3662 (57.6)	415 (70.7)	84 (75.0)	499 (71.4)
Small Holders						
Number	824 (5.9)	120 (5.3)	944 (5.8)	73 (4.0)	14 (4.0)	87 (4.0)
Area	1029 (18.7)	152 (17.9)	1181 (18.6)	92 (15.7)	18 (16.1)	110 (15.7)
Semi-medium Holders						
Number	365 (2.6)	47 (2.1)	412 (2.5)	24 (1.3)	3 (0.9)	27 (1.2)
Area	945 (17.1)	123 (14.5)	1068 (16.8)	61 (10.4)	7 (6.3)	68 (9.7)
Medium Holders						
Number	73 (0.5)	7 (0.3)	80 (0.5)	3 (0.2)	0 (0.0)	3 (0.1)
Area	373 (6.8)	38 (4.5)	411 (6.5)	16 (2.7)	2 (1.8)	18 (2.6)
Large Holders						
Number	3 (0.0)	-	3 (0.0)	-	-	-
Area	37 (0.7)	3 (0.4)	40 (0.6)	3 (0.5)	1 (0.9)	4 (0.6)
All Size Groups Holders						
Number	13888 (100.0)	2275 (100.0)	16163 (100.0)	1818 (100.0)	351 (100.0)	2169 (100.0)
Area	5512 (100.0)	850 (100.0)	6362 (100.0)	587 (100.0)	112 (100.0)	699 (100.0)

Source : Agriculture Census 2010-11, Government of India

Note : Figures in the parentheses denote percentage share to all size group holders

It is evident from Table 7.12 that no less than 91.1 percent of the farmers in Bihar have marginal holdings (less than 1 hectare). Their share in total land is only 57.6 percent. Another 5.3 percent of the farmers have small holdings (between 1-2 hectares) and their share in total land is 18.6 percent. The land endowment of farmers belonging to SC/ST is even poorer.

The state government has been working with a vision of inclusive development. Towards this, in recent years, a special focus of the Department of Revenue has been to make a provision of 3 decimals of homestead land to each Mahadalit family who do not have such land. Such land has been distributed either through 'parcha' or through 'settlement'. The operation 'Bhumi Dakhal' has also been launched to restore possession of land to those families who had been dispossessed of such land. Under the scheme of homestead land to Mahadalit families, 2.34 lakh families have already been covered against a target of 2.43 lakh families, involving 7061 acres of land, as on 2014-15. The achievement percentage registered against the target in 2014-15 is 96.1 percent, 6.5 percentage points more than what was achieved a year before. The Department sought to provide land to the target group by the following four land streams — (a) Gair Mazarua malik/khas land, (b) Gair Mazarua aam land, (c) land under Bihar Priviledged Persons Homestead Tenancy Act, 1947, and (d) in the absence of the above lands, Raiyati land purchased under the Bihar Raiyati Land Purchase Policy, 2010. The progress under this scheme is presented in Table 7.13.

Table 7.13 : Progress under the Scheme of Provision of House Sites to Mahadalit Families

2013-14				2014-15			
Number of Mahadalit families			Area of land distributed (acres)	Number of Mahadalit families			Area of land distributed (acres)
To be covered	Already covered	Percentage of achievement		To be covered	Already covered	Percentage of achievement	
Gair Mazarua Malik / Khas land							
78398	80173	102.3	2644.62	86224	87167	101.1	2937.89
Gair Mazarua Aam land							
47027	43167	91.8	1091.16	47963	44347	92.5	1102.72
Bihar Priviledged Person Homestead Tenancy Act							
52902	57417	108.5	1685.32	56804	60207	106.0	1760.12
Purchase of Raiyati land							
68735	40764	59.3	1220.01	52622	42324	80.4	1255.22
Other Sources							
–	–	–	–	0	140	-	4.88
Total							
247062	221521	89.7	6641.11	243613	234185	96.1	7060.83

Source : Department of Revenue and Land Reforms, GOB

Along with this, the Department is also running other land-related schemes for SC, ST, BC and EBC households. Some of the important programmes of the Department are as follows:

- Between 2005-06 and 2014-15, altogether 18192.71 acres of land was distributed among 47810 landless households, under Bhoodan Yagnya Act.
- Under Privileged Persons Homestead Tenancy Act, altogether 5073.90 acres of land was distributed during 2005-06 to 2014-15 among 1,27,009 households with no homestead land.
- During 2005-06 to 2011-12, altogether 3572.55 acres of land was distributed among 40,163 beneficiaries for agricultural and homestead purposes.
- Abhiyan Basera was started in 2014 under Homestead Land Scheme, Tribal Sub-Plan Scheme and Mahadalit Vikas Yojna. Under this scheme, all those families which have not been given homestead land will be provided with 5 decimal homestead land. The survey work is complete for the purpose. Under this scheme, 27,631 families have been given homestead land, either 3 or 5 decimals.
- The computerization of land records was initiated in the year 1998-99 with 10 percent central fund. In 2008-09, this scheme became a part of Centrally Sponsored Scheme of the National Land Records Modernization Programme (NLRMP).
- Circle (Anchal) office is the main source of land records. Therefore, inter-connectivity is required among sub-division and Anchal level offices. Out of 534 Anchal offices, data entry operators have been deputed in 531 Anchal offices. Networking facilities have been made available to 495 Anchal offices;
- During 2014-15, Revenue Court Camps were organized in 5556 places, in which 2,40,467 mutation applications were received. Out of these 1,82,037 mutation cases were disposed off in the Court Camp itself.
- Up to March 2015, 30,483 acres of land has been acquired for various development projects of either central or state government.
- Under Sampark Sadak Yojna, those villages and tolas which have no connectivity roads are being provided land for road construction. Till date, 415 schemes have been completed, connecting 674 villages/ tolas with roads under this scheme.

7.5 Disaster Management

Although disaster management programmes cover both rural and urban areas, it is the rural areas which are more affected by different disasters. The disaster risks in Bihar are very high because of both natural and manmade disasters. These include flood, drought, earthquake, cyclones, heat waves, cold waves, fire or attacks by extremists. All these contribute to a situation where the population is seriously threatened. The important steps that the state government has taken for disaster management are presented below.

- The state government has provided 9 batallions of NDRF (National Disaster Response Force) at Bihta, Patna.
- The state government has provided 75 acres of land for NDRF battalions. The NDRF battalion consists of specialized teams, trained to respond in various types of natural

and manmade disasters. There are a total 1149 personnel and 18 teams. Each team comprises 45 personnel, well equipped and trained for rendering effective response in any disaster situation. For effective search and rescue operations in North Bihar, a process has started to establish a regular company of NDRF in Supaul district.

- There is provision for Agriculture Input Subsidy, House Damage Subsidy, and Subsidy for cattle loss, in addition to Gratuitous Relief and cash dole for those who were affected by natural disasters.
- A Standard Operating Procedure for flood, drought and drinking Water Crisis has been formulated.
- There is provision for fund to be given as compensation to acquire the land for the rehabilitation of families displaced due to erosion caused by rivers.
- For those who die in man-made disaster, there is a provision for ex-gratia payment and arrangement of free treatment of injured in hospitals.
- The state government has organised training and awareness programme to enhance the capacity of government officials and community for disaster management. These include — training of divers for search and rescue during flood, training of volunteers, training for quick medical response, and training for motor boat driving. In addition, engineers, contractors, architects and masons are being trained to make Earthquake Resistant Building.
- The state government has formulated ‘Bihar Scheme for Assistance to Farmers in Farm Distress, 2015’ to provide assistance to farmers and take measures to prevent farm distress. Under this scheme, there is a provision of an ex-gratia payment of Rs. 4.00 lakh to be deposited in the name of the next-of-kin of the farmer who has died. This creates a fund with a Nationalized Bank which provides monthly interest to the account holder as a financial relief.
- The state government has provided 40 *Fibre Reinforced Plastic Boats* and 310 inflatable motor boats to 28 flood-prone districts.
- An amount Rs. 149.58 lakh has been provided to Beltron for the procurement of 85 satellite phones. Till date, 27 satellite phones have been installed.
- The state government has identified 9 flood-prone districts as the nodal districts to procure tents for mega relief camp. Till date, 4729 tents have been procured.
- The State Disaster Response Force has been equipped with modern equipments like inflatable motor boat, life jacket, deep diving suits and latest equipments of search and rescue during flood.
- In collaboration with All India Institute of Medical Sciences (AIIMS), Patna, two phases of training for Quick Medical Response Teams have been completed. Under this, 3 officials of Health Department and 2 Police personnel from each district were trained. A total of 328 personnel have been trained to operate during multihazard disasters.

- A total of 830 GPS sets were made available to all Divisional Commissioners, District Magistrates, Police Superintendents, Sub-Divisional Officers, Sub-Divisional Police Officers and Block Development Officers.

Table 7.14 gives particulars of amount allotted for floods and cyclones for six years. The fund allocation was the highest in 2013-14.

Table 7.14 : Amount Allotted for Floods and Cyclones

(Rs. lakh)

Programmes	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16*
Relief & Rescue instruments	–	–	–	761.0	1397.8	–
Supply of Dry Food	1070.3	10279.2	1475.0	29357.0	12200.3	5569.3
Cash Dole Assistance	681.3	2976.7	1053.0	18792.9	9945.3	4023.4
Clothes & Utensils Distribution	525.0	39.0	171.7	109.1	334.0	5404.7
Supply of Drinking Water	–	35.5	59.7	41.8	–	–
Repair of Road & Bridges	–	–	260.2	280.2	–	14.5
Evacuation Operation	923.2	1774.4	2061.4	3712.8	1830.3	1592.2
Repair of Public Buildings	–	–	197.9	103.1	471.3	3893.7
Agricultural Inputs	209.0	1021.2	46.7	12116.2	3981.6	14389.4
Repair of Boats	276.9	684.3	584.7	713.5	633.0	460.4
Repair of Embankments and Irrigation system	–	–	–	–	500.0	500.0
Human Medicines	50.5	21.9	0.0	–	–	–
Assistance for Flood Accidents	226.0	275.0	107.1	349.6	363.4	245.3
Total	3962.1	17107.2	6017.5	66337.1	31657.0	36092.8

Source: Department of Disaster Management, GoB; Note: *-Up to September 2015;

7.6 Environment

The debilitating impact of climate change has broadened the sphere of discourse on environment much beyond the traditional concerns. The available evidence suggests that there is high probability of increase in the frequency and intensity of environment-related natural hazards due to climate change. Bihar is highly vulnerable to hydro-meteorological natural disasters, with North Bihar being highly flood-prone and South Bihar being highly drought-prone.

Out of 9359.57 thousand hectares of Bihar's geographical area, forests cover only 621.64 lakh hectares, which is 6.6 percent of the total geographical area. Among the districts, Kaimur, Jamui, Munger and West Champaran has substantial forest area. Valmiki Nagar National Park located there is well known for a Tiger Reserve. The forests provide a wide range of economic and environmental services, including wood and non-wood forest products, protection of other natural resources, and contribution to local climate control. The Department of Environment and Forests has taken the following steps to protect the environment in the state.

- A new scheme of town beautification plantation 'Har Parisar Hara Parisar' has been started from 2014. Under this scheme 1.71 lakh plants have been planted in 234 campuses, against the target of 175 campuses. During the monsoon of 2015-16, another 1.82 lakh plants will be planted in 1114 campuses.
- In 2014-15, the concerned Department has planted 604.21 plants, against the target of 148.20 lakh plants.
- Under Mukhyamantri Niji Poudhshala Scheme for popular plants, the number of such plants raised were 507.66 lakh, benefiting 4314 people. In Mukhya Mantri Niji Poudhshala Scheme for other species, the numbers of tube plants raised were 282.50 lakh, benefiting 1461 people.
- Tissue Culture laboratory-cum-production centres have been established at T.N.B. College, Bhagalpur and at Bharat Sevak Samaj College, Supaul.
- The state government has established 8 high-tech nurseries in different forest divisions, each having the capacity to produce 1 lakh plants every year. E-nursery application and online monitoring is being done for all nurseries in the state.
- 'Goraiya' (Sparrow) as state bird, 'Genda' (Marigold) as state flower, 'Ox' as state animal and 'Peepal' as state tree have been notified.
- Under Water (Pollution Prevention and Control) Act, 1974 and Air (Pollution Prevention and Control) Act 1981, 13,408 agreement orders have been issued by the Bihar State Pollution Control Board for proper functioning of industries in the state.
- For disposal of medical waste of hospitals, nursing homes, clinics etc., incineration plants have been established in the state. A community medical waste treatment facility has started at Indira Gandhi Institute of Medical Sciences (IGIMS), Patna.
- The draft plan is ready for the establishment of a wild life safari in Rajgir.
- The state government has established automatic air quality monitoring centers in Patna, Gaya and Muzaffarpur and data of dirt, sulphur dioxide, nitrogen oxide, and carbon monoxide etc. are being shown through LCD.
- For monitoring of water quality of rivers in the state, samples from 86 places are being collected regularly and analysed.
- A five-storey building (Aranya Bhavan) has been constructed in Patna to ensure more efficient functioning of the Department of Forest and Environment.

APPENDIX

Table A 7.1 : Number and Percentage of Population below poverty line for Major States - 2011-12

	Rural		Urban		Total		Statewise Share of Poor in All India
	Percentage of Persons	No. of Persons (lakh)	Percentage of Persons	No. of Persons (lakh)	Percentage of Persons	No. of Persons (lakh)	
Andhra Pradesh	10.96	61.80	5.81	16.98	9.20	78.78	2.9
Bihar	34.06	320.40	31.23	37.75	33.74	358.15	13.3
Chhattisgarh	44.61	88.90	24.75	15.22	39.93	104.11	3.9
Gujarat	21.54	75.35	10.14	26.88	16.63	102.23	3.8
Haryana	11.64	19.42	10.28	9.41	11.16	28.83	1.1
Jharkhand	40.84	104.09	24.83	20.24	36.96	124.33	4.6
Karnataka	24.53	92.80	15.25	36.96	20.91	129.76	4.8
Kerala	9.14	15.48	4.97	8.46	7.05	23.95	0.9
Madhya Pradesh	35.74	190.95	21.00	43.10	31.65	234.06	8.7
Maharashtra	24.22	150.56	9.12	47.36	17.35	197.92	7.3
Odisha	35.69	126.14	17.29	12.39	32.59	138.53	5.1
Punjab	7.66	13.35	9.24	9.82	8.26	23.18	0.9
Rajasthan	16.05	84.19	10.69	18.73	14.71	102.92	3.8
Tamil Nadu	15.83	59.23	6.54	23.40	11.28	82.63	3.1
Uttar Pradesh	30.40	479.35	26.06	118.84	29.43	598.19	22.2
West Bengal	22.52	141.14	14.66	43.83	19.98	184.98	6.9
India	25.70	2166.58	13.70	531.25	21.92	2697.83	100.00

Source: Planning Commission, GoI

Table A 7.2 : District-wise Progress under MGNREGS

Districts	No. of households issued jobcards (lakh)			Percentage share of SC households among households with jobcards			Percentage of households with jobcards demanding employment		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Patna	5.59	5.40	4.95	46.07	42.60	25.50	10.69	14.43	0.00
Nalanda	3.98	4.08	3.93	46.84	46.00	37.64	15.2	13.00	10.22
Bhojpur	3.24	3.43	4.24	48.47	44.94	33.95	25.16	19.96	7.40
Buxar	2.41	2.36	2.34	20.65	28.54	31.92	16.43	19.61	15.36
Rohtas	3.70	3.78	3.45	49.24	48.95	32.83	21.54	19.94	15.75
Kaimur	2.20	2.10	1.99	46.69	43.97	39.78	16.78	18.52	15.82
Gaya	5.38	5.98	5.71	65.09	66.00	56.84	24.74	21.07	14.32
Jehanabad	1.33	1.22	1.35	43.37	43.80	32.10	26.91	18.84	13.17
Arwal	0.95	0.96	0.92	41.59	41.55	33.44	10.99	15.06	14.02
Nawada	3.20	3.36	3.56	61.09	29.60	30.85	19.73	23.76	12.88
Aurangabad	3.24	3.15	3.22	57.35	42.24	42.81	19.09	22.28	13.96
Saran	4.76	4.76	4.72	48.61	48.61	23.88	13.8	17.01	10.21
Siwan	3.72	4.10	3.20	14.87	25.95	18.57	10.27	9.65	8.66
Gopalganj	3.22	3.40	3.44	21.33	20.56	20.21	11.91	19.37	10.52
W. Champaran	4.00	4.38	4.37	38.1	35.01	19.07	40.64	34.57	7.55
E. Champaran	5.88	6.23	5.96	18.45	19.50	19.73	18.26	14.83	7.86
Muzaffarpur	6.40	6.50	6.28	52	24.11	24.38	24.3	12.82	7.29
Sitamarhi	4.21	4.30	4.31	36.6	35.95	18.49	11.22	22.48	18.33
Sheohar	0.88	0.87	0.76	25.4	22.31	22.62	40.32	25.10	16.16
Vaishali	5.05	5.24	5.10	50.5	46.63	33.85	10.44	8.58	5.23
Darbhanga	4.78	4.67	4.73	38.27	30.42	27.40	9.59	9.91	9.77
Madhubani	6.91	5.39	5.60	40.64	23.88	23.29	14.76	14.67	12.50
Samastipur	5.46	5.33	4.46	51.81	49.46	30.68	10.65	9.79	10.98
Begusarai	3.11	3.11	3.13	22.29	23.92	23.66	14.8	19.40	12.00
Munger	1.82	1.81	1.75	22.88	19.26	17.09	11.23	8.27	7.39
Sheikhpura	0.95	0.96	0.90	49.59	47.28	38.81	21.21	23.49	12.94
Lakhisarai	1.47	1.45	1.50	32.87	24.25	23.93	21.29	16.21	11.12
Jamui	2.37	2.44	2.47	31.92	31.54	26.38	23.23	26.30	16.50
Khagaria	2.24	2.02	1.84	35.98	33.07	26.71	11.44	15.28	14.09
Bhagalpur	3.62	3.62	4.14	23.28	23.31	13.40	17.34	12.75	8.55
Banka	3.01	3.01	2.63	26.27	26.27	16.93	26.43	20.90	13.51
Saharsa	2.98	3.09	3.15	23.71	23.58	23.43	27.21	22.59	13.69
Supaul	3.14	2.90	2.91	30.31	25.16	23.61	14.75	17.50	11.67
Madhepura	3.00	3.02	3.14	58.63	27.44	26.82	31.69	20.39	13.16
Purnea	4.32	4.49	4.17	30.22	23.65	17.91	26.11	20.81	11.55
Kishanganj	2.62	2.52	2.56	11.86	12.52	10.30	12.89	15.62	12.02
Araria	4.34	4.41	3.96	29.48	29.68	18.29	16.83	12.43	12.12
Katihar	3.98	2.98	4.35	23	15.96	15.57	28.71	35.73	21.64
Bihar	133.49	132.82	131.22	38.52	33.53	26.30	18.5	17.67	11.23

Source: Department of Rural Development, GOB

(Contd...)

Table A 7.2 : District-wise Progress under MGNREGS

Districts	Household getting 100 days of employment as percentage those obtaining employment			Persondays of employment generated (lakh)			Percentage share of women in total employment generated		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Patna	8.32	3.21	0.00	28.57	28.24	0.00	33.78	35.08	0.00
Nalanda	10.71	9.45	9.28	24.83	25.19	17.93	35.41	39.18	43.69
Bhojpur	2.26	2.19	4.97	21.77	13.77	8.66	24.99	25.75	26.34
Buxar	8.48	6.63	4.46	17.18	19.83	10.08	5.03	18.45	29.38
Rohtas	3.88	1.78	1.76	25.44	23.86	13.41	13.35	19.03	21.02
Kaimur	8.76	7.70	7.31	14.94	18.25	10.61	17.15	19.54	23.76
Gaya	5.73	7.54	3.59	80.15	73.75	24.47	35	39.46	46.22
Jehanabad	5.41	5.50	5.68	11.96	8.03	5.22	33.95	37.98	41.91
Arwal	2.26	4.79	1.19	5.38	4.95	2.33	30.11	33.94	33.79
Nawada	1.15	1.94	1.28	20.36	22.43	10.68	28.7	41.94	46.62
Aurangabad	5.93	9.47	4.77	34.55	28.23	14.15	30.01	25.61	29.37
Saran	6.17	7.87	1.96	30.21	31.82	9.49	18.25	22.17	26.90
Siwan	7.05	5.07	0.91	21.37	15.95	5.24	18.48	21.87	24.52
Gopalganj	10.99	8.54	2.20	19.92	26.77	8.96	25.72	31.41	33.84
W. Champaran	15.19	4.17	6.19	51.89	39.34	11.97	24.65	30.96	30.22
E. Champaran	32.27	6.16	5.25	82	40.99	16.73	27.3	32.35	30.77
Muzaffarpur	4.01	4.67	1.98	45.03	32.44	11.22	31.65	33.69	34.05
Sitamarhi	0.78	4.91	0.62	14.25	26.54	12.64	33.62	34.09	38.59
Sheohar	8.8	3.84	1.28	15.25	8.66	3.32	40.95	63.34	46.36
Vaishali	7.43	6.75	2.11	25.15	17.05	6.21	17.3	32.32	35.19
Darbhanga	3.46	0.84	2.29	31.43	14.69	12.55	39.18	41.29	47.35
Madhubani	2.33	2.54	2.01	31.14	18.82	14.11	36.61	40.63	42.55
Samastipur	0.74	3.82	4.52	16.74	25.36	13.27	31.1	37.83	42.41
Begusarai	7.5	4.30	3.95	21.66	21.88	10.46	49.79	56.90	57.90
Munger	4.74	1.26	0.99	7.88	3.74	2.23	29.8	27.31	32.19
Sheikhpura	3.49	4.31	1.55	8.72	9.48	2.79	36.97	40.98	41.91
Lakhisarai	4.51	5.12	6.17	12.16	9.04	5.17	37.78	38.20	42.13
Jamui	5.53	9.19	3.24	24.09	31.77	13.69	38.44	39.28	40.54
Khagaria	1.73	2.16	0.59	8.5	10.22	3.21	39.04	41.85	44.59
Bhagalpur	7.94	7.27	6.30	27.8	18.78	9.59	27.6	28.23	32.66
Banka	2.68	5.53	2.53	22.64	21.74	6.39	31.43	35.30	33.05
Saharsa	0.75	1.52	0.72	22.08	22.04	10.98	34.14	47.18	46.67
Supaul	3.38	4.03	1.87	14.77	17.81	6.81	35.74	36.26	36.31
Madhepura	2.08	9.38	1.62	20.56	24.13	9.34	32.98	32.99	41.33
Purnea	2.35	1.85	0.57	37.33	27.11	6.56	29.71	35.89	37.23
Kishanganj	4.62	3.22	0.94	13.88	14.81	4.03	26.1	37.85	29.05
Araria	5.17	2.83	0.78	27.93	16.99	5.90	23.37	27.46	32.10
Katihar	2.06	2.28	1.53	25.91	31.15	12.32	41.99	39.74	39.47
Bihar	6.36	4.82	2.98	965.41	845.65	352.73	29.93	34.35	37.32

Source: Department of Rural Development, GOB

(Concluded)

Table A 7.3 : District-wise Financial Progress under MGNREGS

Districts	2012-13			2013-14			2014-15		
	Fund available (Rs. lakh)	Fund utilised (Rs. lakh)	Percentage of utilisation	Fund available (Rs. lakh)	Fund utilised (Rs. lakh)	Percentage of utilisation	Fund available (Rs. lakh)	Fund utilised (Rs. lakh)	Percentage of utilisation
Patna	8483.48	7202.50	84.9	11853.06	8862.71	74.8	7843.51	4780.65	61.0
Nalanda	7079.36	6105.99	86.3	6566.57	5450.92	83.0	4497.36	3358.61	74.7
Bhojpur	5825.38	4479.08	76.9	4967.73	4015.12	80.8	3218.07	2550.89	79.3
Buxar	4578.28	4188.07	91.5	6637.79	6044.22	91.1	3769.32	2992.20	79.4
Rohtas	6343.87	5788.42	91.2	6960.18	5850.29	84.1	3722.30	2835.96	76.2
Kaimur	3396.66	2909.07	85.7	4835.37	4140.54	85.6	2843.98	1891.42	66.5
Gaya	16975.38	13884.31	81.8	12581.51	10565.25	84.0	8242.24	6603.10	80.1
Jehanabad	3034.63	2590.51	85.4	2433.85	2043.24	84.0	1978.71	1629.92	82.4
Arwal	1158.17	996.37	86.0	1218.62	869.81	71.4	785.13	558.27	71.1
Nawada	4545.27	4254.13	93.6	6126.21	5763.42	94.1	3506.65	3135.82	89.4
Aurangabad	7783.19	6892.84	88.6	7963.25	6964.95	87.5	4691.81	3782.96	80.6
Saran	7503.52	6792.58	90.5	8208.64	7565.55	92.2	3700.93	2862.50	77.3
Siwan	5277.10	4172.42	79.1	6138.80	4198.52	68.4	3528.56	1846.65	52.3
Gopalganj	4204.58	3264.85	77.7	6080.87	5099.57	83.9	3551.96	2646.78	74.5
W. Champaran	10613.48	9324.19	87.9	10310.79	9102.82	88.3	4314.50	2875.61	66.6
E. Champaran	15187.15	13068.54	86.1	13863.29	12395.14	89.4	7231.62	5386.39	74.5
Muzaffarpur	14405.87	8427.26	58.5	10209.51	7853.13	76.9	5350.32	2843.37	53.1
Sitamarhi	3899.43	2681.58	68.8	7097.75	5331.33	75.1	5471.16	4131.44	75.5
Sheohar	3667.29	3120.50	85.1	3011.25	2400.19	79.7	1742.87	1256.22	72.1
Vaishali	6773.51	6048.59	89.3	5744.74	4265.81	74.3	3153.50	2543.24	80.6
Darbhanga	8797.67	7275.67	82.7	5609.34	4165.53	74.3	4610.72	2657.44	57.6
Madhubani	7766.45	6724.60	86.6	6828.00	5144.51	75.3	3448.77	2443.23	70.8
Samastipur	6809.46	5092.79	74.8	9194.47	6881.90	74.8	4979.42	3567.43	71.6
Begusarai	5777.86	4468.88	77.3	7047.15	5772.54	81.9	4928.22	4329.53	87.9
Munger	1734.37	1317.25	76.0	1554.41	1179.81	75.9	1281.00	900.85	70.3
Sheikhpura	1887.53	1749.01	92.7	2356.33	2153.83	91.4	872.98	754.07	86.4
Lakhisarai	3512.66	3191.08	90.9	3355.21	2910.39	86.7	1922.34	1768.87	92.0
Jamui	4707.88	4447.80	94.5	7789.22	6120.78	78.6	2999.14	2748.99	91.7
Khagaria	2163.46	1841.44	85.1	3020.05	2643.87	87.5	1420.04	1108.67	78.1
Bhagalpur	6524.64	5610.46	86.0	7594.90	5678.26	74.8	4661.73	3314.54	71.1
Banka	5475.93	5172.93	94.5	6508.80	5968.60	91.7	2632.83	2103.98	79.9
Saharsa	3565.13	3067.65	86.1	4284.76	3652.68	85.2	4281.09	4267.45	99.7
Supaul	5632.62	3670.69	65.2	6134.89	3387.29	55.2	4433.83	2249.76	50.7
Madhepura	6115.52	4243.05	69.4	5857.97	5170.86	88.3	2694.20	2202.08	81.7
Purnea	8484.52	7672.57	90.4	8651.97	6931.62	80.1	4169.54	3462.95	83.1
Kishanganj	3316.94	2848.86	85.9	4659.40	4152.36	89.1	2222.55	1648.41	74.2
Araria	7546.42	5958.42	79.0	5605.59	3973.78	70.9	4393.40	2667.39	60.7
Katihar	7213.31	6567.94	91.1	9315.09	8452.63	90.7	4698.46	4252.98	90.5
Bihar	237767.96	197112.88	82.9	248177.33	203123.77	81.8	143794.76	106960.62	74.4

Source: Department of Rural Development, GOB

Table A 7.4 : District-wise Distribution of PDS Dealers by Their Social Background in Bihar

Districts	Number of Dealers	Percentage of Dealers belonging to							General	Total
		SC/ ST	BC/ EBC	Minority	Women	Women /Other SHG	Helper Samiti/ PACS/ Samiti of Ex-Army Personnel			
Patna	3410	17.4	46.6	2.7	10.0	0.7	7.5	15.2	100.0	
Nalanda	1459	14.7	41.7	4.0	9.7	1.8	16.1	12.0	100.0	
Bhojpur	1472	13.4	38.6	3.0	7.8	0.0	10.0	27.2	100.0	
Buxar	934	19.7	32.4	2.7	5.6	0.4	15.5	23.7	100.0	
Rohtas	1601	21.5	39.0	5.8	4.7	0.6	12.2	16.3	100.0	
Kaimur	866	24.1	39.7	6.8	8.6	0.0	4.4	16.4	100.0	
Gaya	2396	30.6	32.9	5.4	5.9	1.2	10.5	13.6	100.0	
Jehanabad	630	17.9	29.6	4.3	8.6	0.0	15.4	24.2	100.0	
Arwal	382	27.6	28.8	4.3	5.2	0.3	19.9	13.8	100.0	
Nawada	1127	14.3	33.2	4.8	12.8	0.0	14.1	20.8	100.0	
Aurangabad	1345	18.0	35.3	5.3	4.3	0.2	10.7	26.2	100.0	
Saran	2147	11.4	32.1	2.3	15.8	0.0	11.1	27.2	100.0	
Siwan	1771	13.4	36.4	8.1	5.8	0.1	7.2	29.0	100.0	
Gopalganj	1197	13.4	30.1	3.0	6.8	0.0	16.0	30.8	100.0	
W. Champaran	2197	20.4	31.3	12.0	6.3	0.0	13.1	16.9	100.0	
E. Champaran	2714	13.2	38.1	9.0	5.1	0.3	10.3	24.0	100.0	
Muzaffarpur	2548	18.1	30.9	4.0	9.1	0.6	12.3	24.9	100.0	
Sitamarhi	1776	17.6	41.5	6.7	6.7	0.2	13.2	14.1	100.0	
Sheohar	359	16.6	36.3	2.4	6.6	0.0	12.5	25.6	100.0	
Vaishali	1879	15.5	38.7	1.7	6.9	0.5	15.4	21.4	100.0	
Darbhanga	2117	11.8	31.2	11.1	9.8	0.4	8.5	27.2	100.0	
Madhubani	2377	19.4	36.9	7.3	5.3	1.2	11.9	17.9	100.0	
Samastipur	2267	19.7	35.3	2.5	5.3	0.5	14.7	22.1	100.0	
Begusarai	1433	27.3	27.3	4.3	11.9	0.0	4.6	24.5	100.0	
Munger	782	8.4	48.1	5.7	9.8	0.0	12.5	15.6	100.0	
Sheikhpura	351	13.2	28.5	4.5	5.4	0.8	16.9	30.6	100.0	
Lakhisarai	555	12.0	32.6	2.5	10.8	0.3	13.8	28.1	100.0	
Jamui	922	19.8	34.3	3.4	4.3	0.0	13.3	24.9	100.0	
Khagaria	886	16.8	52.0	3.6	8.4	4.8	6.3	8.2	100.0	
Bhagalpur	1712	15.0	46.1	10.4	7.3	0.0	10.4	10.8	100.0	
Banka	1080	15.3	46.2	7.8	8.7	2.1	6.4	13.4	100.0	
Saharsa	1036	17.1	40.8	9.3	4.1	0.5	16.1	12.1	100.0	
Supaul	1131	11.8	46.8	8.8	4.2	0.0	15.1	13.3	100.0	
Madhepura	1070	14.0	48.0	4.9	7.2	0.2	16.9	8.9	100.0	
Purnea	1525	18.6	36.1	16.2	9.7	1.9	7.1	10.3	100.0	
Kishanganj	925	15.2	38.7	15.9	13.9	0.2	8.7	7.4	100.0	
Araria	1491	15.7	31.5	25.0	13.7	0.0	7.1	7.0	100.0	
Katihar	1601	18.5	38.3	10.7	3.6	0.0	13.1	15.9	100.0	
Bihar	55471	17.1	37.0	6.7	8.0	0.5	11.3	19.4	100.0	

Source: Department of Food and Consumer Protection, GOB

Table A 7.5 : District-wise Allotment and Lifting of Wheat and Rice under NFSA during (2014-15)

('000 qntls)

Districts	Wheat			Rice		
	Allotment	Lifting	Lifting Percentage	Allotment	Lifting	Lifting Percentage
Patna	864	821	95.0	1297	1267	97.7
Nalanda	499	487	97.6	748	748	100.0
Bhojpur	397	393	99.0	596	593	99.6
Buxar	215	214	99.7	322	322	100.0
Rohtas	408	407	99.7	612	610	99.7
Kaimur	229	229	100.0	343	343	100.0
Gaya	723	723	100.0	1084	1084	100.0
Jehanabad	163	158	97.0	244	234	96.0
Arwal	123	122	99.3	185	176	95.3
Nawada	393	393	100.0	590	590	100.0
Aurangabad	404	393	97.3	606	606	100.0
Saran	639	636	99.5	958	931	97.1
Siwan	540	505	93.4	810	754	93.1
Gopalganj	395	376	95.0	593	556	93.8
W. Champaran	767	732	95.4	1151	1112	96.7
E. Champaran	978	978	100.0	1467	1389	94.7
Muzaffarpur	933	851	91.2	1400	1313	93.8
Sitamarhi	721	685	95.0	1082	1055	97.5
Sheohar	135	126	93.7	202	198	97.9
Vaishali	711	648	91.2	1066	996	93.5
Darbhanga	882	728	82.6	1322	1101	83.2
Madhubani	986	906	92.0	1478	1359	92.0
Samastipur	944	905	95.9	1415	1317	93.1
Begusarai	651	634	97.4	976	928	95.1
Munger	262	259	99.1	393	367	93.4
Sheikhpura	108	108	100.0	162	162	100.0
Lakhisarai	175	173	98.6	262	262	100.0
Jamui	327	321	98.0	491	484	98.6
Khagaria	369	331	89.6	554	508	91.7
Bhagalpur	560	494	88.3	839	740	88.2
Banka	427	355	83.2	640	551	86.0
Saharsa	431	394	91.3	647	559	86.3
Supaul	472	450	95.2	708	668	94.4
Madhepura	443	406	91.7	664	651	98.0
Purnea	701	686	97.9	1052	984	93.6
Kishanganj	390	380	97.5	585	583	99.7
Araria	644	627	97.3	966	906	93.7
Katihar	654	606	92.7	981	911	92.9
Bihar	19660	18637	94.8	29489	27919	94.7

Source: Department of Food and Consumer Protection, GOB

CHAPTER VIII

URBAN DEVELOPMENT

The low level of urbanisation in Bihar has been a major concern and promoting urbanisation and preparing towns for their important economic role is a challenge here. The present growth momentum of the state cannot be sustained if urbanisation is not promoted. The rapid economic growth in Bihar during the last decade has entailed a significant structural change in the economy; between 2004-05 and 2014-15, the share of primary sector in GSDP has decreased from 32 to 19 percent, and the combined share of secondary and tertiary sector has consequently increased from 68 to 81 percent. However, this structural shift has not been accompanied by increased urbanisation of the population; between 2001 and 2011, the level of urbanisation in Bihar has increased only marginally, from 10.4 to 11.3 percent. In the near future, therefore, it is likely that the level of urbanisation in Bihar will increase substantially, either through expansion of boundaries of existing towns or through large villages growing into towns. In this perspective, a well managed urbanisation is extremely necessary to ensure that the present growth momentum of Bihar economy is continued.

8.1 Level of Urbanisation

With the level of urbanisation at 11.3 percent, Bihar is the least urbanised state in India; for the entire country, the urbanisation level stands at 31.2 percent (Table 8.1). Bihar accounts for 8.6 percent of India's total population, but it has only 3.1 percent of its urban population. During the decade of 2001-11, the urban population in Bihar grew annually at 3.1 percent and 31 lakh people were added to the urban population; but it made little difference in the level of urbanisation. The progress of urbanisation in Bihar is largely driven by fertility rates which is very high in the state. Therefore, the largest contributor to the increase in urban population is due to the demographic growth of existing urban population, the next important contributor being the change of status for some habitations, from rural to urban. The component of migration of people from rural to urban areas is very small in the state. This pattern of urbanisation in Bihar has continued for long. Between 1961 and 2011, the level of urbanisation has increased by only 3.9 percent — 7.4 percent in 1961 to 11.3 percent in 2011. In contrast, during the same period, the level of urbanisation has increased by 13.4 percent in the entire country — 17.8 percent in 1961 to 31.2 percent in 2011. An important implication of this trend is that, while the future demographic changes in the country will be increasingly driven by urban population, it will continue to be driven by rural population in Bihar.

Bihar's urban system is characterised by the primacy of towns with population ranges of 1-10 lakhs and 50 thousand - 1 lakh (Table 8.2). Patna, as the capital city, has maintained its primacy in the state's urban system, as it accounts for 14 percent of the state's urban population, followed by Gaya which has a share of 4 percent. The huge gap in the distribution of urban population in

towns of different sizes indicates that, in many cases, the towns are not able to generate the desired economies in scale.

Table 8.1 : Trend of Urbanisation in Bihar

Year	Urban Population (Bihar) (lakh)	Level of Urbanisation	
		Bihar	India
1961	25.8	7.41	17.84
1971	32.4	7.70	19.75
1981	50.1	9.59	22.89
1991	64.9	10.05	25.50
2001	86.6	10.43	27.82
2011	117.6	11.29	31.16

Source : Census of India, RGI, GOI

Table 8.2 : Distribution of Urban Population by Size Class of Town

Size Class	Number		Population (million)		Growth Rate of Population
	2001	2011	2001	2011	
>1 million	1	1	1.43	1.68	1.6
100,000 - 1 million	18	25	3.42	5.07	3.9
50,000 - 100,000	19	29	1.37	1.88	3.1
20,000 - 50,000	67	75	2.10	2.49	1.7
10,000 - 20,000	19	22	0.31	0.33	0.8
5,000 - 10,000	6	38	0.04	0.26	18.2
< 5,000	-	9	-	0.03	-
Total	130	199	8.68	11.76	3.06

Source : Census of India, RGI, GOI

Regionally, Bihar's economy is highly uneven and stands sharply divided between North and South, not just in terms of Per Capita Income, but in terms of other indicators as well (Table 8.3). North Bihar, comprising 21 districts, contributes about 42 percent of GSDP of the state, as against its population share of 63 percent. In terms of urbanisation, the level of urbanisation is only 7.7 percent in North Bihar, compared to 17.4 percent in South Bihar.

One of the reasons for low urbanisation in Bihar is that the access to basic urban services is very low in its urban areas in terms of water supply, sewerage system, and drainage system (Table 8.4). As regards water supply, only 16.7 percent of the urban households have tap water within

premises. For access to piped sewer connected to latrines, the coverage is only 7.2 percent. Similarly, household connected to covered drainage is only 29.9 percent of total urban households. With the exception of Patna district, other districts in Bihar have very low coverage of basic urban services. For example, in 14 out of 38 districts, less than 5 percent of households have access to tap water within premises; in another 12 districts, the coverage of tap water within premises is between 5-10 percent. According to an assessment of basic urban services, undertaken as a part of the Asian Development Bank's Bihar Urban Development Investment Programme (BUDIP), per capita water supply in the 24 large towns of Bihar is only 28 lpcd (litres per capita per day), only about one-fifth of the national average. This level is highly critical in all towns, except Patna, Muzaffarpur and Danapur. In terms of access to sewerage, it is observed that urban Bihar lags substantially behind the national average. Similarly, more than half the towns in Bihar are highly critical with respect to management of solid waste.

Table 8.3 : North-South Divide in Bihar

Indicator	North Bihar	South Bihar
Share of Total Population	63.0	37.0
Share of Urban Population (%)	43.1	56.9
Urbanisation Level (%)	7.7	17.4
Share in GSDP (%)	42.3	57.6
Per Capita Income (Rs.) (2004-05 Prices)	10,318	18,295
Households with Piped Water (%)	8.3	24.6
Households with covered Drainage (%)	19.6	38.7
Households with Electricity (%)	56.4	47.9

Table 8.4 : Access to Basic Urban Services in Bihar by Size Class of Towns (2011)

City Size	Households with tap water within premises (%)	Households with access to piped sewer connected to latrines (%)	Households connected to covered drainage (%)
>1 million	50.8	19.6	61.3
100,000 – 1 million	13.1	6.1	29.2
50,000 – 100,000	8.7	3.3	18.8
20,000 – 50,000	4.1	3.0	16.3
10,000 – 20,000	5.1	2.9	13.1
5000 – 10,000	3.1	3.4	17.3
<5000	5.1	2.1	12.9
Bihar Urban	16.7	7.2	29.9

Source: Census of India 2011

In this background, the following sections discuss some of the critical challenges faced by Bihar for its urban development programme and the interventions by the state government.

8.2 Expenditure on Urban Development

The actual expenditure for urban development was Rs. 1391 crore in 2014-15, compared to Rs. 1196 crore a year before (Table 8.5). There has been a steady increase in such expenditure in last five years, growing annually at 40.1 percent. The utilisation of the disbursed amount has also been very high at more than 90 percent in recent years, except in 2011-12 when it was 88 percent. The disbursed amount as a percentage of total budgeted amount was rather low at 43 percent in 2010-11, but this share has increased steadily to reach 74 percent in 2014-15. But even now, the expenditure on urban development constitutes barely 1 percent of the total expenditure of the state government. The state government proposes to enhance this share in coming years. Apart from financial constraint, the urban development programme in Bihar also suffers from manpower shortage, both in terms of number and professional skills. This is yet another area which will receive more attention of the state government in future.

Table 8.5 : Budget Allocations, Disbursements and Expenditure for Urban Development

Year	Budget Allocation (Rs. crore)	Disbursement (Rs. crore)	Expenditure (Rs. crore)
2010-11	1070.00	458.80 (42.9)	448.04 (97.7)
2011-12	1095.00	449.18 (41.0)	395.20 (88.0)
2012-13	1164.24	853.64 (73.3)	843.68 (98.8)
2013-14	1870.54	1248.60 (66.8)	1196.14 (95.8)
2014-15	2592.81	1907.13 (73.6)	1391.43 (93.0)
CAGR	25.0	47.3	40.1

Source : Department of Urban Development and Housing, GOB

8.3 Urban Development Programmes

At present, there are several programmes for urban development, with funding from both central and state governments. These programmes are — (a) JnNURM, AMRUI and Smart City Missions, (b) Swachh Bharat Mission, (c) Namami Gange Scheme, (d) Support Programme for Urban Reforms (SPUR), (e) Urban Housing, and (f) Urban Transport.

(a) JnNURM, AMRUT and Smart City Mission

This programme was the first major flagship programme of the central government for improving urban infrastructure in Mission Cities. Now, the JnNURM has been replaced by the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), announced in 2015. This programme had two sub-components – Urban Infrastructure and Governance (UIG) and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).

Urban Infrastructure and Governance (UIG) : There were two Mission cities in Bihar – Patna Urban Agglomeration (Patna, Danapur, Khagaul, Phulwarisharif) and Bodhgaya. Under this component, Rs. 75608 lakh were sanctioned for implementation of Solid Waste Management (SWM) projects, water supply projects in Patna, Danapur, Khagaul and Phulwarisharif, and water supply and sewerage project in Bodhgaya. Of these projects, the Khagaul water supply scheme has been completed and Phulwarisharif Water Supply Scheme is near completion. The details of the sanctions is presented in Table 8.6.

Table 8.6 : Programmes under Urban Infrastructure and Governance

Name of Scheme	Estimated Cost (Rs. lakh)
SWM for Danapur, Khagaul, Phulwarisharif	1155.81
Khagaul water supply scheme	1315.43
Danapur water supply scheme	6896.45
Phulwarisharif water supply scheme	6896.45
Patna water supply scheme	42698.00
SWM for Patna	3695.40
Bodhgaya water supply scheme	3355.72
Bodhgaya sewerage scheme	9594.34
Total	75607.60

Source : Department of Urban Development and Housing, GOB

Urban Infrastructure Development for Small and Medium Towns (UIDSSMT) : Under this scheme, 11 projects were taken up during the period 2006-07 to 2008-09, with a total expenditure of Rs. 26113.56 lakh. The details are presented in Table 8.7.

Table 8.7 : Details of Urban Development Schemes under UIDSSMT

Name of Scheme	Estimated Cost (Rs. lakh)
Road and drainage construction in Fatuha	759.00
Road and drainage construction in Murliganj	1144.00
Road and drainage construction in Narkatiyaganj	4713.00
Road and drainage construction in Rosera	2921.32
Road and drainage construction in Barbigha	1573.00
Road and drainage construction in Bhabua	1088.00
Road and drainage construction in Bakhtiyarpur	511.00
Road and drainage construction in Lalganj	1263.00
Road and drainage construction in Chakia	1285.00
Water supply scheme in Muzaffarpur	9872.25
SWM in Arrah	983.99
Total	26113.56

Source : Department of Urban Development and Housing, GOB

Under AMRUT (new name of JnNURM), 25 ULBs of Bihar, each with a population of at least 1 lakh, are eligible for funding for water supply, sewerage, stormwater drainage, development of parks and green spaces, and urban transport. These ULBs are Patna, Gaya, Bhagalpur, Muzaffarpur, Darbhanga, Purnea, Arrah, Begusarai, Katihar, Munger, Chhapra, Danapur, Saharsa, Hajipur, Sasaram, Dehri, Siwan, Bettiah, Motihari, Bagaha, Kishanganj, Jamalpur, Jehanabad, Buxar and Aurangabad. The funding share between the central and state government for ULBs with population up to 10 lakhs will be 50:50, and for Patna, the funding share will be 30:70. The central government has provided for Rs. 6642.00 lakh in 2015-16 for this programme. The programme design has a strong bias towards ULBs stressing on decentralisation, which requires the ULBs to prepare State Level Investment Plans (SLIP) that are to be consolidated into State Level Annual Action Plan (SAAP). The Action Plan should be approved by a High Powered Committee at the state level for being submitted to the central government. The ULBs are required to submit the SLIPs on-line, direct to the central government. The relevant ULBs have all finalized the SLIPs and, at state level, the SAAP has also been finalised.

Another new programme launched in 2015 is the 'Smart City Mission', under which 100 Smart Cities are to be developed in India over the next 5 years. Each city will receive Rs. 100 crore annually for 5 years for programme implementation and the state government will provide a matching grant for this purpose. These 100 cities were chosen through a specially designed competition. Bihar Sharif, Bhagalpur and Muzaffarpur in Bihar have qualified to the list of 100 cities at the end of the Phase 1 competition and received Rs. 2 crore each to design their Smart City Plan of Action. The required work is going on. In Phase 2 of the competition, the 100 Smart City Plans will compete to qualify for funding, with 20 cities to be chosen in 2015-16. The Smart City Mission is designed to improve the overall quality of life in cities through intelligent solutions and urban planning interventions.

(b) Swachh Bharat Mission

This is the flagship sanitation programme launched by the central government in 2014. The key components are as follows:

Construction of individual toilets to eliminate open defecation : Bihar has a target of reaching 1.27 lakh urban families in 141 ULBs in 2015-16. The central government will contribute Rs. 4000 and the state government Rs. 8000, for each family to receive a total grant of Rs. 12,000 for this purpose. The central government has released Rs. 37.72 crore to Bihar till date. An amount of Rs. 22.49 crore remaining from the erstwhile Integrated Low Cost Sanitation (ILCS) programme is to be transferred for this purpose.

Improving solid waste management practices : In 2015-16, an amount of Rs. 117.39 crore has been allocated for this purpose under the state plan. Funds are to be utilised for door to door collection of solid waste, purchase of equipment for solid waste management, purchase/development of land for landfill sites, setting up composting/waste to energy plants, cleaning of drains, and appointing additional manpower for cleaning public places.

Construction of community toilets : The target is to construct 6881 units in 141 ULBs of Bihar. The estimated cost is Rs. 5.30 lakh per unit, of which 40 percent will be the central government contribution. The state government will allocate Rs. 70,667 per unit, with the rest being beneficiary contribution.

Construction of public toilets : It is estimated that each city receives about 5 percent floating population on a daily basis comprising people who come on work. To cater to the sanitation needs of this group, Bihar proposes to construct 1 public toilet per 600 of floating population. There are no norms with respect to central and state share for this programme. The ULBs are expected to explore Public-Private-Partnership (PPP) for this purpose. It is estimated that each unit will be constructed at a cost of Rs. 14 lakh. It is proposed that advertising rights will be allowed on three walls and user charges will also be collected. The ULBs are to provide land for this purpose, free of cost.

(c) Namami Gange Scheme

This programme of the central government targets towns located along the river Ganga, aiming for cleaning and rejuvenation of the river. There are 32 towns identified in Bihar for implementation of this scheme. The Detailed Project Reports (DPR) are being prepared in these towns for Interception and Diversion Sewers, Solid Waste Management, River Front Development, Crematoria, Dhobi Ghats, and Community Toilets. A summary of the status of this scheme is presented in Table 8.8.

Table 8.8 : Details of Namami Gange Scheme

Sectors	Number of Towns	Estimated Cost of Projects (Rs. crore)
Solid Waste Management	17	538.19
Sewerage network	14	2950.66
Interception and Diversion of Drainage including STP	16	1707.97
River Front Development	8	1250.21
Crematoria	11	85.58
Dhobi Ghats and Community Toilets	11	88.79
Total		6621.33

Source : Department of Urban Development and Housing, GOB

In addition to the above, the central government had approved 4 sewerage projects (Buxar, Hajipur, Begusarai, Munger) and the Patna River Front Development projects under this Scheme in 2010. These projects are under implementation. The sewerage project cost Rs. 441.86 crore and the Patna River Front Development projects costs about Rs. 250 crore. Although Detailed Project Reports (DPR) for solid waste management and sewerage network have been prepared

under this scheme, there has been a revision in the funding approach for these projects. Since these projects impact the whole town and not just the river, the central government has now proposed to fund these through the Ministry of Urban Development and not the Namami Gange Scheme.

(d) Support Programme for Urban Reforms (SPUR)

The Department for International Development (DFID), UK is supporting the state government in implementing the Support Programme for Urban Reforms (SPUR) in 28 largest ULBs in the state. One of the key intervention areas is the provision of basic infrastructure in 1402 slums of these towns in Phase 1. The infrastructure being provided includes internal paved roads, drains, individual toilets, hand pumps and solar street lights at an estimated budget of Rs. 402 crore, of which Rs. 90 crore is the DFID share and the remaining is the share of the state government. The slum infrastructure works are being implemented by ULBs on the basis of plans that have been prepared by the community institutions in slums. The current focus is on the construction of individual toilets in slums through community-based construction. About 50,000 toilets are to be constructed in these slums at a cost of Rs. 20,000 per unit. The progress with respect to provision of the other basic infrastructure has been relatively slower because of the focus on toilet construction.

(e) Urban Housing

Access to housing for both the poor and the general urban population is a key focus area. According to estimates of the Union Ministry of Housing and Urban Poverty Alleviation, there has been an increase in the shortage of urban housing in Bihar from 3.5 lakh units in 2001 to 11.9 lakh units in 2012. The Bihar State Housing Board is the lead agency for housing schemes in Bihar. The following schemes have been sanctioned by the Board across the state in 2013-14:

- (i) Construction of 1054 flats at an estimated cost of Rs. 475.82 crore on 16.50 acres in Dalpatpur, Arrah.
- (ii) Construction of 1596 flats on 10.10 acres in Sector 5, Patna and construction of commercial complex on 4.20 acres at Lohi Nagar in Patna.
- (iii) Construction of commercial complexes on 1.41 acres in Sector L of Lohia Nagar, Patna and on 0.55 acres in Hanuman Nagar, Patna.
- (iv) Redevelopment of business units in Bahadurpur Sector 3 and 6, Patna on 74.41 acres.
- (v) Reconstruction of old rental flats, EWS (Economically Weaker Section) Housing, slum housing in Sector S,T, and U in Lohia Nagar, Kankarbagh located on 32.35 acres.
- (vi) Redevelopment of old layout plan on 21.75 acres at Damodarpur, Muzaffarpur to construct 1496 flats and business units.
- (vii) Construction on 12,696 flats and business units on 125 acres, located in Katari and Mustafabad, Gaya.

- (viii) Construction of 272 flats on 3.75 acres at an estimated cost of Rs. 101.55 crore at Barari, Bhagalpur.

All the above projects include a mix of flats for EWS (Economically Weaker Section), LIG (Low Income Group), MIG (Middle Income Group) and HIG (High Income Group), as well as commercial complexes. Most of these projects are also to be implemented on PPP (Public-Private-Partnership) basis.

The central government programmes that targeted the housing for the urban poor are described below.

Basic Services for Urban Poor : This programme was a sub-mission under the JnNURM. The central government had sanctioned 22,372 housing units for the urban poor in Patna Urban Agglomeration towns and Bodhgaya. Under this initiative, 18 projects at Rs. 709.98 crore were to be completed by Housing and Urban Development Corporation (HUDCO). Till date, only 480 housing units have been constructed and handed over to beneficiaries. The remaining funds were returned to the central government, which was subsequently allocated to the state government as the central share under the Integrated Housing and Slum Development Plan (IHSDP).

Integrated Housing and Slum Development Plan (IHSDP) : This programme aims to improve the living conditions of the slum dwellers, through both construction of new units as well as rehabilitation of existing dilapidated units. The central government sanctioned 32 projects in 28 towns from 2006-07 to 2011-12 with a ceiling cost of Rs. 80,000 per unit till 2009 and Rs. 1,00,000 per unit thereafter. The progress under this plan is presented in Table 8.9. Work is going on in all the towns with 19,020 units under various stages of completion and 9603 units already completed.

Table 8.9 : Progress of Work under IHSDP

Progress Indicators	Number / Amount
Total Towns Covered	28
Total Sanctioned Scheme	32
Total Sanctioned Dwelling Units	28,623
Total Project Cost	Rs. 75,788.79 lakh
Total Central Share	Rs. 38,078.89 lakh
Total State Share	Rs. 37,709.41 lakh
Central Share Released	Rs. 23,350.66 lakh
State Share Released	Rs. 22,416.95 lakh

Source : Department of Urban Development and Housing, GOB

Rajiv Awas Yojana (RAY) : This central government programme was launched in 2011, which aimed at creating a ‘slum-free India’. All 38 district headquarters have been selected under this programme in Bihar and 29 Detailed Project Reports (DPR) have been prepared for 27 cities. These ‘Slum-free City Plan of Action’ has been approved at the state level. The Central Sanctioning and Monitoring Committee has sanctioned 7 DPRs for Patna, Darbhanga, Katihar and Purnea to be implemented in phases. The progress under this scheme is presented in Table 8.10.

Table 8.10 : Progress of Work under Rajiv Awas Yojana (RAY)

Indicators	Number / Amount
Total Towns Covered	5
Total Sanctioned Scheme	7
Total Sanctioned Dwelling Units	11,276
Total Project Cost	Rs. 45,465.40 lakh
Total Central Share	Rs. 29,771.86 lakh
Total State Share	Rs. 15,693.51 lakh
Central Share Released	Rs. 11,450.73 lakh
State Share Released	Rs. 3,464.60 lakh

Source : Department of Urban Development and Housing, GOB

The various programmes that targeted housing for the urban poor have been subsumed under the ‘Housing for All’ programme launched in 2015. The goal of this programme is to provide a pucca dwelling unit of 30 sq.m. area to all. The central government has allocated Rs. 87.46 crore in 2015-16 for this programme. The central share is Rs. 1.50 lakh per beneficiary and the state government will contribute Rs. 50,000 per beneficiary.

(f) Urban Transport

The JnNURM also sanctioned funds for the purchase of 1098 buses for 19 towns of the state. Consequently, 40 buses have been operationalised in Patna and 25 additional buses procured. The state government also set up the ‘Bihar Urban Transport Services Limited’ for this purpose. The status of procurement of buses for urban areas is shown in Table 8.11.

Table 8.11 : Progress of Work for Urban Transport

Scheme	Total Project Cost	Implementing Agency	Amount released
Purchase of buses in Patna	Rs. 3990.00 lakh	BUIDCo	Rs. 1995.00 lakh
Purchase of buses in Bodhgaya	Rs. 675.00 lakh	BUIDCo	Rs. 67.50 lakh

The state government has established the ‘Patna Metro Corporation’ for developing and implementing the metro rail project in the city. The Feasibility Report has been prepared and the Detailed Project Report (DPR) is under preparation.

8.4 Urban Poverty

As the world becomes increasingly urban, poverty too assumes an urban character. The urban poverty is multi-dimensional, relating to various forms of deprivations and risks. The urban poverty is first manifested in the lack of access of the urban poor to basic services, such as water, sanitation, shelter and livelihood. Secondly, as is becoming increasingly evident, this deprivation also relates to health, education, social security, and empowerment.

Table 8.12 : Poverty Line and Poverty Ratios (2004-05 and 2011-12)

Unit	Poverty Line (Rs)		Poverty Ratio	
	2004-05	2011-12	2004-05	2011-12
Bihar				
Rural	433	778	55.70	34.06
Urban	526	923	43.70	31.23
Total	–	–	54.40	33.74
India				
Rural	447	816	42.00	25.70
Urban	579	1000	25.50	13.70
Total	–	–	37.20	21.92

Source : Planning Commission

Bihar has made impressive strides in accelerating growth and reducing poverty. The incidence of overall poverty as measured by the headcount ratio has declined from 54.4 percent in 2004-05 to 33.7 percent in 2011-12 (Table 8.12). The number of the poor has also decreased from 40.2 million to 37.7 million during the same period. However, poverty in the urban areas continues to be very high and it is a matter of concern for the state’s development policy. Despite an increase in the GSDP, including its non-primary sector component, the numbers of the urban poor have continued to rise with their share in the total having escalated from 5.3 percent in 2004-05 to 7.1 percent in 2011-12.

Table 8.13 : Slum Population in Bihar (2001 and 2011)

Year	Number of Towns	Slum Population		
		Number (in lakh)	As Percentage of Urban Population	As Percentage of India’s Slum Population
2001	22	5.16	5.95	1.37
2011	85	12.37	10.52	1.89

Source: Census of India 2011

Table 8.14 : Attributes of Slums in Bihar and India

Attributes	Bihar	India
Condition of Housing		
Good	37.5	57.7
Liveable	43.4	37.1
Dilapidated	8.8	3.9
Type of Structure		
Permanent	54.2	76.8
Semi-permanent	17.6	15.9
Temporary, serviceable	6.7	3.1
Temporary, non-serviceable	10.4	2.0
Unclassifiable	0.8	1.0
Source of drinking water		
Tap from treated source	10.5	64.5
Tap from untreated source	3.5	8.6
Covered well	0.7	0.8
Uncovered well	2.4	2.2
Hand pump	68.9	12.5
Access to latrines		
Latrine connected to pipe sewer	3.9	24.2
Septic Tank	35.6	31.0
Open defecation	38.1	18.7

Source: Census of India 2011

The 'slum settlements' represent the most visible manifestation of urban poverty in India and reflect serious dimension of social exclusion. The Census (2011) puts the slum population at 12.4 lakh (10.5 percent of Bihar's urban population) in 85 towns reporting slums. Between 2001 and 2011, Bihar's slum population has more than doubled from 5.2 lakh in 2001 to 12.4 lakh in 2011 (Table 8.13). The Census reports that slums are generally an urban phenomenon confined to large cities; however, in Bihar, the largest proportion of slum population is reported from towns in the population range of 20-50 thousand, followed by towns in the population range of 50 thousand - 1 lakh. Further, the number of cities reporting slums in Bihar has risen considerably during 2001-2011. The condition of slums of Bihar compared to the other states shows that they are in a far worse situation (Table 8.14).

The phenomena of urban poverty began receiving its due attention in the course of implementation of the SPUR programme. Some of the key interventions undertaken include a physical survey and GIS mapping of slums in the 28 largest ULBs, community mobilisation, and formation of Self-Help Groups (SHG). The SHGs had a focus on thrift and credit facilities to extend livelihood options. They were also encouraged to federate at slum, city and state level. The interventions initiated under SPUR received a boost with the initiation of the National Urban

Livelihoods Mission (NULM) of the central government that is being implemented in 42 towns of the state. The programme components and achievements are described below.

- (a) Employment through Skills Training and Placement (EST&P) : This component deals with providing market based skill training to BPL youth and their placement and tracking for 1 year. The Department has identified a panel of Skill Training Providers and contracted 34 agencies for this purpose. Additionally, 16 trades and 20 modules have been identified. This list has been shared with the ULBs who also directly approach the agencies for training. The ULBs have also completed the identification of 36,062 beneficiaries for training. Progress has also been made for certification of the courses by the National Council of Vocational Training (NCVT). The progress under this component in 2015-16 is presented in Table 8.15.

Table 8.15 : Progress of Training Work under EST&P

Population Groups	Annual Target	Number of persons undergoing training	Number of persons who completed training
SC	15750	736	2293
ST	2250	27	360
Others	57000	2193	14401
Total	75000	2956	17054

Source : Department of Urban Development and Housing, GOB

- (b) Support to Urban Street Vendors (SUSV) : This module aims at organising street vending activities in 42 ULBs through biometric survey of vendors and issue of I-cards, facilitating their linkages to welfare schemes. The progress under this component in 2015-16 is presented in Table 8.16.

Table 8.16 : Progress of Work under SUSV

Programme/ Monitoring Parameter	Annual Target	Progress
No. of cities for Vendor Survey	42	42
No. of cities which completed Street Vendor Survey	42	9
No. of street vendors identified in surveyed cities	1,00,000	33847
No. of street vendors issued ID cards	1,00,000	0
No. of basic Saving Accounts opened for street vendors	15,000	5186
No. of financial literacy camps for street vendors	42	23
No. of training programmes for street vendors	125	39
No. of street vendors to be trained under Capacity Building	10,000	738
No. of Credit Cards to street vendors	10,000	0
No of street vendors to be linked to insurance scheme	5000	160

Source : Department of Urban Development and Housing, GOB

- (c) Capacity Building and Training (CBT) : Under the programme of NULM, a Project Management Unit has been constituted and City Level Mission Management Units have been mobilised. The progress in this context is presented in Table 8.17.

Table 8.17 : Progress of Work under NULM

Programme Monitoring Parameter	No. of Experts to be positioned	Positioned by end of year
State Level Mission Management Unit (SMMU)	6	6
City Level Mission Management Unit (CMMU)	89	89
Community Organisers (CO)	120	96

Source : Department of Urban Development and Housing, GOB

Till date, 2 training programmes have been conducted for SMMU experts, 5 training programmes for CMMU experts, and 2 training programme for Community Organisers, the last one covering all the 96 officers who have been appointed.

- (d) Scheme of Shelter for Urban Homeless (SUH) : This module aims at providing temporary shelter for the urban homeless, either through the construction of new accommodation or renovation of existing 'rain baseras'. A model design and estimate has been prepared for the construction of a 50 bed shelter, approved at a cost of Rs. 49.33 lakh. The progress under this component is presented in Table 8.18 and Table 8.19.

Table 8.18 : Progress of Work under SUH

Programme Monitoring Parameters	New Construction	Refurbishment
Total target for shelters	38	76
Total no. of proposals received	38	0
Total no. of project proposals approved	38	0
Total cost of Approved Project Proposals (Rs. lakh)	1874.54	760.00
Total capacity of the approved project proposals	1900	2594

Source : Department of Urban Development and Housing, GOB

Table 8.19 : ULB-wise Progress of Work under SUH

Status of SUH	No. of ULB	Name of ULB
Construction started	01	Bhagalpur
Tender published	02	Biharsarif, Katihar
Land identified and under process of tender	11	Muzaffarpur, Purnea, Buxar, Navada, Hajipur, Sheohar, Madhubani, Chhapra, Saharsa, Lakhisarai, Banka
Land identified and No objection certificate (NOC) to be taken from concerned authority.	03	Arrah, Sitamarhi, Araria
Land yet to be identified	21	Patna, Nalanda, Darbhanga, Begusarai, Gaya, Munger, Motihari, Bettiah, Samastipur, Gopalganj, Siwan, Kishanganj, Madhepura, Supaul, Jehanabad, Aurangabad, Arwal, Jamui, Khagaria, Sasaram, Bhabhua

Source : Department of Urban Development and Housing, GOB

- (e) Social Mobilisation and Institutional Development (SM&ID) : This component aims at formation of Self-Help Groups (SHGs) in urban slums, their financial inclusion and federating them. The NULM also entitles graded SHGs to a one-time Revolving Fund of Rs. 10,000. There are more than 5000 SHGs formed in the 42 towns, with more than 1500 of them receiving the Revolving Fund. The task of federating these SHGs at the town and state level has also been initiated. The progress under this component in 2015-16 is presented in Table 8.20.

Table 8.20 : Progress of Work under SM&ID

Programme / Monitoring Parameters	Annual target	Achievement (2015-16)
No. of Self-Help Groups (SHGs)	5000	1193
No. of Area Level Federations formed & registered	160	247
No. of City-Level Federations formed	30	15
No. of SHGs given Revolving Fund	3000	962
No. of trainings conducted for SHGs	121	
No. of SHGs undergone training	354	
No. of Financial Literacy Camps organized	42	0
No. of basic service bank deposit account opened	15000	4256
Life Insurance (Janshree Bima Yojana)	10000	7023
No. of Proposals received by SULM	42	25
No. of CLCs established (with manpower)	5	0

Source : Department of Urban Development and Housing, GOB

- (f) Self-Employment Programme (SEP) : This component aims at facilitating the establishment of individual or group enterprises for livelihood improvements. In this context, structured training is being provided to the SHGs and their bank linkages are being facilitated. The targets for this programme is being shared with the State Level Bankers Committee. Further, discussions with Rural Self-Employment Training Institute (RSETI) are at an advanced stage to facilitate the required training.

The overall financial progress under each of the above components in 2015-16 is summarised in Table 8.21.

Table 8.21 : Financial Allocation for Programmes under NULM (2015-16)

Programmes	Annual Allocation (Rs. lakh)
EST&P	9,041.25
SUSV	203.40
CBT	951.81
SUH	1,379.40
SM&ID	1,218.55
SEP	225.00
Total	13,019.41
Administration and other expenses (2% of Total)	260.39
Information, Education and Communication (3% of Total)	390.58
Total	13,670.38

Source : Department of Urban Development and Housing, GOB

8.5 Municipal Finance

The Bihar Municipal Act, 2007 lists out the set of taxes which the municipalities may levy for raising revenues. The Municipalities may additionally levy user charges for water supply, drainage and sewerage, solid waste management, parking of vehicles, stacking of materials/ rubbish on public streets for construction work, and other specific services as mentioned in the Act. The fees and fines are also leviable on the sanction of building plans, issue of municipal licenses for various non-residential uses of lands, issue of death and birth certificates and the like. The Municipalities are also given the power to levy a surcharge on taxes, user charges and fines. Recognizing that internally generated revenues may not be sufficient to meet the financial requirements of municipalities, the Bihar Act provides for a grant-in-aid for them out of the consolidated fund of the state, based on the recommendations of the State Finance Commission (SFC).

Presently, the status of municipal finances in Bihar is weak. The SPUR project has conducted detailed analysis of the status of municipal finances in the 28 largest ULBs of the state. On an average, these ULBs raised Rs. 589 per capita in 2012-13, which comprised 25 percent of own revenues and the balance is accounted for by state devolutions, assignments and grants-in-aid (Tables 8.22, 8.23 and 8.24).

The municipal expenditure on a per capita basis was estimated to be Rs. 387 in the same year (2012-13). Due to lack of capacity, the 28 ULBs are unable to spend even the limited resources at their disposal for maintaining services. In 2012-13, the 28 ULBs posted a surplus of revenues over expenditure, surplus being 34.2 percent of the total revenue receipts. Further, nearly three-

fourths of expenditure is reported to be on establishment; expenditure on operations and maintenance accounted for just 14 percent of the total expenditure.

Table 8.22 : Indicators of Municipal Finances for 28 Largest ULBs

(Rs. lakh)

Indicators	2012-13	2013-14	2014-15
Total Revenue Income	40540.93	49837.94	49576.62
Self-Generated Income	10324.97	12388.52	11499.58
(a) Holding Tax (Including Water, Latrine Tax and Cesses)	6470.66	7753.00	7449.78
(b) Other Taxes	1381.35	1416.74	601.49
(c) Non-Taxes	2472.95	3218.78	3448.31
Assigned Income	8774.49	11627.90	15184.80
(a) Stamp Duty	8771.68	10554.40	13807.68
(b) Professional Taxes	2.81	1073.50	1377.12
Revenue Grants	14328.81	17414.95	22698.10
Other Income / Receipts (Excluding Capital Grants)	7112.66	8406.57	194.13
Capital Grants Received	20230.84	25406.90	32349.89
Total Revenue Expenditure	26665.11	29457.12	31418.53
Establishment Expenditure	20333.95	21383.63	22766.51
Programme Expenditure	1907.43	2955.89	2979.71
Operation / Maintenance Expenditure	3768.09	3198.85	4855.01
Finance and Interest Expenditure	131.47	202.52	236.84
Other Revenue Expenditure (Including Depreciation and Finance charges)	524.18	1716.23	580.46
Total Debt Servicing (Finance charges, plus Repayment of Capital)	3.49	29.40	-
Total Outstanding Debt	2862.18	2862.18	2862.18
(a) Loans from Financial Institutions / Government	2862.18	2862.18	2862.18
(b) Bank Overdrafts	-	-	-
(c) Bonds	-	-	-
Accumulated Surplus / Equity	-	-	-
Total Assets	30656.73	42783.16	48574.28
Fixed Assets (Capital Expenditure)	9379.34	18333.56	19618.49
Short Term Assets (Excluding Inventory)	21277.39	24449.60	28955.79
(a) Cash	-	-	-
(b) Bank	20602.05	22916.89	24756.44
(c) Investment	-	-	-
(d) Deposits	-	-	-
(e) Accounts Receivables	675.34	1532.71	4199.35
Provision of Bad / Doubtful Receivables (Assumed 30 percent of Receivables)	202.60	195.51	937.33
Current and Other Liabilities (Including Arrears, Estimated Expenses, Pensions, and Dues to Suppliers or Goods and Services already Supplied)	5754.49	5544.86	5544.86
Arrears of Salary and Pension	5544.86	6064.13	5798.73
Number of Property Tax Assesses	8.33	5.60	6.17
Number of Regular Employees	0.04	0.04	0.04
Number of Temporary / Contract Employees	0.02	0.02	0.03
Estimated Population (lakh)	30.44	31.04	31.04
Per Capita Revenue Expenditure	876	949	1012

Per Capita Capital Expenditure	308	591	632
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Source : Department of Urban Development and Housing, GOB

Table 8.23 : Key Indicators of Financial Status of 28 Largest ULBs

Key Indicators	2012-13	2013-14	2014-15
Operating Ratio (Revenue Income/ Revenue Expenditure)	1.52	1.69	1.58
Self-Generated Income/ Revenue Income (Percentage)	25.5	24.9	23.2
Self-Generated Income/ Establishment Expenditure (Percentage)	50.8	57.9	80.5
Per Capita Revenue Expenditure (Rs.)	876	949	1012
Per Capita Capital Expenditure (Rs.)	308	591	632

Source : Department of Urban Development and Housing, GOB

Table 8.24 : Income from Internal Sources for 28 Largest ULBs

(Rs. crore)

Year	Sources of Income		
	Property Tax	Other Self-Generating Income	Total
2008-09	36.08	15.78	51.86
2013-14	77.45	56.19	133.64
2014-15	75.33	49.06	124.39
2015-16 (Estimates)	130.74	69.26	200.00
CAGR	20.2	23.5	20.3

Source : Department of Urban Development and Housing, GOB

There has been a decline in the volume of state devolutions, assignments and grants-in-aid in the recent years, along with an increase in the own tax revenue of municipal bodies. However, the municipalities continue to rely on state devolutions and grants which are estimated to be three-fourths of the total revenue receipts of municipalities.

The role of State Finance Commissions is very important in the context of municipal finances, as transfers to the ULBs are made as per recommendations of the State Finance Commissions. The Fourth State Finance Commission had recommended that 7.5 percent of the state's own tax revenue should be devolved to the local bodies, of which the share of urban local bodies will be 30 percent. The share of each ULB will be decided using three criteria — Population (weightage 60 percent), Geographical Area (weightage 20 percent) and Number of BPL Households

(weightage 20 percent). The priority areas for spending of devolved amounts were — Abolition of Manual Scavenging, Urban Roads, Water supply, Public Health and Sanitation (including Public Conveniences), Parking Places, and Street Lighting. The ULBs were also to be given grants-in-aid from the state government — Rs. 5.00 per annum (Patna), Rs. 1.00 crore per annum (Municipal Corporations) and Rs. 0.50 crore (Municipal Councils).

According to the Fourteenth Finance Commission, Bihar's share of grants-in-aid for municipalities will amount to Rs. 2275 crore for the period 2015-20. It will consist of a basic grant of Rs. 2141 crore, and Rs. 535 crore as performance-linked grant for a period of four years. This will imply an annual amount of Rs. 428 crore as basic grant, and Rs. 134 crore as performance-linked grant. An important feature of the performance grant is that the procedure for the disbursement of the performance grant will need to be designed by the state government. It will be given to those municipalities which — (a) have audited annual accounts that relate to a year not earlier than two years preceding the year for which the performance grant is being sought, and (b) have registered an increase in own revenues over the preceding year. In addition, municipalities claiming performance grant will need to publish the service level benchmarks relating to basic urban services and put them in public domain. At present, the legal framework is already in place to enhance 'own resources' of ULBs in the state. With the appointment of capable staff in the ULBs, they are expected to raise more of own resources.

8.6 Institutions for Urban Development

Bihar has 141 Urban Local Bodies – 11 Municipal Corporations, 42 Nagar Parishads and 88 Nagar Panchayats. The Urban Development and Housing Department at the state level has overall responsibility for urban development in Bihar. The Department is supposed to provide the policy framework and strategic guidance to the next lower level institutions, including specialised agencies in the implementation of policy.

At state level, there are a number of specialized agencies of the Department, with some overlaps between the justification of these agencies. These agencies are :

- (a) Bihar Urban Infrastructure Development Corporation (Implementation of city level infrastructure works)
- (b) Bihar State Housing Board (Lead agency for all housing related interventions)
- (c) Bihar Rajya Jal Parshad (Design and implementation of water supply schemes)
- (d) Urban Engineering Cell (Located within the Department) (Approval and monitoring of small infrastructure projects)
- (e) Town Planning Department (Preparation of Master Plans and their implementation)

As part of the SPUR programme, several key interventions have been made to improve the urban governance framework in the state. These interventions include :

- (a) A significant number of Acts, Rules, Guidelines have been enacted to put in place the legal framework for urban development and governance. The most significant of them is three amendments to the Bihar Municipal Act 2007 to make it more relevant.
- (b) The institutional structure for urban development programmes has been extended and modified. The key interventions include the creation of the Bihar Urban Infrastructure Development Corporation as the lead agency for implementation of urban infrastructure works, and restructuring the Bihar Urban Development Agency to enhance its relevance as the lead agency for implementation of urban poverty programmes. Further, the Directorate of Municipal Administration has been formed for effective management of ULBs and provide additional technical support as required.
- (c) The necessary work is ongoing for 'Right-sizing the ULBs'. This is especially relevant given that the current staff positions in ULBs have been frozen for the last two decades. The majority of sanctioned positions is no longer relevant in light of the reforms agenda that ULBs have adopted, after the enactment of the 74th Constitutional Amendment. The staff shortage is a key impediment to urban governance.
- (d) The necessary work is also ongoing for framing Municipal Cadre Rules in line with other states. This will ensure transparency and accountability of municipal staff and bring in efficiency in staff performance.
- (e) The Training and capacity building of staff is a key focus area. With assistance from the SPUR programme, the 'Centre for Urban Governance' has been established in Bihar Institute for Public Administration and Rural Development (BIPARD). This Centre has already taken the lead in training the newly appointed Executive Officers of the ULBs.
- (f) In order to improve decision making and enhance municipal accountability, an Management Information System (MIS) Cell is operational. This Cell regularly collects information from ULBs on physical and financial progress of various programmes. Monitoring formats have been developed and are used for monthly monitoring of ULB performance.
- (g) A Centralised Grievance Redressal Cell is operational to make it easier for citizens to register complaints. The functioning of this Cell is based on a Citizen's Charter that defines timelines and responsibilities to address complaints regarding service delivery. This Cell undertakes regular follow up till closure of a complaint.

- (h) To help decision making, GIS Base Maps have been prepared in the 28 ULBs under the SPUR project. The reconciliation of detailed property survey (made with the help of the maps) and the database generated with existing municipal records is underway in 12 ULBs. The property survey has been completed in Katihar and Purnea and there has been a two-and-a-half times increase in the property tax base as per the new records. Katihar and Purnea corporations are the first two towns in the state which have also completed unique house numbering and number plate fixing.
- (i) The Department is also implementing an ambitious E-Municipality project to enhance transparency and good governance. In Phase 1, the following modules are being rolled out in the municipal corporation towns — (a) Self-Assessment for Property Tax, (b) Births and Deaths Registration, (c) Right to Information (RTI), (d) Building Plan Approval, and (e) ULB websites. In the next Phase, the intervention will be extended to all the Nagar Parishads. The interface includes the integration of a payment gateway so that the citizen's need for physical presence in ULBs is reduced.

The state has already prepared a Bihar Urban Agenda, 2031. This document has a detailed roadmap for building urban infrastructure across all towns at levels consistent with standards, defined by the Ministry of Urban Development of the central government. The roadmap is focused on development of urban-led growth centres as well as creation of institutional capabilities to undertake the urban reform agenda.

CHAPTER IX

BANKING AND ALLIED SECTORS

During 2014-15, the Indian economy registered a modest recovery in growth, along with declining inflation and reduced current account deficit due to the falling global oil prices. Despite this, as the RBI observed in its report on the ‘Trend and Progress of Banking in India’ for 2014-15, the performance of the Indian banking sector remained subdued. It was manifest especially in relation to bank credit, the growth of which had dipped to a single-digit figure during the year. While the profits of the banking sector improved, it was more due to reduction in the growth of operating expenses, rather than a rise in the growth of income. The return on assets (RoA), the indicator of financial viability of the banks, did not show any improvement in 2014-15. The declining trend of the last few years regarding profitability of Public Sector Banks (PSBs) as well as their RoA continued in 2014-15. With increase in Non-Performing Assets (NPA), the asset quality of banks deteriorated, particularly for the PSBs. The Regional Rural Banks (RRBs) also witnessed a deceleration in profit growth.

Certain reform measures were initiated for the banks, as part of the seven-point ‘Indradhanush’ package in August 2015, following the recommendations by the Committee to Review the Governance of Boards of Banks in India. This led to significant changes in selection of higher management positions to imbibe professionalism and efficiency in the decision making process. Further, it also led to a fresh plan for recapitalisation of the PSBs to the tune of Rs 70,000 crore till 2019, following a performance-cum-need-based approach. These reforms were expected to strengthen the weakening capital positions of PSBs in order to enable them to adopt the Basel III framework. A framework for accountability for PSBs was also introduced based on some Key Performance Indicators (KPI), both quantitative and qualitative.

During 2014-15, spill over from external shocks also impacted the financial markets in India, though capital flows remained largely buoyant. The macroeconomic fundamentals of the economy improved moderately with continuing fiscal consolidation, narrowing of current account deficit and lower rate of inflation. However, the banking sector in general and PSBs in particular suffered due to reduced growth in credit, reflecting a slowdown in industrial growth and poor growth of earnings in the corporate sector. All these impacted the performance of the banking sector in Bihar as well. As the Annual Report of RBI stressed, “With fiscal consolidation firmly underway and with buoyant business optimism, the stage is now set for unshackling stalled investments and for boosting new capital spending in order to accelerate the pace of growth. Drawing on the experience of 2014-15, it is now time to implement an agenda to take the economy to higher growth in 2015-16 and over the medium-term.” This is especially important as the outlook for growth has shown signs of improvement. Following the initiatives launched by the central government in the form of ‘JAM trinity’ and the National Mission for

Skill Development, self-employment activities including start-up business and other programmes like Digital India and Make in India need to be strongly incentivised for better realisation of their employment potential.

The PSBs play a major role in financial inclusion, particularly in the rural sector. In the near absence of a capital market, the financial sector in a state like Bihar is almost entirely driven by the Scheduled Commercial Banks (SCB). Any adverse development in the international and national banking scenario affecting the SCBs is, therefore, bound to impact the financial sector in Bihar as well. The financial system is driven by the flow of finances through intermediaries like banks, insurance companies, securities firms, mutual funds, finance companies and pension funds, all the institutions that channel resources from those who save to those who invest. However, the analysis of the financial sector in Bihar will take into account only banking institutions functioning in the state which includes — (i) Banks that include Commercial Banks, Regional Rural Banks, Cooperative Banks as well as other Cooperative institutions, (ii) State financial institutions, and (iii) National financial institutions.

9.1 Banking Infrastructure

Commercial Banks

Table 9.1 shows the distribution of commercial bank branches in Bihar from 2010 to 2015 and their growth. In March 2015, 58 percent of the total of 6297 branches of commercial banks in Bihar were located in rural areas, compared to 61 percent in 2010. Following a record 638 branches opened during 2013-14, the next year saw only 389 new branches, with as many as 178 branches (46 percent) opened in rural areas, 96 branches (25 percent) in semi-urban areas, and 115 branches (29 percent) in urban areas. The growth in number of banks in 2014-15 was 6.6 percent, compared to 12.1 percent in 2013-14 which was the highest during the last six years.

Table 9.1 : Distribution of Commercial Bank Branch Offices (2010-2015)

Years (End March)	Total	Growth Rate	Percentage distribution of branches by location			
			Rural	Semi- urban	Urban	All
2010	4173	9.6	61.2	21.3	17.5	100.0
2011	4549	9.0	60.4	21.5	18.1	100.0
2012	4860	6.8	59.6	22.0	18.4	100.0
2013	5270	8.4	59.6	21.8	18.6	100.0
2014	5908	12.1	58.7	23.0	18.3	100.0
2015	6297	6.6	57.9	23.1	19.0	100.0

Source : State Level Bankers' Committee

As of March 2015, the private non-nationalised banks have 221 urban and semi-urban branches and only 18 rural branches. These banks obviously take advantage of the relatively higher purchasing power in the urban and semi-urban areas. Their location pattern does not serve the objective of financial inclusion.

From Table 9.2, it can be noted that Bihar accounted for only 4.8 percent of all the bank branches in the country in June 2015, though its share in country's population was about 8.6 percent. This share has nearly been the same over the past few years.

Table 9.2 : Distribution of Branches of Commercial Banks among States

States	No. of branches	Percentage share in all-India branches	Percentage share in all-India population
Assam	2127	1.6	2.6
Bihar	6301	4.8	8.6
Gujarat	7286	5.5	5.0
Haryana	4440	3.4	2.1
Himachal Pradesh	1476	1.1	0.6
Jharkhand	2793	2.1	2.7
Karnataka	9478	7.2	5.0
Kerala	6220	4.7	2.8
Madhya Pradesh	6036	4.6	6.0
Maharashtra	11896	9.0	9.3
Odisha	4448	3.4	3.5
Punjab	6084	4.6	2.3
Rajasthan	6484	4.9	5.7
Tamil Nadu	9923	7.5	6.0
Uttar Pradesh	15886	12.1	16.5
Uttarakhand	1931	1.5	0.8
West Bengal	7363	5.6	7.5
All India	131694	100.0	100.0

Source : Statistical Tables Relating to Banks in India (2014-15) RBI

Cooperative Banks

The data for the State and District Central Cooperative Banks are shown in Table 9.3. It emerges from the table that the number of State Cooperative Banks in the country as a whole increased by 82 in 2013, but decreased by 22 in 2014. Similarly, in Bihar, both the State Cooperative Banks as well as the District Central Cooperative Banks experienced contraction in 2014, with their numbers shrinking from 12 to 11 in respect of the former and from 311 to 277 in respect of the latter. The total number of Cooperative Bank branches in Bihar was 288 in 2014, compared to 323 in 2013 and 295 in 2012.

Table 9.3 : Number of Branches of State and District Central Cooperative Banks (As on March 31)

State	State Cooperative Banks			District Central Cooperative Banks			Total		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Andhra Pradesh	24	37	36	571	577	334	595	614	370
Bihar	16	12	11	279	311	277	295	323	288
Gujarat	1	3	7	1191	1247	1234	1192	1250	1241
Haryana	13	14	13	594	621	604	607	635	617
Himachal Pradesh	175	197	190	187	205	219	362	402	409
Jharkhand	-	-	5	114	122	95	114	122	100
Karnataka	40	40	42	605	604	652	645	644	694
Kerala	20	24	20	670	703	701	690	727	721
Madhya Pradesh	20	25	25	835	856	838	855	881	863
Maharashtra	53	53	53	3728	3710	3721	3781	3763	3774
Odisha	14	15	14	323	339	315	337	354	329
Punjab	20	21	19	805	812	800	825	833	819
Rajasthan	16	17	16	414	444	425	430	461	441
Tamil Nadu	46	47	47	738	784	782	784	831	829
Uttar Pradesh	29	29	29	1350	1385	1336	1379	1414	1365
Uttarakhand	15	16	15	232	243	235	247	259	250
West Bengal	43	48	43	322	285	287	365	333	330
India	999	1081	1059	13302	13655	13246	14301	14711	14305

Source : National Federation of State Cooperative Banks Ltd. (NAFSCOB)

Regional Rural Banks (RRB)

With the promulgation of Regional Rural Banks (RRB) Act of 1976, the regional rural banks came into existence. With equity holdings by the central government, the concerned state governments and the sponsoring banks in the proportion of 50:15:35, respectively, the RRBs provide a multi-agency approach for agricultural and rural credit in India.

The data for RRBs in Bihar are shown in Table 9.4. At the end of September, 2015, Bihar had 2058 RRB branches; in September, 2014, the number was 1889. Of the three RRBs in Bihar, Uttar Bihar Kshetriya Gramin Bank alone accounted for 50 percent of the total RRB branches in the state.

Table 9.4 : Number of RRBs Branches in Bihar (As on September, 2015)

Banks	Number of Branches			
	Rural	Semi-Urban	Urban	Total
Madhya Bihar Gramin Bank	570	75	31	676
Bihar Kshetriya Gramin Bank	243	92	15	350
Uttar Bihar Kshetriya Gramin Bank	759	236	37	1032
Total	1572	403	83	2058

Source : State Level Bankers' Committee

The total rural deposits of all Scheduled Commercial Banks in Bihar stood at Rs 48,202 crore as of March 2014 (Table 9.5). Bihar accounted for about 6 percent of all rural deposits of the Scheduled Commercial Banks in the country in 2013-14; this ratio has remained unchanged during the recent years. Deposits in the savings bank constituted the bulk (65 percent) of the total rural deposits of Scheduled Commercial Banks in Bihar.

Table 9.5 : Rural Deposits of Scheduled Commercial Banks by Type of Deposit (as on March, 2014)

State	No. of Branches	Current		Savings		Term		Total	
		No. of Accounts (lakh)	Amount (Rs crore)	No. of Accounts (lakh)	Amount (Rs crore)	No. of Accounts (lakh)	Amount (Rs crore)	No. of Accounts (lakh)	Amount (Rs crore)
Andhra Pradesh	3366	5.1	2067	325.3	17035	29.3	22339	359.8	41442
Bihar	3037	12.2	2298	237.3	31307	24.2	14597	273.7	48202
Chhattisgarh	943	1.8	1001	71.2	9816	6.6	4818	79.5	15635
Gujarat	2320	2.6	1665	131.1	17138	27.0	29073	160.8	47876
Haryana	1400	5.4	1195	69.3	12243	6.8	10513	81.4	23952
Himachal Pradesh	1025	5.6	996	46.7	10541	17.7	17957	70.0	29494
Jharkhand	1231	1.7	876	102.3	11925	12.6	9835	116.6	22636
Karnataka	3056	4.8	2184	194.6	15574	28.9	23186	228.4	40944
Kerala	425	0.6	287	29.6	3725	5.1	6632	35.4	10643
Madhya Pradesh	2174	3.3	1180	173.8	14972	15.2	11463	192.3	27615
Maharashtra	2924	4.0	2612	205.1	21428	20.6	23828	229.6	47868
Odisha	2124	3.1	1377	170.8	20790	22.5	14666	196.4	36832
Punjab	2161	12.3	1498	94.0	20781	17.1	27048	123.4	49326
Rajasthan	2380	5.6	1226	141.2	15694	16.1	13144	162.8	30064
Tamil Nadu	2585	3.7	1599	233.9	17117	22.3	22067	259.9	40784
Uttar Pradesh	6993	22.2	4277	745.8	77115	55.3	36519	823.2	117911
Uttarakhand	830	2.3	920	42.3	8861	9.3	7401	53.9	17183
West Bengal	2864	7.1	2242	304.8	33083	50.0	36329	361.9	71654
All-India	44653	110.2	34170	3539.5	392259	416.6	360722	4066.2	787151

Source : Basic Statistical Returns of Scheduled Commercial Banks in India, RBI

Employees of Scheduled Commercial Banks

From Table 9.6, it can be seen that there were 42,201 bank employees in Bihar in March 2014, compared to 38,368 in March 2013. Out of them, 46.7 percent belonged to the category of officers, down from 48.2 percent in the previous year. Bihar accounted for only 3.4 percent of all the employees of Scheduled Commercial Banks in India in March, 2014. From Table 9.7, it is seen that the total number of female employees of Scheduled Commercial Banks in Bihar in 2014 was 5237, compared to 3936 in 2013. Female employees account for a share of only 1.9 percent of all female employees in the country.

Table 9.6 : Distribution of Employees of SCBs (March, 2014)

State	Officers	Clerks	Sub-ordinates	Total
Andhra Pradesh	48676 (48.8)	34561 (34.6)	16613 (16.6)	99850 (100.0)
Bihar	19689 (46.7)	14855 (35.2)	7657 (18.1)	42201 (100.0)
Chhattisgarh	7823 (52.5)	5049 (33.9)	2021 (13.6)	14893 (100.0)
Gujarat	34503 (50.2)	24405 (35.5)	9778 (14.2)	68686 (100.0)
Haryana	21766 (57.5)	11224 (29.6)	4876 (12.9)	37866 (100.0)
Himachal Pradesh	4036 (43.6)	3406 (36.8)	1823 (19.7)	9265 (100.0)
Jharkhand	10294 (47.4)	7581 (34.9)	3861 (17.8)	21736 (100.0)
Karnataka	42430 (48.4)	32987 (37.6)	12242 (14.0)	87659 (100.0)
Kerala	27014 (47.3)	22616 (39.6)	7447 (13.0)	57077 (100.0)
Madhya Pradesh	23088 (48.4)	16788 (35.2)	7829 (16.4)	47705 (100.0)
Maharashtra	116199 (57.7)	63571 (31.6)	21732 (10.8)	201502 (100.0)
Odisha	15799 (47.8)	11848 (35.9)	5388 (16.3)	33035 (100.0)
Punjab	26991 (54.2)	15536 (31.2)	7302 (14.6)	49829 (100.0)
Rajasthan	25407 (51.4)	16672 (33.7)	7377 (14.9)	49456 (100.0)
Tamil Nadu	49345 (50.1)	37580 (38.1)	11654 (11.8)	98579 (100.0)
Uttar Pradesh	56070 (48.1)	40981 (35.2)	19476 (16.7)	116527 (100.0)
Uttarakhand	6196 (44.6)	5084 (36.6)	2623 (18.9)	13903 (100.0)
West Bengal	36205 (45.0)	29206 (36.3)	15000 (18.6)	80411 (100.0)
All India	640869 (51.1)	431842 (34.4)	181244 (14.5)	1253955 (100.0)

Note : Figures in Parenthesis indicate percentage share
Source : Basic Statistical Returns of Scheduled Commercial Banks in India

Table 9.7 : Distribution of Female Employees of SCBs (March, 2014)

State	Officers	Clerks	Sub-ordinates	Total
Andhra Pradesh	8839 (41.71)	9415 (44.43)	2936 (13.86)	21190 (100.0)
Bihar	2675 (51.08)	2189 (41.8)	373 (7.12)	5237 (100.0)
Chhattisgarh	1105 (41.89)	1385 (52.5)	148 (5.61)	2638 (100.0)
Gujarat	5098 (41.97)	5942 (48.91)	1108 (9.12)	12148 (100.0)
Haryana	4922 (58.04)	2891 (34.09)	667 (7.87)	8480 (100.0)
Himachal Pradesh	494 (33.49)	606 (41.08)	375 (25.42)	1475 (100.0)
Jharkhand	1728 (45.99)	1810 (48.18)	219 (5.83)	3757 (100.0)
Karnataka	9486 (38.24)	13157 (53.04)	2161 (8.71)	24804 (100.0)
Kerala	9296 (41.67)	10894 (48.83)	2118 (9.49)	22308 (100.0)
Madhya Pradesh	3490 (41.31)	4458 (52.76)	501 (5.93)	8449 (100.0)
Maharashtra	29375 (52.68)	24135 (43.29)	2247 (4.03)	55757 (100.0)
Odisha	2383 (48.59)	2207 (45)	314 (6.4)	4904 (100.0)
Punjab	5066 (46.98)	4456 (41.32)	1262 (11.7)	10784 (100.0)
Rajasthan	3356 (49.45)	2708 (39.91)	722 (10.64)	6786 (100.0)
Tamil Nadu	11261 (38.79)	15408 (53.08)	2359 (8.13)	29028 (100.0)
Uttar Pradesh	7552 (48.03)	6637 (42.21)	1534 (9.76)	15723 (100.0)
Uttarakhand	929 (38.28)	1220 (50.27)	278 (11.45)	2427 (100.0)
West Bengal	6165 (51.29)	4573 (38.05)	1281 (10.66)	12019 (100.0)
All India	129345 (46.56)	125795 (45.28)	22652 (8.15)	277792 (100.0)

Note : Figures in Parenthesis indicate percentage share

Source : Basic Statistical Returns of Scheduled Commercial Banks in India

9.2 Deposits and Credits

Per Capita Deposits and Credits of Scheduled Commercial Banks

Table 9.8 shows the deposits and credits of Scheduled Commercial Banks in major states of India in 2012-13 and 2013-14. From this table, it is seen that there has been a significant growth (15.3 percent) in the total deposits in Bihar in 2013-14 (Rs 25,225 crore) over the previous year. Simultaneously, the credit in 2013-14 has also expanded by more than Rs 12,727 crore, implying a very high growth of 25.6 percent. Bihar's share in the total deposits of Scheduled Commercial Banks increased slightly from 2.34 percent in 2012-13 to 2.39 percent in 2013-14, and its share of credit also improved marginally from 0.90 percent to 0.99 percent in this period. But, it is to be noted that the total bank credit in Bihar does not account for even 1 percent of the total bank credit in the country.

Table 9.8 : State-wise Deposits and Credit of Scheduled Commercial Banks in India (March 31)

State	Deposits				Credits				CD Ratio
	Amount (Rs. crore)	Share Percentage	Amount (Rs. crore)	Share Percentage	Amount (Rs. crore)	Share Percentage	Amount (Rs. crore)	Share Percentage	
	2012-13		2013-14		2012-13		2013-14		2013-14
Andhra Pradesh	398497	5.65	440999	5.54	438107	7.96	490843	7.81	111.30
Bihar	165209	2.34	190434	2.39	49735	0.90	62462	0.99	32.80
Gujarat	361054	5.12	414792	5.21	260642	4.73	309819	4.93	74.69
Haryana	169911	2.41	193315	2.43	129274	2.35	150886	2.40	78.05
Himachal Pradesh	45528	0.65	51993	0.65	15772	0.29	18598	0.30	35.77
Jharkhand	105701	1.50	120341	1.51	33415	0.61	38248	0.61	31.78
Karnataka	464639	6.59	536909	6.75	331540	6.02	381438	6.07	71.04
Kerala	234217	3.32	281593	3.54	171712	3.12	190557	3.03	67.67
Madhya Pradesh	200820	2.85	224910	2.83	115776	2.10	135788	2.16	60.37
Maharashtra	1785043	25.31	2028845	25.50	1576489	28.63	1821186	28.99	89.76
Odisha	143978	2.04	164629	2.07	66325	1.20	73343	1.17	44.55
Punjab	200680	2.85	230021	2.89	162550	2.95	182003	2.90	79.12
Rajasthan	177139	2.51	201257	2.53	163268	2.97	175331	2.79	87.12
Tamil Nadu	446577	6.33	499974	6.28	549245	9.97	608742	9.69	121.75
Uttar Pradesh	515015	7.30	597679	7.51	224708	4.08	266630	4.24	44.61
Uttarakhand	66453	0.94	76009	0.96	23147	0.42	27094	0.43	35.65
West Bengal	438344	6.22	480108	6.03	269934	4.90	295914	4.71	61.63
India	7051332	100.00	7955721	100.00	5506496	100.00	6282082	100.00	78.96

Source : Statistical Tables Relating to Banks in India, 2014-15, RBI

From Table 9.8, one can also note that the Credit-Deposit (CD) ratio of Scheduled Commercial Banks in Bihar in 2013-14 was the lowest (32.8 percent) among all the major states, as in the previous years. It was nowhere near the national average of 79.0 percent, not to mention the high CD ratios of Tamil Nadu (121.8 percent), undivided Andhra Pradesh (111.3 percent), Rajasthan (87.1 percent) or Maharashtra (89.8 percent).

The Credit-Deposit (CD) ratios in Bihar since 2005-06, according to data released by the State Level Bankers' Committee (SLBC), are presented in Table 9.9. As on September 2015, the aggregate deposits of all banks in Bihar were Rs 2,20,667 crore, against a credit of Rs 104004 crore, resulting in a CD ratio of 47.1 percent, substantially higher than the 32.1 percent in 2005-06. Even though there has been some improvement in the CD ratio in recent years, its low level continues to plague the banking scenario in Bihar.

Table 9.9 : Credit-Deposit (CD) Ratio of All Banks in Bihar

Year	Deposit (Rs. crore)	Credit (Rs. crore)	CD Ratio
2005-06	46134	14808	32.10
2006-07	56342	19048	33.81
2007-08	68244	22077	32.35
2008-09	83048	24051	28.96
2009-10	98588	31679	32.13
2010-11	113909	38723	33.99
2011-12	138163	50704	36.70
2012-13	161036	65364	40.59
2013-14	183458	85334	46.51
2014-15	211302	100261	47.45
2015-16 (up to Sep 2015)	220667	104004	47.13

Source: State Level Bankers' Committee

Note : As per the RBI data given in Table 9.8, CD Ratio of Bihar is 32.8 percent as of March, 2014, whereas the SLBC data presented in this table depicts the same as 46.51 percent. The difference is mainly due to the inclusion of funds loaned by banks under the RIDF Scheme (discussed in Section 9.5). Excluding the RIDF, the CD ratio would be 41.78 percent. Also Table 9.8 contains data only for the commercial banks in Bihar, while Table 9.9 contains data for all banks in Bihar including RRBs and Cooperative Banks.

In absolute terms, the low CD ratio means that if the current CD ratio of about 47 percent in the state were to increase to match the national level of around 78 percent, investments in the state would have to go up by nearly Rs. 68,400 crore which could provide the much-needed impetus to economic activities. The low disbursement of credit also indicates that either the industrial activities are stagnating or the credit requirements of the enterprises are being met at higher rates of interest from private lending agencies, eating into their profitability. This, naturally, is a serious hindrance to industrial growth in the state. Further, this also indicates the flight of capital away from an already disadvantaged state. However, it is to be mentioned that improvement in the CD ratio will depend on the credit demand which is dependent on a number of other factors like availability of infrastructure (especially uninterrupted supply of power), market, entrepreneurial skill and business atmosphere, for many of which Bihar is seriously disadvantaged.

Chart 9.1 : CD Ratio of Major Indian States as on March 31, 2014

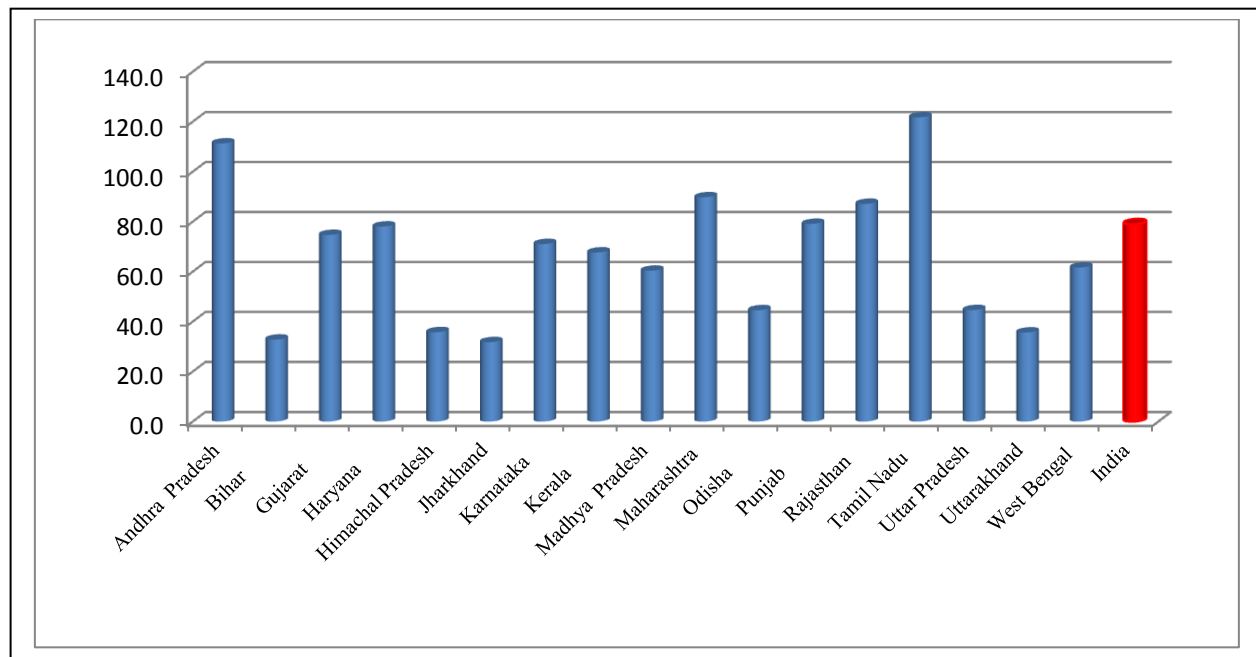
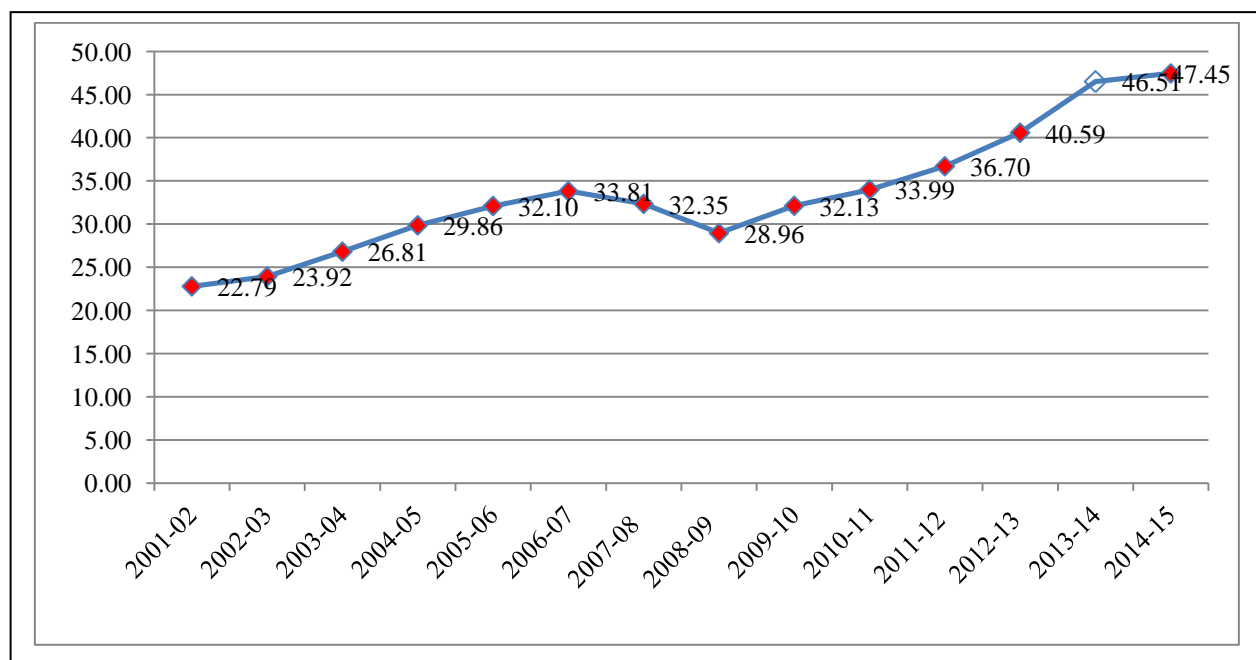


Chart 9.2 : CD Ratio of Bihar



The CD ratios in Bihar in 2014-15 by the bank groups and their locations are shown in Table 9.10. The CD ratios of Scheduled Commercial Banks in 2013-14 in different states as per sanction and utilization are shown in Table 9.11. Both these tables are based on the RBI data which do not take into account the credit available from NABARD under RIDF. In 2014-15, the CD ratio was the highest (54.92 percent) for Regional Rural Banks in Bihar, followed closely by the Cooperative Banks (53.49 percent) and, for Scheduled Commercial Banks, the ratio (35.52 percent) was much lower. Their respective shares in total deposits were Regional Rural Banks

(10.2 percent), Cooperative Banks (1.1 percent), and Scheduled Commercial Banks (88.7 percent); for credit, the respective shares were 14.9 percent, 1.5 percent and 83.6 percent. The combined credits or deposits of the Regional Rural Banks and Cooperative Banks were a fraction of the total credits and deposits of the Scheduled Commercial Banks; consequently, unless the CD ratio of the latter improves significantly, the overall CD ratio in the state is unlikely to improve.

Table 9.10 : Bank Group-wise and Area-wise Credit-Deposit Ratio (2014-15)

Bank Groups	Area	Deposits (Rs. lakh)	Credits (Rs. lakh)	CD Ratio	Investment (Rs. crore)	ICD Ratio
Commercial Bank	Rural	5903362	1599628	27.10	-	27.10
	Semi-Urban	4761965	1605494	33.71	-	33.71
	Urban	8082448	3453626	42.73	-	42.73
	Total	18747775	6658748	35.52	691770	43.91
RRB	Rural	1419631	846990	59.66	-	59.66
	Semi -Urban	445259	217649	48.88	-	48.88
	Urban	291072	119474	41.05	-	41.05
	Total	2155962	1184113	54.92	27298	56.19
Cooperative Bank	Rural	90484	42602	47.08	-	47.08
	Semi-Urban	59721	42302	70.83	-	70.83
	Urban	76263	36245	47.53	-	47.53
	Total	226468	121149	53.49	4373	55.43
All Banks	Rural	7413477	2489220	33.58	-	33.58
	Semi-Urban	5266945	1865445	35.42	-	35.42
	Urban	8449783	3609345	42.72	-	42.72
	Total	21130205	7964010	37.69	723441	45.29

Source : State Level Bankers' Committee

Investment Plus Credit to Deposit (ICD) Ratio

The banks assist the economy not simply by giving credit, but also by investing in state government securities and in shares and bonds of state undertakings, quasi-government bodies and joint stock companies. Therefore, the total involvement of the banks in the economic activities of a state is truly reflected not by CD ratios alone, but by the Investment plus Credit to Deposit (ICD) ratios. From Table 9.10, it is seen that if the ICD ratio is taken into account, Scheduled Commercial Banks are much better, compared to their CD ratios.

CD Ratio as per Sanction and Utilisation

The CD ratio is conventionally calculated on the basis of credit sanctions in a state. A low CD ratio, based on credit sanctions, would indicate the migration of deposits from one state to

another. On the other hand, a CD ratio based on credit utilization takes into account the actual location where the credit is utilised. A comparison between these two types of ratios, therefore, assumes importance. For the country as a whole, these two ratios would evidently be identical, but the utilization ratio may be larger in respect of less developed states. This was indeed the case in Bihar, as the CD ratio based on utilisation was a little higher than the same based on sanction in both 2013 and 2014. (Table 9.11).

Table 9.11 : Credit-Deposit (CD) Ratio of the Scheduled Commercial Banks as on March 31

	2013		2014	
	As per Sanction	As per Utilization	As per Utilization	As per Sanction
Andhra Pradesh	112.0	116.0	111.3	115.9
Bihar	30.5	35.0	32.8	34.8
Gujarat	72.8	81.5	74.7	81.0
Haryana	76.5	86.0	78.1	88.5
Himachal Pradesh	35.1	41.6	35.8	37.8
Jharkhand	32.1	35.8	31.8	33.0
Karnataka	71.9	76.5	71.0	76.5
Kerala	73.1	74.0	67.7	67.8
Madhya Pradesh	58.2	57.4	60.4	63.3
Maharashtra	89.4	80.8	89.8	81.3
Odisha	46.3	50.9	44.6	46.2
Punjab	81.6	78.9	79.1	81.3
Rajasthan	92.6	102.9	87.1	91.4
Tamil Nadu	123.3	122.2	121.8	120.6
Uttar Pradesh	44.1	53.0	44.6	48.0
Uttarakhand	34.8	37.3	35.6	36.7
West Bengal	62.0	63.3	61.6	63.9
India	78.8	78.8	79.0	79.0

Source : Report on Trend and Progress of Banking in India 2014-15, RBI

CD Ratio of Districts

Table 9.12 depicts the CD ratios of all Scheduled Commercial Banks as well as Regional Rural Banks in all 38 districts of Bihar, during the last 6 years. From the table, it can be seen that the CD ratios showed a wide variation across the districts, from a low 23.4 percent in Siwan to a high of 60.5 percent for Muzaffarpur. However, there has been some improvement in these ratios compared to the last year for most districts. As of September 2015, the CD ratio was less than 30 percent in only 4 of the 38 districts (Bhojpur, Saran, Munger and Siwan); the number was the same in the

Table 9.12 : District-wise Credit-Deposit (CD) Ratio

District	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (Sep 15)
Patna	26.53	31.33	33.13	34.64	36.1	36.18
Nalanda	29.75	30.87	32.22	34.04	32.1	31.17
Bhojpur	23.9	25.17	24.53	22.28	27.88	29.09
Buxar	31.56	32.23	31.65	28.96	36.19	37.04
Rohtas	38.37	40.04	40.2	42.94	45.72	45.94
Kaimur	52.16	49.07	54.59	52.44	56.51	58.43
Gaya	32.07	31.38	33.37	33.76	33.05	32.57
Jehanabad	29.98	32.36	33.72	27.6	32.13	34.73
Arawal	45.38	31.5	32.2	34.03	37.19	39.09
Nawada	34.44	39.27	37.76	38.62	36.95	37.31
Aurangabad	31.82	33.24	34.94	37.34	39.63	41.09
Saran	24.35	24.35	22.96	25.8	28.42	28.56
Siwan	21.63	21.1	21.68	23.26	25.36	23.41
Gopalganj	28.66	28.43	27.71	26.69	31.79	30.71
West Champaran	45.69	49.14	45.46	45.8	49.79	51.69
East Champaran	44.07	42.25	43.5	45.51	48.24	46.79
Muzaffarpur	35.69	33.2	38.88	39.56	40.99	60.47
Sitamarhi	34	34.65	38.88	38.1	39.21	38.76
Sheohar	34.09	36.81	34.9	40.31	45.64	47.91
Vaishali	29.9	29.98	30.74	32.29	33.62	33.66
Darbhangha	28.54	26.91	36.85	43.69	38.11	35.98
Madhubani	29.4	30.59	29.82	31.47	34.28	33.04
Samastipur	44.36	42.74	37.41	39.55	43.17	41.34
Begusarai	39.63	38.95	45.24	49.9	44.68	47.02
Munger	29.64	28.08	21.25	26.39	26.72	25.76
Sheikhpura	28.6	28.93	29.82	34.5	39.72	40.19
Lakhisarai	24.95	25.25	28.09	34.74	35.66	35.79
Jamui	26.79	29.16	29.75	29.83	39.51	37.57
Khagaria	36.05	39.84	39.03	47.53	57.76	57.76
Bhagalpur	28.97	24.92	28.76	46.96	32.31	32.64
Banka	35.15	36.45	38.85	43.41	42.56	46.57
Saharsa	34.53	33.53	34.8	36.36	37.1	37.66
Supaul	36.1	35.83	39.97	41.47	44.84	43.22
Madhepura	43.39	31.78	37.1	39.01	39.12	37.11
Purnea	53.12	50.92	54.24	57.32	58.9	58.66
Kishanganj	53.34	50.65	52.58	58.46	58.17	56.28
Araria	45.84	48.96	48.52	46.68	50.04	54.12
Katihar	44.92	44.29	42.37	44.87	48.61	47.2

Source : State Level Bankers' Committee

last year. It was above 40 percent in 17 districts (Araria, Aurangabad, Banka, Begusarai, Kaimur, Kishanganj, Khagaria, Katihar, Muzaffarpur, Purnea, Rohtas, Samastipur, Sheikhpura, Sheohar, Supaul, East Champaran and West Champaran); there were 15 such districts last year. However, the high CD ratios in some districts are sometimes related to high Non-Performing Assets (NPA) of many banks, including cooperative banks; they do not necessarily reflect the banks' increased credit flow in the district.

CD Ratio of Commercial Banks in Bihar

Tables 9.13 shows the CD ratios of nationalized commercial banks in Bihar. Among the Lead Banks, Central Bank of India had the highest CD ratio of 43.0 percent as on September 2015, followed closely by Union Bank of India (41.7 percent), Canara Bank (41.3 percent) and Bank of

Table 9.13 : Credit-Deposit (CD) Ratio of Nationalised Commercial Banks

Banks	No. of Branches in 2015	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (Sep 15)
Lead Banks							
State Bank of India	912	28.09	31.21	26.50	35.65	27.00	26.49
Central Bank of India	439	34.69	33.91	37.31	41.11	37.15	43.00
Punjab National Bank	554	29.74	33.05	30.46	37.05	38.65	39.46
Canara bank	219	33.71	39.40	39.07	42.78	40.21	41.33
UCO Bank	229	36.05	28.88	36.31	36.63	39.26	38.66
Bank of Baroda	235	34.27	33.57	35.08	35.77	34.82	41.01
Union Bank of India	141	26.67	36.78	22.29	36.02	41.12	41.73
Other Banks							
Bank of India	335	35.02	35.02	37.53	38.52	38.50	38.79
Allahabad Bank	233	26.62	30.50	34.17	41.36	39.97	39.90
Andhra Bank	30	20.18	21.35	23.32	14.53	16.76	15.99
Bank of Maharashtra	13	14.55	17.18	7.89	7.97	32.46	40.48
Corporation Bank	41	7.79	75.00	20.44	57.42	59.30	49.41
Dena Bank	40	11.64	09.49	41.94	31.13	30.26	31.16
Indian Bank	59	20.26	32.33	21.57	60.58	68.83	69.33
Indian Overseas bank	60	13.60	17.81	36.77	50.23	51.02	62.53
Oriental Bank of Commerce	48	24.40	30.41	42.67	45.13	39.90	41.79
Punjab and Sind Bank	12	10.73	11.10	10.82	112.00	62.82	NA
Syndicate Bank	56	41.67	39.92	41.43	40.11	40.88	40.32
United Bank of India	92	27.82	34.48	46.94	51.61	53.89	52.62
Vijaya Bank	30	21.28	21.93	22.77	25.68	29.19	34.18
State Bank of B&J	18	27.41	41.28	43.19	81.18	70.11	71.33
State Bank of Patiala	3	86.30	63.29	55.32	58.74	46.30	50.44
State	3799	31.37	34.90	40.59	40.73	37.69	38.55

Source : State Level Bankers' Committee

Baroda (41.0 percent). Both Canara Bank and Central Bank of India had also maintained consistently high CD ratios since 2008-09. Among other nationalized banks, State Bank of Bikaner & Jaipur had the highest CD Ratio of 71.3 percent, followed by Indian Bank (69.3 percent). Out of 22 banks, 14 had registered improvement over the last year, others recording a deterioration.

CD Ratios of Private Commercial Banks

The CD ratios of private commercial banks in Bihar need a separate mention (Table 9.14). As of 2014-15, there were 239 branches of 10 private banks in Bihar, compared to 205 branches in 2013-14. Their CD ratios varied from only 0.45 to 54.43 percent. The combined CD ratio for these banks was 40.3 percent in March 2015. Except for the 18 rural branches of only four banks (Axis Bank, HDFC Bank, ICICI Bank and IndusInd Bank), all other branches of private commercial banks were either in the semi-urban or urban areas. Only two rural branches were opened during 2014-15 by them.

Table 9.14 : Credit-Deposit (CD) Ratio of Private Commercial Banks (2014-15)

Banks	Rural			Urban and Semi-urban			Total			
	No. of branches	Deposit (Rs. lakh)	Advance (Rs. lakh)	No. of branches	Deposit (Rs. lakh)	Advance (Rs. lakh)	No. of branches	Deposit (Rs. lakh)	Advance (Rs. lakh)	CD Ratio
ICICI Bank	1	7365	3617	69	265739	114896	70	273104	118513	43.39
Federal Bank	0	0	0	8	19138	3019	8	19138	3019	15.77
Jammu Kashmir Bank	0	0	0	1	6243	1932	1	6243	1932	30.95
South Indian Bank	0	0	0	1	16792	1857	1	16792	1857	11.06
ING Vysya Bank	0	0	0	2	9850	44	2	9850	44	0.45
AXIS Bank	9	5412	525	52	355998	106399	61	361410	106924	29.59
HDFC Bank	3	1139	252	70	328832	160730	73	329971	160982	48.79
IndusInd Bank	5	5963	4336	11	91072	48483	16	97035	52819	54.43
Karnataka Bank	0	0	0	1	2240	775	1	2240	775	34.6
Kotak Mahindra Bank	0	0	0	6	19976	10257	6	19976	10257	51.35
All Private Bank	18	19879	8730	221	1115880	448392	239	1135759	457122	40.25

Source : State Level Bankers' Committee

CD Ratios of Regional Rural Banks (RRB)

There are three Regional Rural Banks in Bihar, each serving a particular zone: Madhya Bihar Kshetriya Gramin Bank (sponsored by Punjab National Bank), Uttar Bihar Kshetriya Gramin Bank (sponsored by Central Bank of India) and Bihar Kshetriya Gramin Bank (sponsored by UCO Bank). Table 9.15 shows the CD ratios of these three Regional Rural Banks. Bihar Keshtriya Gramin Bank has the highest ICD ratio of 81.3 percent in September 2015, while Madhya Bihar Keshtriya Gramin Bank has the lowest CD ratio of 38.3 percent. The overall CD

ratio of RRBs in the state in September 2015 was 52.9 percent, nearly the same as in the last year (53.6 percent). There was not much difference between their CD and ICD ratios.

Table 9.15 : Credit-Deposit (CD) and Investment Plus Credit-Deposit (ICD) Ratios of RRBs

RRBs	CD Ratio				ICD Ratio			
	2012-13	2013-14	2014-15	2015-16 (Sep 15)	2012-13	2013-14	2014-15	2015-16 (Sep 15)
Madhya Bihar KGB	42.40	42.52	43.36	38.26	42.42	42.52	43.36	38.26
Bihar KGB	50.92	72.11	75.35	72.57	50.52	79.33	83.48	81.28
Uttar Bihar KGB	51.80	55.30	56.79	56.93	51.80	55.30	56.79	56.93
Total of R.R.Bs	48.51	53.56	54.92	52.89	48.51	54.70	56.19	54.27

Source : State Level Bankers' Committee

9.3 Sectoral Share in Priority Sector Advances

Achievement under Annual Credit Plan (ACP)

Table 9.16 presents the sectoral profile of credit deployment in 2014-15. The priority sector advances constituted 73 percent of the total bank advances in the state. The share of agriculture in the total advances was 50 percent, about the same as in the previous year. It can be seen that the advances made to the small and medium scale industries were 13 percent of the total loans disbursed in 2014-15, which was a little higher than 11 percent registered in 2013-14. This lower volume of credit to industry in Bihar is certainly a cause for concern. For augmenting the credit flow to this sector, development of infrastructure in power and roadways would be necessary, along with the revival of Industrial Estates. The overall achievement under the Annual Credit Plan was 93 percent in 2014-15, which was about the same achieved in 2013-14 (92 percent). There was also an overachievement in respect of credit to small and medium enterprises during the last four years. This obviously indicates a growing demand for credit for small and medium enterprises and the need to enhance the allocation for this sector. The district-wise figures of achievements of Annual Credit Plan are shown in Table A 9.1 (Appendix).

Table 9.16 : Sectoral Share of Advances under Annual Credit Plans (2014-15)

Sector	ACP Target (Rs. crore)	Achievement (Rs. crore)	Achievement (percentage)	Share in Advances (percentage)
Agriculture	36000	34680	96.33	50.41
Small & Medium Enterprises	8500	8875	104.40	12.90
Other Priority Sector Advances	7500	6484	86.45	9.42
Total Priority Sector Advances	52000	50038	96.23	72.73
Non Priority Sector Advances	22000	18759	85.27	27.27
Total	74000	68797	92.97	100.00

Source : State Level Bankers' Committee

The total credit flow in Bihar during the past six years is shown in Table 9.17. Under the Annual Credit Plan of banks in Bihar, the total credit flow in the state has increased from Rs 57,007 crore in 2013-14 to Rs 68,797 crore in 2014-15, registering a 21 percent growth compared to the 28 percent growth registered a year before. The achievement percentages have been rising steadily from 69 percent in 2010-11 to 93 percent in 2014-15. It is also seen that there were wide variations in achievement rates among various bank groups, ranging from as low as 36 percent in the case of Cooperative Banks to 102 percent in case of Regional Rural Banks (Table 9.18).

Table 9.17 : ACP Achievement - All Banks

Year	Target (Rs. crore)	Achievement (Rs. crore)	Achievement (percentage)
2009-10	21128	17537	83.0
2010-11	37000	25552	69.1
2011-12	43200	32416	75.0
2012-13	51400	44521	86.6
2013-14	62000	57007	92.0
2014-15	74000	68797	92.97

Source: State Level Bankers' Committee

Table 9.18 : Agency-wise Analysis of ACP Achievement (2014-15)

Agencies	Target (Rs. crore)	Achievement (Rs. crore)	Achievement (percentage)
Commercial Banks	57166	52250	91.40
Regional Rural Bank	1003	362	36.07
Cooperative Banks	15831	16185	102.24
Total	74000	68797	92.97

Source : State Level Bankers' Committee

Outstanding Agricultural Advances

The data on credit flow to agriculture in Bihar during the six year period 2009-10 to 2014-15 is presented in Table 9.19. The agricultural credit flow expanded continuously since 2010-11. In 2014-15, except for the Cooperative Banks, the achievement rates have been more than 95 percent in respect of both Commercial Banks and RRBs. It was, of course, the Commercial Banks that accounted for the major share in the total credit, which was 61 percent in 2014-15. The outstanding agricultural advances stood at Rs 30,652 crore at the end of 2014-15 (Table 9.20). This implied an annual growth rate of 21 percent in total outstanding credit to agriculture during the six-year period.

Table 9.19 : Agriculture Credit Flow

(Rs. crore)

Year	Commercial Bank		RRBs		CCB		Total	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
2009-10	5425	4960 (91.4)	2220	1851 (84.0)	1082	353(32.6)	8727	7163 (82.1)
2010-11	9111	7058 (77.5)	5228	3188 (61.0)	1529	422 (27.6)	15868	10667 (67.2)
2011-12	12241	9689 (79.2)	7013	4882 (69.6)	1848	387 (20.9)	21102	14958 (70.9)
2012-13	14674	13203 (90.0)	8407	8035 (95.6)	2319	328 (14.2)	25401	21566 (84.9)
2013-14	18709	17786 (95.1)	10777	10676 (99.1)	800	307 (38.4)	30286	28770 (95.0)
2014-15	22191	21260 (95.8)	12809	13058 (101.9)	1000	362 (36.2)	36000	34680 (96.3)

Note : Figures in bracket indicate percentage of achievement
Source: State Level Bankers' Committee

Table 9.20 : Outstanding Agricultural Advances

Year	Outstanding Agricultural Advances (Rs. crore)				Annual Growth Rate
	Commercial Banks	RRBs	Cooperative & LDBs	Total	
2008-09	6409	2206	308	8923	15.6
2009-10	8521	3104	292	11916	33.5
2010-11	10664	3270	48	13982	17.3
2011-12	12426	3445	2418	18290	30.8
2012-13	15422	4219	2824	22538	23.2
2013-14	19231	5101	1047	25380	12.6
2014-15	23130	6311	1212	30652	20.8

Source: State Level Bankers' Committee

Primary Agricultural Credit Societies (PACS)

Table 9.21 shows some selected indicators of functioning of Primary Agricultural Credit Societies (PACS) in different states, as on March 2014. Though with 8463 PACS, Bihar accounts for 9.1 percent of all PACS in India, it is much behind the other states in terms of both deposits and borrowings. Also, out of the total 8463 PACS in Bihar, as many as 3962 societies are making losses, their total loss amounting to Rs 1crore, while 1180 societies have earned a total profit of Rs 6 crore. The total deposits of all PACS were only Rs 175 crore, and their total borrowings amounted to Rs 508 crore.

Table 9.21 : Selected Indicators of Primary Agricultural Credit Societies (March 31, 2014)

State	No. of PACS	Deposits (Rs crore)	Borrowings (Rs crore)	Loans and Advances Outstanding (Rs crore)		Societies in Profit		Societies in Loss	
				Agriculture	Non-Agriculture	No.	Amount (Rs crore)	No.	Amount (Rs crore)
Andhra Pradesh	2807	1260	35043	4237	184	1222	50	1585	440
Bihar	8463	175	508	NA	NA	1180	6	3962	1
Gujarat	8313	1560	12026	6101	233	5969	96	1909	55
Haryana	657	565	10586	7335	406	63	40	580	360
Himachal Pradesh	2135	2283	2878	586	11	1718	0	343	0
Jharkhand	NA	NA	NA	NA	NA	NA	NA	NA	NA
Karnataka	4915	2856	9245	4703	730	3030	100	1652	45
Kerala	2909	57968	79628	9389	35993	1127	961	936	1743
Madhya Pradesh	4457	817	6456	3400	119	2153	131	2129	178
Maharashtra	21268	187	15219	10132	Na	9264	2	11424	5
Odisha	2701	1182	4575	2739	80	645	26	2028	351
Punjab	1609	434	1206	1183	36	925	199	472	829
Rajasthan	5671	1395	7015	3012	187	4049	83	1113	34
Tamil Nadu	4310	8066	17844	4988	11238	2803	9147	1507	4860
Uttar Pradesh	8929	68	1259	800	Na	4536	18	1968	2
Uttarakhand	758	545	1224	386	111	586	45	167	8
West Bengal	7402	1891	4630	1388	241	2344	20	4036	15
India	93042	81895	212429	61376	49679	43327	11052	37662	9118

Source : National Federation of State Cooperative Banks Ltd.(NAFSCOB)

The poor resource base of PACS, their inefficient management and low level of participation of their members are major bottlenecks for increasing the credit flow through PACS. As indicated by NABARD, the capacity of PACS is limited to meet only partially the credit requirements of their members. In order to improve their functioning and financial status, it is necessary to develop them as Multi-Service Centres to provide ancillary services to their members and help them to diversify their activities.

State Cooperative Banks

Table 9.22 shows the working results of State Cooperative Banks in major states during the three years 2011-12 to 2013-14. The recovery percentage for these banks in Bihar actually declined significantly from 65 percent in June 2012 to only 25 percent in June 2014. The share of Non-

Performing Assets (NPA) in the total outstanding loans in Bihar was 12.4 percent in 2014, compared to 10.3 percent in 2012 and 13.0 percent in 2013.

Table 9.22 : Working Results of State Cooperative Banks

State	Profit/Loss (Rs. crore)			NPAs as percentage to Loans Outstanding			Recovery (percentage) as at end-June		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Andhra Pradesh	123.02	73.89	1365.10	0.98	1.94	2.27	99.10	97.34	97.30
Bihar	45.88	59.50	241.20	10.25	13.03	12.38	65.00	54.76	25.08
Gujarat	18.85	66.36	139.30	2.13	1.62	2.30	86.30	98.47	98.54
Haryana	18.69	30.21	219.80	0.05	0.05	0.05	99.94	99.96	100.00
Himachal Pradesh	41.42	50.46	406.80	10.91	9.83	10.36	71.76	69.72	86.00
Jharkhand	0.00	-0.52	-23.30	NA	37.46	55.48	NA	NA	69.14
Karnataka	29.00	31.00	345.00	3.66	3.30	4.22	97.65	97.61	98.04
Kerala	-101.16	53.16	-635.90	12.72	8.41	24.74	85.14	84.37	86.15
Madhya Pradesh	68.25	39.04	655.90	1.48	1.71	0.80	97.43	97.66	97.70
Maharashtra	175.39	391.17	4005.10	21.19	18.94	14.66	97.30	89.12	83.81
Odisha	11.01	12.64	140.50	4.69	4.61	3.76	97.08	97.11	97.32
Punjab	27.18	18.91	172.90	0.87	0.75	0.77	98.70	98.73	97.29
Rajasthan	19.58	23.53	151.30	0.83	0.88	0.33	94.70	97.02	98.51
Tamil Nadu	51.99	43.24	322.20	3.29	4.62	4.27	98.34	99.82	99.46
Uttar Pradesh	30.02	32.36	402.40	6.23	5.09	5.06	95.28	96.03	95.45
Uttarakhand	2.76	4.44	71.40	4.93	10.15	3.11	97.20	97.19	94.83
West Bengal	-59.90	10.04	-106.30	10.29	9.57	7.57	71.20	93.06	53.28

Source : National Federation of State Cooperative Banks Ltd.(NAFSCOB)

State Cooperative Agriculture and Rural Development Banks

Table 9.23 shows the working results of State Cooperative Agriculture and Rural Development Banks (SCARDB) in major states. Here also, the recovery rate in Bihar was very poor at only 6.4 percent in 2014, compared to the national average of 33.3 percent. In Bihar, the Non-Performing Assets (NPA) constituted as much as 98.1 percent of their total outstanding loans in 2014, a little lower than 99.3 percent registered in 2013. These ratios were much higher than the national average of only 35.6 and 36.0 percent, in these two years. The total losses of these banks in Bihar was Rs. 22.1 crore in 2014, compared to a modest profit of Rs. 1.5 crore a year before.

Table 9.23 : Working Results of SCARDBs

State	Branches	Profit/Loss (Rs. crore)		NPAs as percentage of Loans outstanding		Recovery (Percentage)	
		2013	2014	2013	2014	2013	2014
Bihar	131	1.54	-22.08	99.34	98.06	1.95	6.38
Chhattisgarh	0	-8.94	-9.56	66.25	70.68	21.99	6.44
Gujarat	181	37.52	23.50	40.35	43.68	43.56	42.99
Haryana	0	-6.99	-36.13	29.47	46.59	55.68	32.10
Himachal Pradesh	33	0.01	2.41	48.97	50.30	50.86	50.24
Karnataka	23	0.05	0.06	26.99	26.99	39.01	42.14
Kerala	14	20.65	21.11	3.43	3.16	94.39	94.88
Madhya Pradesh	7	-139.88	-197.64	77.87	86.31	8.39	3.56
Maharashtra	0	-113.02	-204.76	98.35	99.90	1.21	0.02
Odisha	5	-0.97	-0.97	100.00	100.00	0.38	0.38
Punjab	0	28.78	25.67	3.81	2.13	81.44	83.65
Rajasthan	7	3.07	2.15	38.26	46.48	48.81	43.86
Tamil Nadu	18	2.29	2.67	22.29	9.11	5.57	74.93
Uttar Pradesh	323	81.79	81.79	65.98	65.98	17.29	17.29
West Bengal	2	0.06	-24.21	18.82	26.88	60.08	57.21
All India	823	-101.32	-346.33	36.00	35.57	32.26	33.25

Source : National Federation of State Cooperative Banks Ltd.(NAFSCOB)

Kisan Credit Cards

The Kisan Credit Cards (KCC) scheme, introduced in 1998-99, aims at providing crop loans to farmers in a flexible and cost-effective manner. The scheme is implemented by all Scheduled Commercial Banks, Regional Rural Banks, State Cooperative Banks, Central Cooperative Banks, and Primary Agricultural Cooperative Societies. Beneficiaries under the KCC are issued with a credit card-cum-passbook, incorporating the borrowing limit and validity period. The credit limits are fixed, taking into account the production credit needs for a full year, plus ancillary activities relating to crop production. At the discretion of lending banks, sub-limits for credits are also fixed. The crop loan is provided in the form of a revolving cash credit facility, involving any number of drawals and repayments within the fixed limit.

The number of KCCs issued by banks in Bihar during the period 2010-11 to 2014-15 is shown in Table 9.24. For the Scheduled Commercial Banks and the RRBs, the achievement rates were consistently high, with the achievement rate at 69.5 percent and 65.8 percent respectively in 2014-15. The Central Cooperative Banks lagged way behind their targets, their achievement in 2014-15 being only 22.3 percent. The overall achievement for all banks in 2014-15 was 66.4

percent, down from 71.6 percent a year ago. The district-wise figures of achievements of KCC scheme are shown in Table A 9.2 (Appendix).

Table 9.24 : Number of Kisan Credit Cards (NEW) issued by Banks

	Target	Achievement	Percentage	Target	Achievement	Percentage
	Commercial Banks			RRBs		
2010-11	861430	474628	55.10	478570	276129	57.70
2011-12	811209	579456	71.43	467080	204488	43.78
2012-13	811207	600343	74.01	467081	246987	52.88
2013-14	909186	675107	74.25	535348	387658	72.41
2014-15	903944	628370	69.51	537590	353841	65.82
	CCB			Total		
2010-11	160000	40021	25.01	1500000	790778	52.72
2011-12	221711	34946	15.76	1500000	818890	54.59
2012-13	221712	16492	7.44	1500000	863822	57.59
2013-14	55466	11325	20.42	1500000	1074090	71.61
2014-15	58466	13057	22.33	1500000	995268	66.35

Source: State Level Bankers' Committee

9.4 Financial Institutions

National Bank for Agriculture and Rural Development (NABARD)

The NABARD has a mandate for facilitating credit flow for development of agriculture, agro-industries, village and cottage industries, handicrafts and other rural crafts by providing refinance to lending institutions in rural areas. It also coordinates the operations of rural credit institutions and offers training and research facilities. In addition, it manages the Rural Infrastructure Development Fund (RIDF), created to compensate for the shortfall in lending by commercial banks to agriculture. NABARD also provides loans to state governments for projects relating to irrigation, soil conservation, watershed management, drinking water supply, cold storage chains, and other rural infrastructure projects.

The details of sector-wise refinancing by NABARD till March, 2015 are shown in Table 9.25. Refinancing by NABARD has been continuously increasing and stood at Rs 7585 crore at the end of 2014-15, compared to only Rs 1336 crore in 2010-11. In 2014-15, there were substantial increases in both crop loan refinance and RIDF loan, raising the level of total financial support by 85 percent. About 14 percent of the financial support has been provided by way of RIDF loans, discussed in the next section.

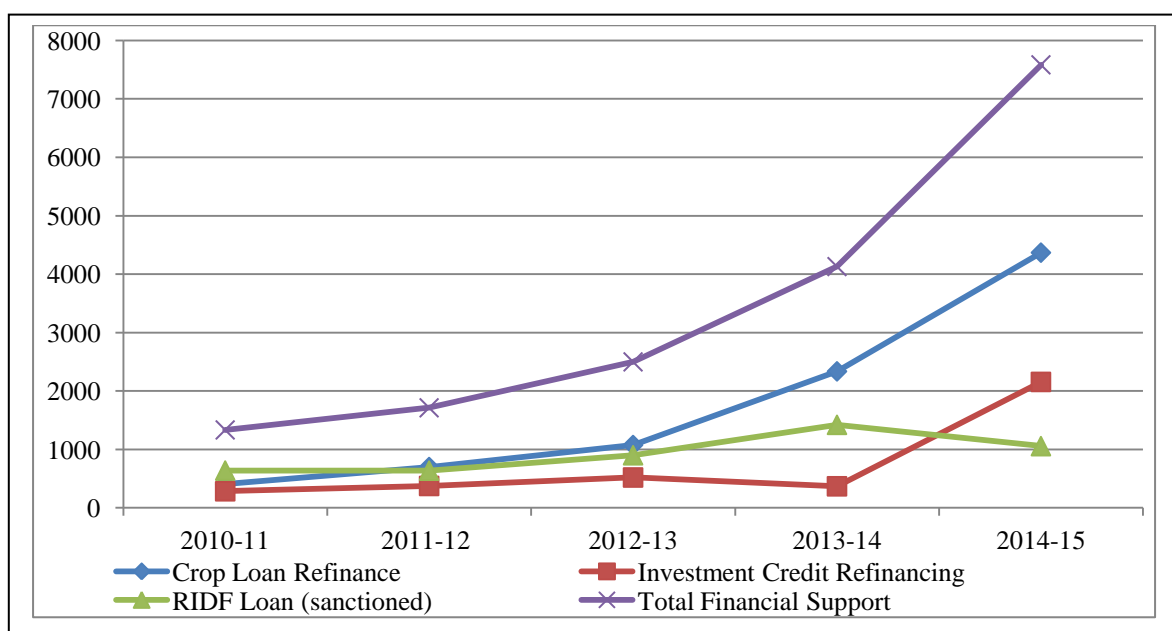
Table 9.25 : Sector-wise Refinancing by NABARD

(Rs crore)

Year	Crop Loan Refinance	Investment Credit Refinancing	RIDF Loan (sanctioned)	Total Financial Support
2010-11	409.7	285.9	640.0	1335.6
2011-12	700.0	376.5	638.0	1714.5
2012-13	1077.0	521.4	902.0	2500.4
2013-14	2338.0	370.6	1422.8	4131.4
2014-15	4370.0	2157.4	1058.0	7585.4

Source : NABARD

Chart 9.3 : Refinancing by NABARD (Rs crore)



Under the Investment Credit Refinancing, NABARD covers a number of activities and Table 9.26 presents the extent of refinancing for each of these activities during the last five years. It emerges from the table that four most important activities refinanced by NABARD in 2014-15 were — farm mechanisation, self-help groups, dairy and rural non-farm sector. The shares of these four important activities in total refinancing of Rs. 2157.36 crore were — farm mechanisation (13.7 percent), Self-Help Groups (5.3 percent), dairy (4.9 percent) and farm sector (13.8 percent). The level of refinancing in 2014-15 was increased by nearly 6 times from the previous year.

Table 9.26 : Details of Sector-wise Investment Credit Refinance in Bihar by NABARD

(Rs. crore)

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15
Minor Irrigation	39.38	32.72	46.57	17.89	25.25
Farm Mechanization	81.92	97.76	250.84	67.27	295.60
Dairy	92.56	70.62	-	31.11	104.59
Self Help Groups	40.57	43.66	-	63.38	114.24
Non-Farm Sector	22.84	97.80	53.56	21.26	298.06
Others	8.72	33.98	170.46	169.73	1319.30
Total	285.99	376.54	521.43	370.64	2157.36

Source : NABARD, Bihar

9.5 Rural Infrastructure Development Fund (RIDF)

The RIDF was set up by the central government in 1995-96 for financing ongoing rural infrastructure projects by providing low cost fund support to the state governments and state-owned corporations. The fund is managed by NABARD. The scheduled commercial banks contribute to the fund to the extent of their shortfall in stipulated priority sector lending to agriculture. The RIDF was created to provide the following benefits: (i) unlocking of sunk investment already made by the state governments, (ii) creation of additional irrigation potential, (iii) generation of additional employment for the rural people, (iv) contribution to the economic wealth of the state, (v) improved connectivity between villages and marketing centres, and (vi) improvements in quality of life through facilities in education, health and drinking water supply. At present, RIDF covers a wide range of 31 activities classified broadly under three categories — (i) Agriculture and Related sectors, (ii) Social Sectors and (iii) Rural Connectivity. For Agriculture and Related Sectors, the loans are provided for 95 percent of the project cost; for Social Sectors, the limit is 90 percent for north-eastern region and 85 percent for other states; finally, for Rural Connectivity, the limits are 90 percent for north-eastern region and 80 percent for other states.

Till the end of March, 2015, 19 tranches of RIDF have been sanctioned, totaling to Rs 2,30,951 crore for the entire country, out of which only Rs 1,86,448 crore (80.7 percent) have been disbursed (Table 9.27). For Bihar, however, the disbursed amount of Rs 7586 crore constituted 77.9 percent of the total sanction of Rs 9735 crore. Bihar was able to utilise 84.6 percent of the total disbursed fund till March 2015.

Table 9.27 : Cumulative Disbursements under RIDF till March 2015

State	Sanctions (Rs. crore)	Disbursement (Rs. crore)	Utilisation (Rs Crore)	Utilisation percentage
Andhra Pradesh	19118	16143	13290	82.3
Bihar	9735	7586	6419	84.6
Chhattisgarh	5096	3573	3163	88.5
Gujarat	16739	13919	12801	92.0
Haryana	4955	4030	3500	86.8
Himachal Pradesh	5133	4564	3462	75.9
Jharkhand	6807	5403	4664	86.3
Karnataka	9994	7936	7055	88.9
Kerala	7536	5205	4205	80.8
Madhya Pradesh	16119	12618	10354	82.1
Maharashtra	11908	9961	8387	84.2
Odisha	12328	8368	7654	91.5
Punjab	7216	6192	5028	81.2
Rajasthan	15510	12916	10800	83.6
Tamil Nadu	14298	11517	11190	97.2
Uttar Pradesh	17596	14479	13206	91.2
Uttarakhand	5047	3293	3425	104.0
West Bengal	12066	7595	8447	111.2
RIDF Total	212451	167948	147989	88.1
Bharat Nirman	18500	18500	18500	100.0
All India	230951	186448	166489	89.3

Source : Annual Report, 2015, NABARD

Table 9.28 : Sanctions and Disbursements in Bihar under RIDF till March, 2015

(Rs. crore)			
RIDF Tranche	Sanction	Disbursement	Disbursement Percentage
RIDF I -X	508	351	69.1
RIDF XI	459	418	91.1
RIDF XII	305	231	75.7
RIDF XIII	578	512	88.6
RIDF XIV	752	720	95.7
RIDF XV	674	637	94.5
RIDF XVI	1089	656	60.2
RIDF XVII	1048	598	57.1
RIDF XVIII	1490	533	35.8
RIDF XIX	1764	634	35.9
Total till March 2013	6907	3965	57.4
Total till March 2014	8790	5290	60.2
Total till March 2015	9735	6419	65.9

Source : NABARD Bihar

The total disbursements made by NABARD to Bihar under 19 tranches of the RIDF loan are shown in Table 9.28. For many tranches, there is a huge gap between sanction and disbursement. Till March 2014, the total disbursements stood 61.0 percent which rose to 65.9 percent by March 2015. Such shortfall in disbursements of RIDF funds is a matter of concern for Bihar.

The progress of RIDF during 2014-15 under tranche XIX is shown in Table 9.29. During this year, the RIDF projects in the state could create irrigation potential for 9.88 lakh hectares, besides building 72,605 meters of bridges and 6959 kms. of roads. The total value of all of these infrastructural gains was Rs 2210 crore. These projects also created employment potential for 3.43 lakh people. However, in respect of the generation of employment potential, Bihar's achievements are very modest when compared to other states like undivided Andhra Pradesh, Madhya Pradesh, Maharashtra, Gujarat, Odisha, West Bengal or Uttar Pradesh.

Table 9.29 : Estimated Benefits under RIDF –XIX as on March, 2015

States	Potential			Value of production (Rs. crore)	Recurring employment (No.)	Non-recurring employment (lakh man-days)		
	Irrigation (ha)	Roads (km)	Bridges (m)			Irrigation	Rural road and rural bridge	Others
Andhra Pradesh	2466638	34152	71134	5034	2092791	5597	5970	3738
Bihar	988366	6959	72605	2210	343437	406	4137	676
Chhattisgarh	505028	10809	31603	972	89306	1079	1132	86
Gujarat	2754717	20124	4346	1331	1914883	1670	990	1431
Haryana	1108730	3363	4903	1843	177070	765	479	234
Himachal Pradesh	130362	9733	22526	1023	790822	774	799	406
Jharkhand	311869	10871	102521	338	100075	419	1813	544
Karnataka	508125	41874	53234	1186	161780	1856	3378	1259
Kerala	343381	5281	32826	783	116758	446	886	716
Madhya Pradesh	1707926	16658	48082	6093	1257107	3853	2158	478
Maharashtra	1031425	29522	79629	1625	5215485	3718	3385	355
Odisha	2080345	8061	112624	3779	1250594	3412	4286	831
Punjab	1607981	10511	8606	7161	301230	1401	1265	1078
Rajasthan	798026	67295	14224	799	312740	1480	3627	4935
Tamil Nadu	650104	42946	85018	926	508305	735	4581	2769
Uttar Pradesh	6157325	29209	66610	8900	1885131	3482	2466	2524
Uttarakhand	223225	11638	18209	594	100990	581	1271	102
West Bengal	1450795	17092	21818	2523	955815	1390	3273	4762
Total	25879995	396084	961171	47843	17911579	34174	50450	28530

Source : NABARD Annual Report, 2015

9.6 Micro-Finance in Bihar

The conventional anti-poverty programmes suffer from problems of delivery and are often unsuccessful in making a serious dent on poverty, especially the kind of poverty caused by the absence of a credit support for the poor households. This is particularly true in Bihar. In this scenario, microfinance is a potent alternative for poverty alleviation, through affordable, timely and adequate credit and other financial services for the poor people. In this background, the Self Help Groups (SHGs) and the SHG-Bank Linkage Programme (SHG-BLP), implemented by Scheduled Commercial Banks, Regional Rural Banks and Cooperative Banks, have emerged as the major microfinance programme in the country.

As of March 2015, there were 77 lakh SHGs in India linked to the formal banking system with their savings balance of nearly Rs. 11,060 crore, compared to Rs 9900 crore in the previous year. The total bank loan disbursed to these SHGs during 2014-15 amounted to more than Rs 27,580 crore. In other words, the SHG-BLP has so far been one of the most preferred and viable models for financial inclusion of the hitherto unreached rural poor.

Bihar, a slow starter, is gradually catching up with other states in both formation of SHGs and ensuring their bank linkages. The performance of SHGs in Bihar till 2014-15 is shown in Table 9.30. As of March, 2015, bank-linked SHG coverage in rural Bihar was 29.2 lakh households, down from 32.4 lakh a year before. The average savings of Rs 13,216 per SHG in Bihar was still

Table 9.30 : Performance of SHGs in Bihar

Indicators	March 2014	March 2015
Rural households covered (SHG: savings linked) (in lakh)	32.4	29.18
No. of SHGs having savings bank account (in lakh)	2.69	2.24
Average savings / SHG (Bihar) (Rs)	6127.0	13216
Average savings / SHG (India) (Rs.)	13321.0	14368
No. of SHGs provided bank loan	190171	189341
Amount of bank loan outstanding (Rs. lakh)	89814.2	102675.69
No. of SHGs provided bank loan during the year	40036	65122
Amount of bank loan (Rs. lakh)	28400.0	47100.54
Average bank loan per SHG in Bihar (Rs. lakh)	0.70	0.72
Average bank loan per SHG in India (Rs. lakh)	1.75	1.69
Gross NPA (Rs. lakh)	7057.6	7130.35
Percentage of gross NPA to total outstanding in Bihar	7.86	6.94

Source: NABARD Bihar

below the national average of Rs 14,368, but the gap has considerably narrowed, compared to the last year. The average credit of Rs 72 thousand per SHG was, however, far below the national average of Rs 1.69 lakh. The total loans disbursed during 2014-15 to the SHGs by banks

amounted to Rs 471 crore, which was much higher than Rs 284 crore disbursed in the previous year. Their outstanding loans at the end of 2014-15 stood at Rs 1027 crore, higher than the corresponding figure one year earlier (Rs 898 crore). The non-productive assets of SHGs in Bihar declined marginally from Rs 71 crore in 2014 to Rs 70 crore in 2015. Such non-productive assets in 2015 constituted 6.9 percent of total outstanding loans. NABARD has identified 16 districts in Bihar for promoting and financing women SHGs through positioning an anchor NGO in each identified district.

Table 9.31 shows the status of SHG-Bank Linkage in major Indian states in terms of the number of credit-linked SHGs till 2014-15. Bihar had 2.24 lakh SHGs at the end of 2014-15, about 2.9 percent of the country's total. Their number was much higher last year (2.69 lakh). The total savings of these SHGs were Rs 297 crore and total bank credit of Rs 471 crore were made available to these SHGs during 2014-15.

Table 9.31 : SHG-Bank Linkage in Selected States of India (March 2015)

	No. of SHGs with Bank Linkage	Savings of SHGs with Banks (Rs lakh)	Bank loans disbursed during the year (Rs lakh)
Andhra Pradesh	884508	262949.95	562314.81
Bihar	224469	29666.98	47100.54
Chhattisgarh	148293	17954.14	11107.29
Gujarat	215839	17543.01	26209.02
Haryana	41653	3651.08	4060.03
Jharkhand	82138	8492.52	3750.89
Karnataka	734304	130241.10	480337.12
Kerala	585471	64524.57	144477.29
Madhya Pradesh	225615	23901.55	30532.80
Maharashtra	717860	90380.82	89053.23
Odisha	452068	49703.80	127888.29
Punjab	25870	2235.11	3364.99
Rajasthan	245903	14379.43	28920.80
Tamil Nadu	987282	103456.83	401673.11
Uttar Pradesh	392276	35475.66	65820.57
West Bengal	760941	127347.93	150504.66
Total	7697469	1105984.07	2758231.06

Source : Status of Micro Finance in India, 2014-15, NABARD

The year-wise progress made in credit linking of SHGs is shown in Table 9.32. During 2014-15, banks have credit-linked additional 51,403 SHGs within the state. This is an improved performance compared to 2013-14, when only 41,714 SHGs were bank-linked.

Table 9.32 : Growth of Micro-financing in Bihar

Year	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Number of SHGs linked to bank during the year	30241	26055	22714	30297	41714	51403

Source : State Level Bankers' Committee

Table 9.33 shows the microfinancing activities of the Regional Rural Banks in Bihar in 2014-15. During that year, the three Regional Rural Banks have together financed 51,403 SHGs (51.4 percent of target). The total amount of credit disbursed during the year was Rs 284 crore, compared to Rs 177 crore during the previous year, which was about 60 percent of the total credit of Rs. 471 crore disbursed to SHGs in Bihar in 2014-15.

Table 9.33 : Microfinancing by RRBs during (2014-15)

RRBs	SHGs with Bank-linkage			
	Target	Sanction	Credit Amount (Rs lakh)	Percentage Achievement
Bihar KGB	4414	3719	1865	84.25
Madhya Bihar KGB	11482	10575	5946	92.10
Uttar Bihar KGB	20700	17290	9508	83.53
Total for Bihar	100000	51403	28352	51.40

Source : State Level Bankers' Committee

Some major handicaps that exist in linking the SHGs to banks include the absence of reputed NGOs and low awareness of the stakeholders about the benefits of SHG lending. As noted by NABARD, despite the unique characteristics of SHGs and their accomplishments so far, several issues continue to affect the programme like inadequate outreach in many regions, delays in opening of SHG accounts, delays in disbursement of loans, impounding of savings by banks as collateral, non-approval of repeat loans even when the first loans were repaid promptly, multiple membership, limited interface with bankers, and monitoring. It is expected that initiatives taken by NABARD and other implementing banks in organising sensitisation programmes shall result in a more favourable environment towards the SHG movement in the state.

The State Level Bankers' Committee in Bihar had identified certain factors that have contributed to the success of SHGs in other states and which are, by and large, absent in Bihar. These factors are — attitude of the rural people and their education, availability of professionally-run quality micro-finance institutions, conducive regulatory framework, government support, and channelising government assistance through the SHGs. It will be necessary to remove the above constraints to ensure the spread of the SHG movement in the state. The SHG-BLP was given a renewed thrust by NABARD with the launch of SHG-2 to address some of these bottlenecks. All the SCBs, RRBs and CCBs are part of this renewed thrust. The focus of SHG-2 would be on voluntary savings, cash credit as a preferred mode of lending, scope for multiple borrowings by SHG members in keeping with the repayment capacity, and avenues to meet higher credit

requirements for livelihood creation. Further, the scheme will also promote SHG Federations as non-financial intermediaries, audit and rating of SHGs as part of risk mitigation system, and strengthening the monitoring mechanisms.

9.7 Financial Inclusion

The Reserve Bank of India had instructed to provide banking facilities in all the unbanked villages in Bihar, irrespective of population criterion by March, 2016 (instead of the earlier

Table 9.34 : Roadmap of Financial Inclusion (September 2015)

Sl. No.	Name of Bank	Number of allotted village	Number of Banking Outlets opened through			
			Bank Branch	Banking correspondent	Other modes	Total
Scheduled Commercial Banks(SCB)						
1	State Bank of India	3719	33	3686	0	3719
2	Central Bank of India	2207	14	2193	0	2207
3	Punjab National Bank	3855	16	3839	0	3855
4	Canara Bank	621	18	603	0	621
5	Uco Bank	1467	0	1460	7	1467
6	Bank of Baroda	582	41	541	0	582
7	Union Bank of India	346	0	346	0	346
8	Bank of India	1123	0	1123	0	1123
9	Allahabad Bank	937	20	917	0	937
10	Andhra Bank	13	0	0	13	13
11	Corporation Bank	5	0	4	0	5
12	Dena Bank	10	10	0	0	10
13	Indian Bank	121	0	121	0	121
14	Indian Overseas Bank	27	0	26	0	27
15	Oriental Bank of Commerce	47	3	44	0	47
16	Syndicate Bank	73	18	31	23	73
17	United Bank of India	428	0	419	8	428
18	Vijaya Bank	7	0	7	0	7
19	IDBI	1	0	1	0	1
	Total for SCB	15589	173	15361	51	15589
Private Bank						
1	ICICI Bank	3	1	2	0	3
2	Jammu Kashmir Bank	3	0	0	3	3
3	HDFC Bank	1	0	1	0	1
	Total Private Bank	7	1	3	3	7
Regional Banks						
1	Madhya Bihar Gramin Bank	4547	219	4328	0	4547
2	Bihar Gramin Bank	1792	35	1757	0	1792
3	Uttar Bihar Gramin Bank	5408	24	5384	0	5408
	Total for RRBS	11747	278	11469	0	11747
	Total for Bihar	27343	452	26833	54	27343

deadline of August, 2015). A Roadmap for such financial inclusion was prepared by the banks in Bihar, in consultation with the state government. The Roadmap aimed at expanding banking outlets, either by opening new branches, or by appointing Banking Correspondents, or through ICT-based and other modes.

Table 9.34 presents the number of villages allotted to each bank under this Roadmap and it further shows that its target has been fully achieved by September, 2015. Out of 27.3 thousand villages that were financially included, the majority (98.1 percent) were included through Banking Correspondents; new bank branches accounted for 1.7 percent of the villages, and other modes 0.2 percent of the villages. Among the three types of banks, private banks had an insignificant role in this plan for financial inclusion. The Scheduled Commercial Banks had the largest role, which together extended banking facility to 15.6 thousand villages (57.0 percent) and the Regional Rural Banks played that role for 11.7 thousand villages (43.0 percent).

9.8 Corporate Climate in Bihar

Tble 9.35 shows the total number of limited companies registered in major states of India during 2013-14. From this table, it can be seen that 2366 limited companies (2.4 percent of the country's total) had registered themselves in Bihar in 2013-14, compared to 1566 in the previous

Table 9.35 : State-wise Number of Registration of New Limited Companies during 2013-14

States	No. of Companies			Authorised Capital (Rs crore)		
	Public	Private	Total	Public	Private	Total
Andhra Pradesh	82	7093	7175	151.39	3065.36	3216.75
Bihar	128	2238	2366	74.31	271.31	345.62
Chhatisgarh	33	512	545	11.95	104.37	116.32
Gujarat	126	5009	5135	314.11	2101.25	2415.36
Haryana	62	3405	3467	93.4	640.89	734.29
Himachal Pradesh	8	293	301	2.35	34.38	36.73
Jharkhand	99	941	1040	3628.46	206.23	3834.69
Karnataka	41	5953	5994	23.85	994.62	1018.47
Kerala	55	2865	2920	112.62	603.08	715.7
Madhya Pradesh	80	2169	2249	140.55	269.56	410.11
Maharashtra	361	17325	17686	612.45	3881.83	4494.28
Odisha	38	1239	1277	131.3	164.99	296.29
Punjab	86	1182	1268	45.4	221.68	267.08
Rajasthan	43	3506	3549	4035.33	270.9	4306.23
Tamil Nadu	162	6293	6455	223.47	1371.33	1594.8
Uttar Pradesh	419	7431	7850	3353.7	532.03	3885.73
Uttrakhand	19	467	486	9.75	64.55	74.3
West Bengal	961	8976	9937	250.46	1269.76	1520.22
Grand	3184	95253	98437	19174.34	19699.49	38873.83

Source: Annual Report, Ministry of Corporate Affairs, Government of India, 2014-15

year. Of these, as many as 2238 companies (94.6 percent) were private limited companies with a total authorised capital of Rs 271 crore, and only 128 companies (5.4 percent) were public limited companies, with a total authorised capital of Rs 74 crore. There were 14,547 registered companies in Bihar in March 2013. With the registration of 2366 new companies, the total number of companies in Bihar in March 2014 would be 16,913. However, many of these companies, including some in the public sector, may be either closed or non-working, and many others may not have yet started operations. Data in respect of this remains unavailable.

APPENDIX

Table A 9.1 : District-wise Performance Under Annual Credit Plan as on 31.3.2015

A : Priority Sector Advances

(Rs. crore)

District	Agriculture			Small & Medium Enterprise			Other Priority Sector			Total Priority Sector		
	Target	Achievement	Achievement Percentage	Target	Achievement	Achievement Percentage	Target	Achievement	Achievement Percentage	Target	Achievement	Achievement Percentage
Patna	1396	1445	103.54	1470	2268	154.27	2052	1991	97.05	4918	5705	116.00
Nalanda	866	773	89.2	262	266	101.42	105	83	79.24	1234	1122	90.92
Bhojpur	1444	1327	91.91	146	142	97.52	134	103	76.95	1724	1572	91.18
Buxar	1356	1222	90.14	199	190	95.47	134	104	77.45	1689	1516	89.76
Rohtas	1427	1454	101.88	392	380	97.09	142	123	86.5	1960	1956	99.80
Kaimur	1298	1202	92.57	139	115	82.52	71	59	82.85	1508	1375	91.18
Gaya	1403	1287	91.74	443	373	84.16	191	189	99.26	2036	1849	90.82
Jehanabad	440	360	81.72	71	55	77.56	83	68	82.33	594	483	81.31
Arwal	265	235	88.57	33	31	92.8	46	40	86.75	344	305	88.66
Nawada	490	438	89.27	69	70	100.43	97	61	62.38	657	568	86.45
Aurangabad	1103	923	83.72	147	129	88.17	196	173	88.14	1445	1225	84.78
Saran	1261	1330	105.46	353	336	95.26	234	223	95.25	1848	1889	102.22
Siwan	984	1012	102.84	192	180	93.38	199	171	86.01	1375	1363	99.13
Gopalganj	1280	1244	97.18	72	79	109.48	157	78	49.72	1510	1401	92.78
W. Champaran	1524	1527	100.25	392	358	91.5	350	260	74.32	2265	2146	94.75
E. Champaran	1526	1577	103.39	291	301	103.23	220	154	69.79	2037	2032	99.75
Muzaffarpur	1943	1756	90.35	461	512	111.18	344	326	94.69	2749	2594	94.36
Sitamarhi	781	734	94.06	151	145	95.59	80	69	86.34	1012	948	93.68
Sheohar	177	157	88.92	12	14	119.24	10	8	75.19	198	179	90.40
Vaishali	893	848	94.96	146	143	98.12	201	187	93.17	1239	1178	95.08
Darbhanga	751	737	98.16	224	241	107.88	131	145	110.38	1106	1124	101.63
Madhubani	1206	1041	86.26	217	244	112.58	134	133	99.3	1557	1418	91.07
Samastipur	1667	1431	85.85	385	270	70.18	195	199	102.02	2247	1900	84.56
Begusarai	1283	1254	97.73	495	514	103.84	380	205	53.87	2158	1973	91.43
Munger	403	373	92.51	119	90	75.3	150	134	89.5	672	596	88.69
Sheikhpura	226	215	94.8	35	26	73.76	30	26	87.07	291	266	91.41
Lakhisarai	325	367	112.92	76	54	71.55	69	57	82.39	470	478	101.70
Jamui	419	547	130.57	76	57	75.76	85	64	74.86	580	668	115.17
Khagaria	649	672	103.56	140	104	74.47	87	65	74.85	877	842	96.01
Bhagalpur	901	959	106.48	438	377	86.07	196	172	87.92	1534	1508	98.31
Banka	554	539	97.19	140	118	83.98	135	112	82.72	830	769	92.65
Saharsa	567	538	94.91	58	58	98.88	125	102	81.75	750	698	93.07
Supaul	573	661	115.29	41	33	80.05	104	60	57.64	718	754	105.01
Madhepura	611	632	103.44	41	40	97.53	76	71	92.89	727	742	102.06
Purnea	1209	1240	102.6	162	165	101.78	200	180	89.7	1571	1585	100.89
Kishanganj	852	748	87.79	131	125	96.09	101	91	90.23	1083	964	89.01
Araria	946	877	92.67	153	141	92.18	100	79	78.96	1200	1097	91.42
Katihar	1002	1000	99.74	129	130	101.04	155	120	77.52	1286	1250	97.20
Bihar	36000	34680	96.33	8500	8875	104.4	7500	6484	86.45	52000	50038	96.23

Source: State Level Bankers' Committee

B : Non-Priority Sector Advances as on 31.3.2015

(Rs. crore)

District	Non-Priority Sector			Grand total		
	Target	Achievement	Achievement Percentage	Target	Achievement	Achievement Percentage
Patna	6513	6141	94.29	11431	11846	103.63
Nalanda	455	405	89.05	1689	1527	90.44
Bhojpur	476	315	66.19	2200	1888	85.8
Buxar	269	214	79.67	1958	1730	88.38
Rohtas	420	369	87.77	2380	2325	97.68
Kaimur	245	177	72.35	1753	1552	88.56
Gaya						
Gaya	788	497	63.01	2825	2346	83.04
Jehanabad	151	144	95.26	746	627	84.14
Arwal	101	82	81.69	445	388	87.14
Nawada	259	270	104.01	916	838	91.43
Aurangabad	382	335	87.74	1827	1560	85.39
Saran						
Saran	613	549	89.48	2461	2438	99.04
Siwan	647	427	66	2022	1790	88.5
Gopalganj	394	283	71.95	1904	1685	88.5
W. Champaran						
W. Champaran	584	426	73.05	2849	2572	90.29
E.Champaran	697	677	97.12	2734	2709	99.07
Muzaffarpur	1010	878	86.94	3759	3473	92.39
Sitamarhi	487	386	79.28	1498	1334	89
Sheohar	63	53	84.53	262	232	88.7
Vaishali	496	359	72.31	1735	1536	88.55
Darbhanga						
Darbhanga	716	1082	151.16	1822	2205	121.05
Madhubani	617	475	76.94	2174	1892	87.04
Samastipur	669	453	67.72	2916	2353	80.7
Begusarai						
Begusarai	519	317	61.08	2677	2290	85.53
Munger	455	369	80.98	1127	965	85.63
Sheikhpura	74	78	105.04	366	344	94.23
Lakhisarai	146	118	81.24	616	596	96.9
Jamui	215	180	84.11	794	849	106.83
Khagaria	214	168	78.67	1090	1010	92.64
Bhagalpur						
Bhagalpur	571	347	60.84	2105	1855	88.13
Banka	244	183	74.87	1074	951	88.57
Saharsa						
Saharsa	287	263	91.88	1037	961	92.71
Supaul	329	278	84.51	1047	1031	98.52
Madhepura	306	260	84.98	1034	1003	96.96
Purnea						
Purnea	389	276	70.95	1960	1861	94.94
Kishanganj	193	149	77.16	1277	1113	87.22
Araria	309	278	90.2	1508	1376	91.21
Katihar	698	496	71.02	1984	1746	87.98
Bihar	21999	18759	85.27	74000	68797	92.97

Source : State Level Bankers' Committee

Table A 9.2 : District-wise Achievement Kisan Credit Card (NEW and RENEW) Numbers

District	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Patna	18048	26233	60143	50522	54949	54317	72920	59086
Nalanda	16175	22281	34946	42065	46476	63100	52078	54166
Bhojpur	15918	27575	50759	59020	84537	86527	96033	90502
Buxar	6775	10916	38447	32040	40533	79492	64988	51356
Rohtas	19590	33141	56523	57664	76546	95856	78681	72125
Kaimur	12094	24102	31488	29355	44165	63615	57317	63940
Gaya	16371	52571	40101	41012	60645	85438	95487	86967
Jehenabad	5348	12261	16095	25154	26430	18910	16732	14201
Arwal	2932	4443	6691	8363	12753	13458	11095	13466
Nawada	11217	25992	24837	28980	23731	36426	44285	42456
Aurangabad	8638	28077	42494	42353	54786	67639	31695	54098
Saran	14127	24233	32706	34841	39064	66255	72475	61317
Siwan	14545	27750	38536	34165	36959	72170	55790	71073
Gopalganj	13396	29824	42890	53928	60448	82846	97366	98799
West Champaran	32431	47446	70194	75740	97812	86741	104247	98925
East Champaran	26210	45138	74330	82860	104239	129858	147007	156795
Muzaffarpur	20050	36197	61028	58142	71134	91760	96007	144851
Sitamarhi	24403	19944	34675	30368	43467	62523	66492	47519
Sheohar	2617	6646	6315	12123	7682	11305	27414	9874
Vaishali	17144	30629	38763	45605	66709	82387	88732	80246
Darbhanga	8011	20738	43993	26360	41682	56134	52021	39350
Madhubani	15598	35420	38578	55261	72368	101067	95600	97564
Samastipur	22783	38363	79075	80395	95785	94512	155580	154742
Begusarai	14712	20694	57130	72811	89799	111447	152526	134323
Munger	5608	10756	16559	16701	28053	19329	36372	36215
Shiekhpora	3532	7882	6036	5216	12738	13617	12604	21867
Lakhisarai	4587	10054	11401	15848	18074	16615	35836	39826
Jamui	7382	13458	15779	22590	28020	30842	50855	64318
Khagaria	9296	12375	30313	39919	57270	45848	69174	78560
Bhagalpur	11477	22734	44740	37938	48747	45360	66863	65704
Banka	4282	9463	21232	22829	36202	34782	36685	36018
Saharsa	7250	13835	21763	18904	25224	32859	41012	47163
Supaul	6296	57130	22830	16790	27256	40505	45482	46709
Madhepura	6056	11620	12307	14707	24802	29932	36537	25387
Purnea	13477	27434	51210	30384	55209	64566	64262	61973
Kishanganj	7393	13680	14645	20790	36764	44189	51111	46034
Araria	8558	16384	20225	29469	47758	54054	82371	53922
Katihar	12213	19833	29760	31618	48620	45505	53031	49916
Bihar	466540	897252	1339537	1402830	1847436	2231786	2514763	2471353

Source : State Level Bankers' Committee

CHAPTER X

HUMAN DEVELOPMENT

It is now widely recognised that promoting human development through a set of social policies should run parallelly to the policies for economic development. Indeed, the human development is an essential prerequisite for sustained economic development of a region. It builds up a strong edifice for a vibrant economy. It leads to enhancement in the quality of life through promotion of education, health, sanitation, and welfare programmes for the marginalised sections of the population. This chapter presents the status of different components of human development in Bihar.

Bihar has shown high rate of economic growth over the years. During 2005-06 to 2014-15, the economy has grown annually at constant prices at the rate of 10.5 percent. Simultaneously, the state government has also enhanced its development expenditure in recent years. In consequence, human development has been substantial in the state, particularly in the fields of education and health, the two of its most important components. During the last five years, the level of Per Capita Development Expenditure (PCDE) in Bihar has been low compared to the national average; but thanks to the commitment of the state government, the growth rate PCDE in Bihar has been 29.6 percent, compared to a much lower growth rate of 17.8 percent for all states. (Table 10.1).

Chart 10.1 : Trend of Per Capita Expenditure on Social Services

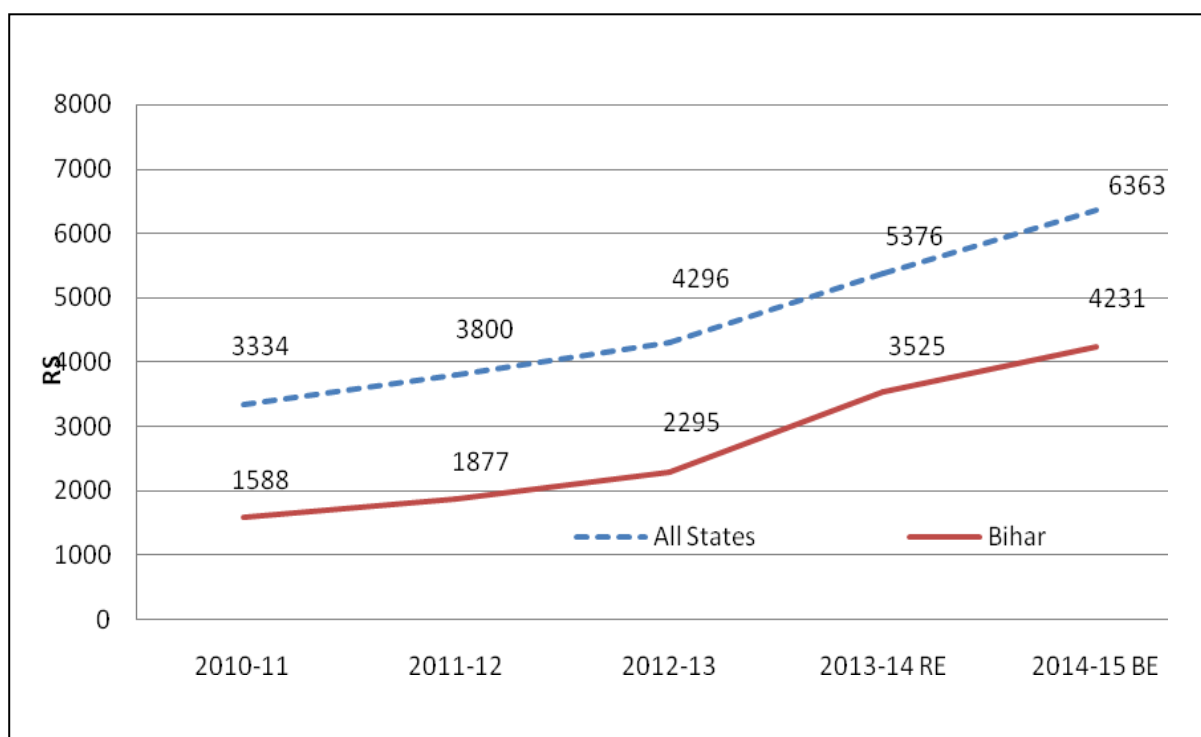


Table 10.1 : Trend of Social Services Expenditure

Year	Total Expenditure on Social Services (Rs crore)		Total Expenditure (Rs. crore)		Percentage share of Social Services in Total Expenditure		Per Capita Expenditure on Social Services (Rs.)	
	All States	Bihar	All States	Bihar	All States	Bihar	All States	Bihar
2010-11	397112.4	16161.5	4927322	189279	8.1	8.5	3334	1588
2011-12	459980.3	19535.9	5194730	203940	8.8	9.6	3800	1877
2012-13	528654.6	24438.2	6152788	179104	8.6	13.6	4296	2295
2013-14 (RE)	672388.0	38396.6	5424946	110504	12.4	34.8	5376	3525
2014-15 (BE)	808828.0	47137.3	5765550	129030	14.0	36.5	6363	4231

Source: State Finances, A Study of Budgets, RBI

10.1 Health

Health is an important determinant of well-being. The World Health Organisation (WHO) considers health as a “state of complete physical, mental, and social well-being and not merely the absence of diseases or infirmity”. Good health enhances the capabilities of a person to work and participate in economic development. For improvement in the health and nutritional status of the population, the major thrust areas should be improving the access to and utilization of health, family welfare and nutrition services, with special attention on underprivileged segments of the population. In recent years, Bihar has strengthened both the infrastructure and manpower for the health services at all levels — primary, secondary and tertiary. Better infrastructure, easy availability of drugs, and expansion of human resources for health services have all led to an improvement in public health services. This may be ascribed to increased expenditure on health, as well as constant monitoring of the health services.

Selected Health Indicators of Bihar

Bihar has witnessed remarkable improvement in health indicators in recent years. The Life Expectancy at Birth (LEB) is one of the major indicators of the health status of a population. The relevant data on this indicator, for Bihar and India, has been presented in Table 10.2. It is apparent from the table that the gap between India and Bihar has been narrowed down to 0.3 years in 2006-10 from 2.1 years in 2001-05. When one compares the LEB for males and females, it is usually found to be higher for females, because of biological reasons. In case of India, this general pattern was observed in both 2001-05 and 2006-10. In case of Bihar, although the LEB for female was lower than that of male in 2001-05, it is now higher, indicating lessening of gender disparity.

Table 10.2 : Life Expectancy at Birth

State/India	2001-05			2006-10		
	Male	Female	Total	Male	Female	Total
Bihar	62.0	60.1	61.0	65.5	66.2	65.8
India	62.3	63.9	63.1	64.6	67.7	66.1

Source : Sample Registration System (SRS), Office of the Registrar General, India.

Three more indicators of health for which there exists comparable data are — Crude Birth Rate (CBR), Crude Death Rate (CDR) and Infant Mortality Rate (IMR). Table 10.3 presents the relevant data for Bihar and India. For Crude Birth Rate (CBR), the figures are persistently higher for Bihar; in 2012-13, it was 27.6 for Bihar, compared to 21.4 for India, registering a difference of 6.2. This indicates the absence of demographic transition in Bihar. Between 2008-09 and 2012-13, however, the difference between CBR of Bihar and India has been slightly reduced. As regards CDR, it has steadily declined in the state. This was the result of greater health consciousness amongst the public, increasing education levels, and easier accessibility to better health services. Between 2008-09 and 2012-13, the CDR in Bihar has declined from 7.4 to 6.6.

The Infant Mortality Rate (IMR) which indicates the death of children before the age of one year per thousand live births, is another reliable indicator of health and nutritional status of a population. The concerted efforts of the state government through ensuring round the clock delivery services in all PHCs had paid rich dividends in bringing down the IMR considerably in Bihar. In 2012-13, the IMRs in Bihar were — male (40), female (43), and overall (42). The corresponding figures for India were — male (39), female (42), and overall (40). Thus, the situation in Bihar was very close to the national average, in spite of its serious economic and social disadvantages.

Table 10.3 : Selected Health Indicators for Bihar and India

Category		2008-09	2009-10	2010-11	2011-12	2012-13
Crude Birth Rate						
Bihar	Rural	29.7	29.3	28.8	28.4	28.3
	Urban	22.5	22.2	22	21.6	21.5
	Combined	28.9	28.5	28.1	27.7	27.6
India	Rural	24.4	24.1	23.7	23.1	22.9
	Urban	18.5	18.3	18.0	17.4	17.3
	Combined	22.8	22.5	22.1	21.6	21.4
Crude Death Rate						
Bihar	Male	7.6	7.2	7.1	6.7	6.7
	Female	6.9	6.8	6.6	6.5	6.5
	Total	7.4	7.0	6.8	6.6	6.6
India	Male	8.0	7.8	7.7	7.7	7.5
	Female	6.8	6.7	6.7	6.4	6.4
	Total	7.4	7.3	7.2	7.0	7.0
Infant Mortality Rate						
Bihar	Male	53	52	46	42	40
	Female	58	52	50	45	43
	Total	56	52	48	43	42
India	Male	52	49	46	41	39
	Female	55	52	49	44	42
	Total	53	50	47	42	40

Source : Office of the Registrar General, India.

Health Infrastructure

The Public Health Infrastructure is an essential pre-requisite for a healthy society. The state government has taken several steps to improve the health infrastructure in the state and enhance the accessibility of health services. The Primary Health Centres (PHC), Sub-Centres, Additional PHCs (APHC) and Community Health Centres (CHC) constitute the primary level of health infrastructure. The sub-district and district-level hospitals serve as the secondary tier; and finally, tertiary health care is provided by large hospitals in major towns. Thanks to several initiatives by the state government, the functioning of the public health institutions is improving steadily. This is indicated by the number of patients visiting government hospitals (Table 10.4). The average number of patients visiting government hospitals per month was 4675 in 2010, which has increased to 9871 in 2014. This more than two fold increase is due to better infrastructure facilities, larger manpower, and proper monitoring of the health institutions.

Table 10.4 : Monthly Average Number of Patients Visiting Government Hospitals

Year	2010	2011	2012	2013	2014
No. of patients visiting government hospitals per month	4675 (22.2)	9317 (99.3)	9863 (5.9)	10476 (6.2)	9871 (-5.8)

Note : Figures in the parenthesis represent annual increase
Source : State Health Society, GOB

Presently, there are 36 district hospitals, 55 sub-divisional hospitals, 70 referral hospitals, 533 PHCs, 9729 Sub-centres and 1350 APHCs; the last three categories add up to 11,612 health centres. Thus, per lakh of population, there are about 11 health centres in the state (Table 10.5). Towards strengthening of the health services, the approach of the state government has been a pragmatic one, with the thrust on improving the functioning of the existing facilities, rather than extension of the infrastructure. For example, out of 533 block level PHCs, 410 are in the process of being upgraded to 30 bedded Community Health Centres (CHC). Out of these, 130 has been upgraded and handed over.

Table 10.5 : Overall Status of Health Infrastructure

(Figures in Number)

Year	District Hospital	Referral Hospital	Sub Divisional Hospital	Health Centres				Total PHCs APHCs and Sub-Centre per ten lakh of population
				PHC	Sub Centre	APHC	Total	
2011	36	70	55	533	9696	1330	11559	111
2012	36	70	55	533	9696	1330	11559	111
2013	36	70	55	533	9696	1330	11559	111
2014	36	70	55	533	9729	1350	11612	112
2015	36	70	55	533*	9729	1350	11612	112

Source: State Health Society, GOB
Note : 130 upgraded to 30 bedded CHC

From the data on the number of health institutions in different districts, as presented in Table A 10.1 (Appendix), it is obvious that there is considerable variation across the districts in terms of the availability of health infrastructure. The average size of population served by a health institution (either a hospital or a PHC) varies from 5.5 thousand in Jamui to as high as 14.6 thousand in Sheohar. The best three districts in terms of availability of health infrastructure are — Jamui (5501), Sheikhpura (5785) and Nawada (5886). The three most disadvantaged districts are — East Champaran (12,347), Sheohar (14,583) and Sitamarhi (12727).

The availability of health services also varies considerably across the districts, as indicated by two indicators — average number of outpatients visiting hospitals per day and the in-patient bed occupancy rate. This data is reported for three years — 2013-14, 2014-15 and 2015-16 (Table 10.6). In 2014-15, three districts with the highest number of outpatients visiting hospitals per day are — Aurangabad (590), Purnea (549), and Muzaffarpur (518). On the other hand, three districts with the lowest number of outpatients visiting hospitals per day were — Jamui (214), Nawada (188), and East Champaran (169).

Along with the services provided to outpatients, the hospitals also admit people with serious illness for their treatment. The extent of such services can be judged from the occupancy rate of hospital beds. For the Bihar as a whole, the bed occupancy rate is very high. Even after a decline over the last three years, the occupancy rate was 77.5 percent in 2015-16. In the same year, among the districts, the occupancy rate varied from 31.4 percent (Bhojpur) to 128.0 percent (Madhepura). The demand for health services is so high that in 18 districts, the bed occupancy rates exceed 100 percent.

One of the important dimensions of health infrastructure is the availability of health personnel — doctors, nurses, Auxiliary Nurse-cum-Midwife (ANM), and Accredited Social Health Activist (ASHA). The availability of such personnel for the entire state is presented in Table 10.7. Four tables in the Appendix present the same data for different districts — Table A 10.2 (Doctors), Table A 10.3 (Nurses), Table A 10.4 (ANM) and Table A 10.5 (ASHA). As regards doctors, there are now 2052 regular doctors in Bihar, against 6261 sanctioned posts, indicating vacancy ratio of 67 percent. However, names of 2085 doctors have been received from Bihar Public Service Commission for appointment, adding up of which will reduce the vacancy ratio to 34 percent. In addition, there is also the sanction for 2314 contractual doctors, of which 1488 posts have been filled up, indicating a vacancy ratio of 36 percent. The state government has been able to fill up 4779 posts of Grade-A nurses against 8538 sanctioned posts indicating a vacancy ratio of 44 percent. Contrary to the situation regarding doctors and nurses, the strength of health personnel is much higher for ANM and ASHA. In 2015-16, the strength of regular ANM was 8895, against the sanctioned strength of 11805, implying a vacancy ratio of 25 percent. In addition to regular ANMs, the state government has also sanctioned posts of 12587 contractual ANMs, and 9670 of them have already been filled. When it comes to ASHA workers, it is found that there are in all 85.0 thousand of them working in the entire state, against a sanctioned strength of 104.2 thousand, implying a vacancy ratio of only 18 percent. When one compares the districtwise positions, variation is found to be limited regarding ANM and ASHA workers. But in terms of doctors and nurses, there is considerable inter-district variation.

Table 10.6 : Districtwise Average Number of Outpatients Visiting per Day

District	Average no. of Outpatient visits per day			In-patient Bed Occupancy Rate		
	2013-14	2014-15	2015-16*	2013-14	2014-15	2015-16*
Patna	354	323	230	78.4	52.5	49.8
Nalanda	323	335	372	118.9	131.4	96.4
Bhojpur	370	299	311	41.5	32.1	31.4
Buxar	294	258	225	90.8	81.8	64.2
Rohtas	328	297	322	81.3	70.7	69.3
Kaimur	263	256	297	93.7	88.0	74.1
Gaya	334	359	350	84.5	82.5	75.5
Jehanabad	474	441	414	102.5	79.7	64.2
Arwal	315	247	278	85.4	85.3	75.0
Nawada	226	188	173	94.1	72.2	76.2
Aurangabad	626	590	583	102.2	83.9	81.4
Saran	394	379	399	83.2	100.7	82.2
Siwan	452	328	282	88.8	85.4	81.4
Gopalganj	248	240	261	78.9	76.9	67.8
W.Champaran	317	457	285	76.9	58.9	48.6
E.Champaran	252	169	335	110.3	91.9	76.2
Muzaffarpur	576	518	517	90.4	77.5	56.1
Sitamarhi	343	294	258	108.1	104.4	87.2
Sheohar	197	220	191	89.7	78.4	76.4
Vaishali	355	323	390	110.1	100.7	93.5
Darbhanga	352	316	334	123.8	106.8	86.5
Madhubani	352	341	297	97.0	70.3	50.4
Samastipur	359	353	434	117.3	118.1	116.6
Begusarai	255	251	247	51.4	62.1	59.7
Munger	338	303	302	110.8	105.0	101.4
Sheikhpura	282	269	239	84.8	61.8	65.1
Lakhisarai	233	249	287	49.9	67.5	75.5
Jamui	302	214	197	75.4	48.7	40.5
Khagaria	563	489	419	114.9	128.0	127.8
Bhagalpur	320	286	282	234.7	153.6	106.0
Banka	372	385	361	103.0	94.4	71.2
Saharsa	313	297	260	108.6	78.3	77.3
Supaul	462	405	390	121.1	117.6	108.6
Madhepura	318	357	315	148.8	147.9	128.0
Purnea	503	549	534	130.0	124.7	124.9
Kishanganj	415	378	336	112.4	103.4	88.1
Araria	311	347	471	112.2	98.0	100.1
Katihar	307	295	316	90.1	74.0	68.8
Bihar	349	329	327	98.5	87.7	77.5

Source : State Health Society, GOB, Note: *-Upto September 2015

Table 10.7 : Number of Health Personnel

Name of the Post	Regular				Contractual			
	Sanctioned Posts	Working			Sanctioned Posts	Working		
		2013-14	2014-15	2015-16*		2013-14	2014-15	2015-16*
Doctors	6261	2392	2255	2052	2314	1580	1580	1488
Grade A Nurse	1688	397	356	1706	3502	1643	1621	412
ANM	11805	9146	8999	8895	12587	9484	9933	9670
ASHA	–	–	–	–	104239	83702	85045	NA

Source : State Health Society, GOB

Note : Upto September, 2015

Institutional Delivery

The number of institutional deliveries in Bihar has increased rapidly in the recent years (Table 10.8). Although there was a drop in the number of institutional deliveries in 2014-15, the average annual growth rate during the last decade was 24.2 percent. It should be noted here that the substantial decrease in Infant Mortality Rate (IMR) in Bihar in recent years is an outcome of this wider practice of institutional delivery. In Table A 10.6 (Appendix), the information is presented for the number of institutional deliveries in different districts of Bihar for the years 2010-11 to 2014-15. From the table, one may notice that the districts where the extent of institutional deliveries is relatively higher are Samastipur (5.7 percent), Purnea (4.6 percent), Patna (4.4 percent) and West Champaran (4.4 percent). It is interesting to note that three out of these four districts are in north Bihar. Contrary to this, Buxar (1.5 percent), Kishanganj (1.6 percent) and Kaimur (1.6 percent) are three lowest performing districts.

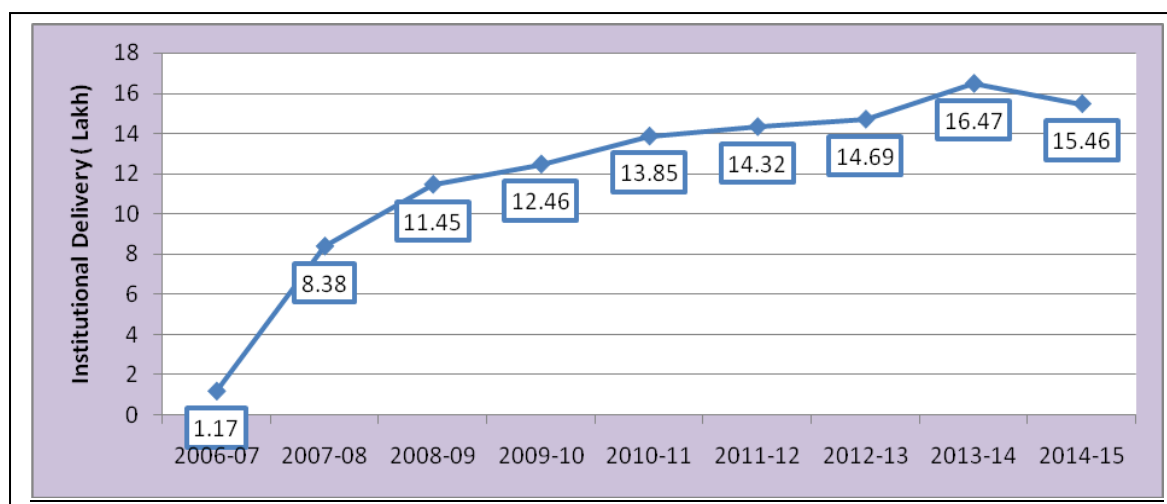
The Janani Suraksha Yojana (JSY) is an intervention for safe motherhood under the National Health Mission (NHM) and it is aimed at reducing maternal and neo-natal mortality by promoting institutional delivery among the poor women. The scheme is being implemented in all states, with special focus on low performing states like Bihar. For this scheme, ASHAs are required to identify pregnant women, facilitate at least three antenatal check-ups for them, and motivate them to seek an institutional delivery. They are also required to visit the mother and newborn for a postnatal check-up within seven days of delivery and counsel them on early breastfeeding. In rural areas, an incentive amount of Rs. 1400 to mothers and Rs. 600 to ASHAs are given under the scheme. Similarly, in urban areas, an amount of Rs. 1000 to mothers and Rs. 400 is given to Anganwadi Workers (AWW). The large number of ASHA workers in rural areas and AWWs in urban areas have contributed effectively in the successful implementation of JSY. The data on coverage of JSY in different districts is presented in Table A 10.7 (Appendix).

Table 10.8 : Number of Institutional Delivery

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Institutional Delivery (lakh)	1.17	8.38	11.45	12.46	13.85	14.32	14.69	16.47	15.46
Percent Change	–	616.27	36.52	8.89	11.09	3.41	2.60	12.08	-6.10

Source : State Health Society, GOB

Chart 10.2 : Number of Institutional Delivery



Immunisation

As per 2011 census, 12.7 lakh children die every year in India before completing 5 years of age. In most of the cases, the children die due to a diseases which is avoidable through immunisation. Like other states in India, Bihar has also made substantial progress towards universal immunisation in the recent years. The relevant data in this regard is presented in Table 10.9. This data refers to five components of immunisation – TT (Anti-tetanus), BCG, OPV, DPT and measles. Looking at the most recent figure (2014-15), one notices that Bihar has achieved complete immunization for TT (139 percent). The current positive trend in coverage shows that the state is expected to achieve complete immunisation for other components in near future. It is a matter of pride for Bihar to be declared as ‘Maternal and Neonatal Tetanus free State’ in 2015. The pentavalent vaccination in which five individual vaccines has been conjugated (Haemophilus Influenza type B, whooping cough, tetanus, hepatitis B and diphtheria) has started in 2015 which safeguards the infant from those five deadly diseases.

Table 10.9 : Antigen-wise Immunisation Coverage

Antigen name	2013-14			2014-15			2015-16 (Upto September)		
	Target ('000)	Achievement ('000)	Achievement (%)	Target ('000)	Achievement ('000)	Achievement (%)	Target ('000)	Achievement ('000)	Achievement (%)
TT (P.W)	3121	4460	143	3106	4306	139	3184	2273	71
BCG	2916	2597	89	2926	2658	91	2999	1208	40
OPV 0	2916	1990	68	2926	1801	62	2999	834	28
OPV 1	2916	2601	89	2926	2483	85	2999	1093	36
OPV 2	2916	2499	86	2926	2461	84	2999	1141	38
OPV 3	2916	2384	82	2926	2400	82	2999	1202	40
DPT 1 Penta 1	2916	2603	89	2926	2684	92	2999	1101	37
DPT 2 Penta 2	2916	2503	86	2926	2659	91	2999	1167	39
DPT 3 Penta 3	2916	2388	82	2926	2580	88	2999	1241	41
Measles	2916	2244	77	2926	2330	80	2999	1331	44

Source : State Health Society, GOB

Note : DPT has been replaced by Pentavalent in 2015-16

Prevalence of Main Diseases

An important dimension of health status of a population is the main diseases that affect it. Table 10.10 presents the data on the prevalence of various diseases in Bihar during the last two years. It is observed from the table that, in 2014-15, the number of cases was the highest in respect of Acute Respiratory Infections (17.3 lakh), followed by Fever of Unknown Origin (13.2 lakh), Acute Diarrhoea (6.9 lakh), Dog Bite (6.3 lakh), Dysentery (3.6 lakh) and Enteric Fever (3.1 lakh). It also emerges from the table that the cases of periodic water-borne diseases like diarrhoea or dysentery are also very frequent in the state, underlining the inadequate availability of safe drinking water. The district-wise figures are provided in Table A 10.8 (Appendix). The implementation of National Rural Health Mission (NRHM), now known as National Health Mission (NHM) is essential for strengthening the health services. According to the financial guidelines, NRHM-A deals with maternal and child health, and family welfare; NRHM-B deals with funds for ASHA, strengthening of hospitals, mobile medical units etc.; and NRHM-C covers Routine Immunisation (RI).

New Interventions and Outcomes in Health Sector

- Rashtriya Bal Swasthya Karyakaram (RBSK) assures a package of health services for children from both to 18 years for early detection and management of selected health conditions. This aims to improve survival outcomes by decreasing morbidity and improving the quality of life for children. Children in Anganwadi centers, Government and Government-aided schools are being reached systematically through Mobile Health Teams under RBSK. Early identification of various health conditions under RBSK, reduces out of pocket expenditure and the disease burden. The programme is running in the state since 1st July, 2015. A total number of 1637 Ayush doctors, 764 pharmacists and 755 ANMs have been given employment under this programme. Till date, 83,67,981 children have been screened and given Health Cards. Out of that 9,77,905 children have been referred to health units in the districts for treatment.
- Bihar has been declared as polio free, thanks to successful implementation of polio programme. Since 2010, no polio case has been reported in the state.
- Rashtriya Kishor Swasthya Karyakram has been launched in 23 districts to address malnutrition problems in the state. Under this programme, 158 YUWA clinics have been opened in various hospitals to address the malnutrition problem.
- 3 new medical colleges have been established — Indira Gandhi Institute of Medical Sciences (IGIMS) (Patna), Vardhmaan Ayurvedigyan Sansthan (Nalanda) and Government Medical college (Bettiah), making a total of 9 medical colleges in the state. Additionally, 4 new medical colleges have been approved for Madhepura, Purnea, Samastipur and Saran. Along with this, 4 private medical colleges also have been established — Mata Gujari Memorial Medical College (Kishanganj), Katihar Medical College (Katihar), Narayan Medical College (Sasaram) and Lord Buddha Medical College (Saharsa).
- Bihar Healthcare Investment Promotion Policy is being formulated to involve private partners in providing super speciality services in the state.

Table 10.10 : Prevalence of Main Diseases in Bihar

(No. of Patients in lakh)

Diseases	2013-14	2014-15
Acute Diarrhoea	6.87 (11.7)	6.87 (13.1)
Bacillary Dysentery	4.00 (6.8)	3.64 (6.9)
Viral Hepatitis	0.14 (0.2)	0.26 (0.5)
Enteric Fever	3.11 (5.3)	3.07 (5.9)
Malaria	0.33 (0.6)	0.29 (0.6)
Fever of Unknown Origin	16.43 (28)	13.18 (25.2)
Acute Respiratory Illnesses	21.52 (36.6)	17.30 (33.0)
Pneumonia	0.73 (1.2)	0.49 (0.9)
Dog Bite	4.15 (7.1)	6.27 (12.0)
Any other State Specific disease	0.42 (0.7)	0.29 (0.6)
Unusual Syndromes not captured above	1.03 (1.8)	0.71 (1.4)
Total	58.74 (100.0)	52.37 (100.0)

Source: State Health Society, GOB

Integrated Child Development Scheme (ICDS)

The children in the age group 0-6 years number around 19.1 million in Bihar, accounting for 18.3 percent of state's total population (2011 census). These children are the future human resource of the state. Thus, Integrated Child Development Services (ICDS) was launched in 33 blocks of Bihar in 1975, along with other states. The ICDS is a centrally sponsored scheme, which provides a package of six services — supplementary nutrition, immunisation, health check-up, referral services, nutrition and health education for mothers, and non-formal pre-school education for children between the ages of 3-6 years. The target group of ICDS is reached through Anganwadi Centres (AWC). The personnel for ICDS includes Child Development Project Officer (CDPO), Lady Supervisor, Anganwadi Worker (AWW) and Anganwadi Helper. The beneficiaries of the scheme are children in the age group of 0-6 years, pregnant women and lactating mothers. The objectives of the scheme are:

- (a) To improve the nutritional and health status of children in the age-group 0-6 years;
- (b) To lay the foundation for proper psychological, physical and social development of the children;
- (c) To reduce the incidence of mortality, morbidity, malnutrition and school dropout among the children;
- (d) To achieve effective co-ordination of policy and implementation amongst the various departments to promote child development; and
- (e) To enhance the capability of the mothers to look after the normal health and nutritional needs of the child through proper nutrition and health education.

Presently, ICDS is running in all the 38 districts of Bihar through 544 project offices. In all, 91.6 thousand AWCs have been established to cater to 19.1 million children (0-6 years) and 60.3 lakh pregnant and lactating women. Compared to 2013-14, there has been an increase in the number of Anganwadi Workers and Anganwadi Helpers in 2014-15; but there is a decrease in the number of CDPOs and Lady Supervisors. According to Table 10.11, the vacancy ratios in 2014-15 were — CDPO (15.8 percent), Lady Supervisors (24.0 percent), Anganwadi Workers (6.3 percent) and Anganwadi Helpers (7.0 percent).

Table 10.11 : Staffing Position in ICDS

Year	Posts	CDPO	Lady Supervisor	Anganwadi Worker	Anganwadi Helper
2012-13	Sanctioned	544	3288	91677	86237
	Working	507	2916	75183	67753
	Percentage of Vacant Post	6.8	11.3	18.0	21.4
2013-14	Sanctioned	544	3288	91677	86237
	Working	504	2859	82177	78076
	Percentage of Vacant Post	7.4	13.0	10.4	9.5
2014-15	Sanctioned	544	3288	91677	86237
	Working	458	2499	85936	80176
	Percentage of Vacant Post	15.8	24.0	6.3	7.0

Source : Directorate of ICDS, GOB

The budget provision for ICDS has steadily increased from Rs. 880.24 crore in 2010-11 to Rs. 2238.31 crore in 2014-15, implying an annual growth rate of 24.3 percent. In 2014-15, the fund released by the central government is 58.5 percent of the budgetary amount, which is lower than the figures in previous four years. Contrary to this, 94.4 percent of the released fund has been spent in 2014-15, which clearly indicates the efficient utilisation of this fund. The details of the contribution of central and state governments for ICDS are given in Table 10.12.

Table 10.12 : Resource Utilisation in ICDS

Year	Budget for ICDS Bihar (Rs crore)	Funds Released by GOI (Rs crore)	Expenditure (Rs crore)	Fund Released as Percentage of Budget	Expenditure as Percentage of Fund Released
2010-11	880.24	727.17	615.28	82.6	84.6
2011-12	1255.87	767.40	945.09	61.1	123.2
2012-13	1393.30	1094.00	1086.10	78.5	99.3
2013-14	1714.28	1147.43	1234.46	66.9	107.6
2014-15	2238.31	1308.39	1234.92	58.5	94.4

Source: Directorate of ICDS, GOB

Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG) (SABLA)

Considering that many adolescent girls are out of school, get married early, and face discrimination in accessing health, education and other services, they need special attention. The health challenges for adolescent girls include pregnancy, risk of maternal mortality, infant mortality, sexually transmitted diseases, reproductive tract infections, incidence of HIV, etc., and all these require improved health-seeking behavior by them. To meet the requirements of the adolescent girls, Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG) (SABLA) was launched in November, 2010 as a comprehensive intervention for adolescent girls in the age-group of 11-18 years with a special focus on out-of-school girls.

Using the ICDS platform, this scheme is meant for nearly 953.5 lakh adolescent girls across the country and 83.0 lakh adolescent girls in Bihar. This is a 100 percent Centrally Sponsored Scheme. At AWCs, supplementary nutrition (600 kcal) and 18-20 gms. of protein and micronutrients are provided every day, either as hot cooked meal or as take home rations. This service is available to out-of-school adolescent girls in 11-14 years and all adolescent girls between 14-18 years for 300 days in a year. In addition, out of school adolescent girls are being provided other services, which include life skills education. The scheme also emphasizes convergence of services under various programmes for health, education, youth affairs and sports, and Panchayati Raj Institutions (PRI) to achieve the programme objectives.

SABLA programme was launched in 12 districts of Bihar (Patna, Buxar, Gaya, Aurangabad, West Champaran, Sitamarhi, Vaishali, Saharsa, Kishanganj, Katihar, Banka and Munger) in 2011-12. In 2014-15, 18.20 lakh adolescent girls were benefitted through the scheme.

Indira Gandhi Matritva Sahyog Yojana (IGMSY)

The maternal under-nutrition is a major challenge in the country, with more than one third of the mothers having low Body Mass Index (BMI). Early marriage, early childbearing and frequent pregnancy adversely affect the maternal nutritional status. To address this severe problem, IGMSY is a 100 percent Centrally Sponsored Scheme. It is being implemented using the platform of ICDS scheme. The scheme was introduced in October 2010 on pilot basis and it is now operational in 53 selected districts of the country. Currently, the beneficiaries are paid Rs. 6000 in two installments through bank accounts or post office accounts. The first installment is given in third trimester, i.e., seven to nine months of pregnancy and the second installment is given six months after delivery on fulfilling specific conditions. This cash incentive is provided directly to the mothers who are 19 years and above for the first two live births, subject to fulfilling some conditions. In Bihar, the scheme is operating in Vaishali and Saharsa districts. In 2014-15, 1.05 lakh pregnant women were benefitted under the scheme.

10.2 Drinking Water Supply and Sanitation

A regular access to safe drinking water and sanitation is critical for healthy living. The state government is solely responsible for provision of clean drinking water and sanitation to improve the health status of a population. According to 2011 census, the households having

no latrine in the country were 53.1 percent, compared to 63.6 percent in 2001. In Bihar, no less than 76.9 percent of households were found to have no latrines in 2011, compared to 80.8 percent households in 2001. This decadal decrease of only 3.9 percentage point is very small and is a matter of concern.

In order to focus universal sanitation coverage, the Prime Minister has launched the Swachh Bharat Mission on October 2, 2014, with two Sub-Missions — Swachh Bharat Mission (Gramin) and the Swachh Bharat Mission (Urban). This Mission aims to achieve Swachh Bharat by 2019, as a fitting tribute to the 150th Birth Anniversary of Mahatma Gandhi. In rural areas, it aims to improve the levels of cleanliness through Solid and Liquid Waste Management activities and making all villages Open Defecation Free (ODF), clean and sanitised. Bihar has done well in terms of coverage of rural and urban habitations with safe sources of drinking water, including piped water supply, tube wells and shallow wells. In Bihar, the coverage of households using tap water, tube well water and well water was 86.2 percent in 2001, which increased 94.0 percent in 2011.

The progress of work under water supply and sanitation is presented in Table 10.13. In 2014-15, as many as 24.3 thousand handpumps have been installed under the National Rural Drinking Water Programme (NRDWP). The goal of NRDWP is to ensure that, by 2022, every rural household in the country has access to at least 70 litres of water per capita per day (lpcd) within their household premises or at a distance of less than 50 meters from their households. In 2014-15, there were also additions in the construction of individual household latrines (1.65 lakh), sanitary complexes (20), school toilets (1046) and Anganwadi toilets (11). The smaller figures for sanitary complexes, school toilets and Anganwadi toilets is mainly because most of them have already been covered in previous years. The district-wise coverage of habitations for water supply and sanitation through state and central schemes is presented in Table A 10.10, A 10.11 and A 10.12 (Appendix).

Table 10.13 : Achievement under Water Supply and Sanitation

(Figures in Number)

Year	Handpumps Installed	Slipped back Habitations/ Water quality problems covered	Individual Household Latrine (IHHL) constructed			Construction of		
			APL	BPL	Total	Sanitary Complex	School Toilet	Anganwadi Toilet
2010-11	58597	13922	173219	557312	730531	66	8401	315
2011-12	28286	11243	193875	646052	839927	132	22575	1521
2012-13	31926	10960	236021	560678	796699	214	17009	4822
2013-14	34289	12787	63190	98456	161646	36	5076	1437
2014-15	24287	12236	47056	118401	165457	20	1046	11

Source : Public Health Engineering Department, GOB

The fund utilisation under National Rural Drinking Water Programme (NRDWP), during the period 2010-11 to 2014-15 is shown in Table 10.14. The utilisation of fund has increased steadily, from 79.5 percent in 2010-11 to 88.0 percent in 2014-15. This significant increase in fund utilisation has definite impact on physical achievement.

Table 10.14 : Financial Progress under NRDWP

(Rs. crore)

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Outlay	530.32	440.8	351.02	353.8	426.35
Expenditure	421.40	364.22	283.50	299.02	375.38
Percentage of Utilisation	79.5	82.6	80.8	84.5	88.0

Source : Public Health Engineering Department, GOB

The financial and physical progress for water supply and sanitation schemes under state plan are presented in Tables 10.15 and 10.16. The annual growth rate in expenditure in the past five years (37.6 percent) was slightly lower than the rate of growth in outlay (43.2 percent). The physical progress under the state plan schemes has also improved, except for the Rural Piped Water Supply Scheme. The achievement rate for installation of new hand pumps has increased from 32 percent in 2010-11 to 41 percent in 2014-15. The achievement rate of covering uncovered habitations is also higher in 2014-15 (94 percent), compared to 2010-11 (74 percent).

Table 10.15 : Financial Progress in State Plan Schemes for Water Supply and Sanitation

(Rs. crore)

Year	2010-11	2011-12	2012-13	2013-14	2014-15	CAGR
Outlay	223.41	259.49	554.10	745.59	793.68	43.20
Expenditure	207.86	224.71	302.54	645.94	604.91	37.61
Outlay as Percent of Expenditure	93.0	86.6	54.6	86.6	76.2	–

Source : Public Health Engineering Department, GOB

Table 10.16 : Physical Achievements in State Plan Schemes for Water Supply and Sanitation

Years/Schemes		Rural Piped Water Supply Scheme	Installation of New instead of Old Hand Pumps	Uncovered Tolas (Habitations)
2010-11	Target	39	10178	18749
	Achievement	25 (64.1)	3298 (32.4)	13922 (74.3)
2011-12	Target	23	6880	15810
	Achievement	12 (52.2)	3330 (48.4)	11243 (71.1)
2012-13	Target	22	50492	15015
	Achievement	8 (36.4)	12114 (24.0)	10960 (73.0)
2013-14	Target	14	94526	13832
	Achievement	3 (21.4)	44066 (46.6)	12787 (92.4)
2014-15	Target	12	105688	13000
	Achievement	2 (16.7)	43783 (41.4)	12236 (94.1)

Note : Numbers in parentheses indicate percentage achievement;

Source : Public Health Engineering Department, GOB

Drinking Water and Sanitation: New Interventions

- A scheme called Lohiya Swachhatta Yojana with a budget of Rs. 1431.12 crore was sanctioned to cover APL families excluded from Swachh Bharat Mission (Gramin) for construction of individual household toilets in rural areas.
- A state-level Training-cum-Research centre 'Pranjal' has been established under Bihar State Water and Sanitation Mission of the Department of Public Health Engineering.
- Under Mukhyamantri Chapakal Yojana, a target of 5 hand pumps per Gram Panchayats in rural areas, 3 hand pumps per ward in Nagar Nigam, 2 hand pumps per ward in Nagar Parishad, 1 hand pump per ward in Nagar Panchayat of urban areas and 100 hand pumps per Hon'ble Member of Bihar Legislative Council was set to strengthen the drinking water supply in all districts by 2015-16.
- Under Mukhya Mantri Kshetra Vikas Yojna, 382 Ghats and public ponds were constructed. Presently, another 301 schemes with a cost of Rs. 18.80 crore are under progress.
- Implementation of multi-villages piped water supply scheme based on surface water (Ganga River) with 5 years operation and maintenance was started in 2015, to provide potable drinking water in 111 arsenic affected villages. These affected villages are — Matihani, Barauni and Begusarai blocks of Begusarai districts. In 45 villages in Biddupur block and adjoining areas of Vaishali district, 130 villages in Simari block and adjoining areas of Buxar district and 25 villages of Maner block of Patna district, a similar scheme is under progress.

10.3 Education, Art, Culture and Youth

Education is an equally important a component of human development as health. Besides its intrinsic value, education also helps people to acquire knowledge and skill, and enable them for fruitful economic and social participation. All these contribute towards economic growth and human development. The three main priorities for education are — access, equity and quality. In this section, the initiatives of the state government to expand education in Bihar is analysed, taking into consideration both the educational inputs (number of educational institutions and financial expenditure) and outputs (literacy rate, enrolment ratio and dropout rates).

Literacy Rate

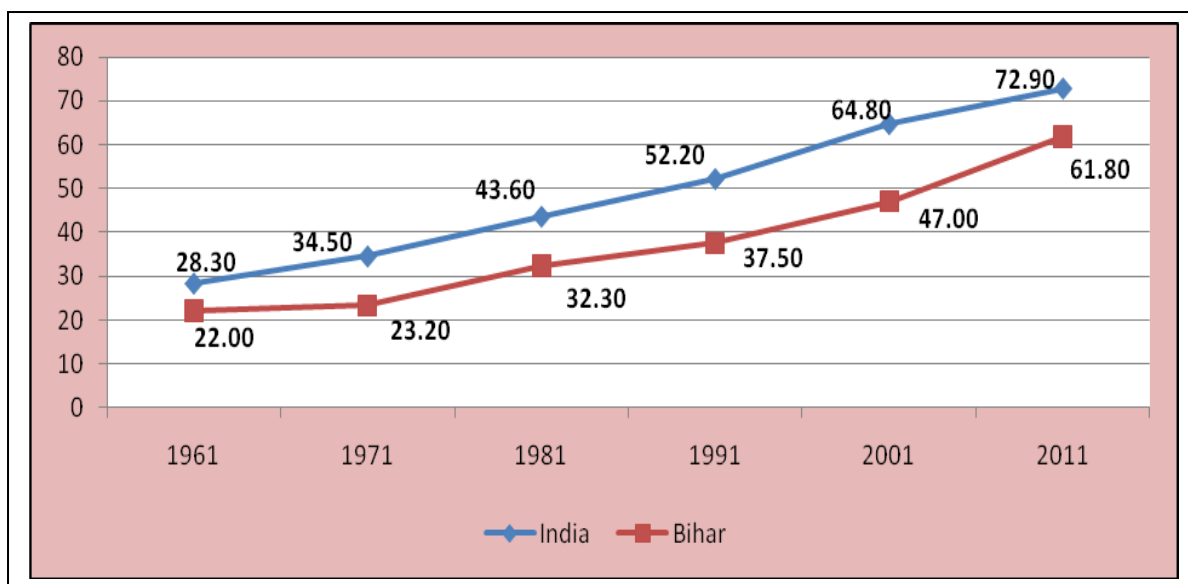
In 2011, the literacy rate in India was 72.9 percent, with male literacy at 80.9 percent and female literacy at 64.6 percent. The literacy rate in Bihar was much lower at 61.8 percent, with male literacy at 71.2 percent and female literacy at 51.5 percent. However, the increase in literacy rate in Bihar was 17.9 percentage points between 2001 and 2011, compared to 10.9 percentage points for the entire country. It is worthwhile to note that this decadal increase is not only the highest among all the decadal growth rates in Bihar since 1961, it is also the highest among all the states for the decade 2001-11. The gender gap in education has also come down in Bihar, as in India. Table 10.17 presents the trend of literacy rate in India and Bihar since 1961.

Table 10.17 : Trend of Literacy Rates in India and Bihar

Year / Decade	India			Bihar		
	Male	Female	Persons	Male	Female	Persons
	Literacy Rates					
1961	40.40	15.40	28.30	35.20	8.20	22.00
1971	46.00	22.00	34.50	35.80	10.20	23.20
1981	56.40	29.80	43.60	43.80	15.80	32.30
1991	64.10	39.30	52.20	52.50	22.90	37.50
2001	75.30	53.70	64.80	60.30	33.60	47.00
2011	80.90	64.60	72.90	71.20	51.50	61.80
	Decadal Increase					
1961-71	5.6	6.6	6.2	0.6	2.0	1.2
1971-81	10.4	7.8	9.1	8.0	5.6	9.1
1981-91	7.7	9.5	8.6	8.7	7.1	5.2
1991-01	11.2	14.4	12.6	7.8	10.7	9.5
2001-11	5.6	10.9	8.1	10.9	17.9	14.8

Source : Census of India

Chart 10.3 : Trend of Literacy Rates in India and Bihar



Elementary Education

The educational system of the state is divided into three levels — elementary, secondary, and higher education. The state government has given more importance to elementary education in the recent years. It is the elementary education sector which feeds students for the

secondary sector which, in turn, feeds students for the higher education sector. The progress in elementary education also implies that the process is an inclusive one, since it is more relevant for a large number of students who are first-generation learners, coming from the disadvantaged sections of society. The status of elementary education is indicated by two crucial indices — enrolment ratio and dropout rate. The performance on these two indicators, in turn, is most influenced by the availability of educational facilities like schools, teachers, etc. This is particularly important for Bihar where most of the families reside in rural areas and depend entirely on government schools.

Enrolment Ratio

The progress towards the goal of universal access to education has been steady over the years. The elementary education consists of primary (I-V) and upper primary (VI-VIII) education. Table 10.18 shows total enrolment at primary and upper primary levels in Bihar, during 2009-10 to 2013-14. The annual growth rate of enrolment in primary level over this period was 3.4 percent. The total enrolment in primary level was 161.20 lakhs in 2013-14, increasing from 139.08 lakhs in 2009-10. At the upper primary level also, the enrolment has shown an increasing trend. The total enrolment has increased from 41.27 lakh in 2009-10 to 65.41 lakh in 2013-14, implying an annual growth rate of 12.0 percent. As a whole, the total enrolment, taking both primary and upper primary levels, rose to 226.61 lakhs in 2013-14 from 180.35 lakhs in 2009-10, with an annual growth rate of 6.0 percent. Additionally, the total enrolment for SC and ST students during this period has also grown at the rate of 8.1 and 16.0 percent respectively.

The gender gap in elementary education is also decreasing over the years, as the growth rate of enrolment of girls was 8.1 percent during 2009-10 to 2013-14, compared to 3.3 percent for the boys. The total enrolment of boys (117.0 lakhs) at the elementary level was only marginally higher than that of the girls (109.6 lakhs) in 2013-14. This pattern of higher growth rate of enrolment for girls, and a marginally lower share of girls in total number of students, is also observed for both primary and upper primary schools. Taking primary and upper primary together, boys accounted for 56.0 percent of the total enrolment in 2009-10; but in 2013-14, this share was 51.6 percent.

The district-wise total enrolment for all, SC and ST categories is given in Table A 10.13, A 10.14 and A 10.15 (Appendix), respectively. There exists high variation in enrolment among the districts at both primary and upper primary level in 2013-14. East Champaran (16.28 lakh) has registered the highest enrolment at both the levels, followed by Muzaffarpur (14.28 lakh) and Patna (10.46 lakh) in 2013-14. On the other hand, Sheohar (1.18 lakh) and Sheikhpura (1.29 lakh) have registered the lowest enrolment in primary and upper primary in 2013-14. Regarding SC students, the best performing district at both the levels was Gaya (3.02 lakh) and the worst performing district was Kishanganj (0.22 lakh). For ST students, the best performing district in 2013-14 was Katihar (0.72 lakh).

Table 10.18 : Total Enrolment in Primary and Upper Primary Levels

(Nos. in lakh)

Level/Type of Students		2009-10	2010-11	2011-12	2012-13	2013-14	CAGR
Primary							
Boys	Total	77.56	80.76	82.29	79.74	83.34	1.3
	SC	13.68	15.23	16.1	14.5	15.81	2.4
	ST	1.31	1.07	1.34	1.59	1.64	8.8
Girls	Total	61.52	68.57	74.21	74.77	77.86	5.7
	SC	9.85	12.17	13.29	13.21	14.47	8.9
	ST	0.73	0.73	1.14	1.33	1.36	20.2
All	Total	139.08	149.34	156.5	154.51	161.20	3.4
	SC	23.54	27.4	29.39	27.71	30.29	5.3
	ST	2.03	1.81	2.48	2.92	3.01	13.5
Upper Primary							
Boys	Total	23.42	26.65	27.04	31.34	33.66	9.3
	SC	3.24	3.82	4.26	4.81	5.59	14.1
	ST	0.36	0.25	0.36	0.55	0.58	19.0
Girls	Total	17.85	22.14	23.51	29.02	31.75	15.3
	SC	2.09	2.78	3.37	4.23	5.11	24.7
	ST	0.18	0.18	0.3	0.46	0.48	33.6
All	Total	41.27	48.8	50.55	60.36	65.41	12.0
	SC	5.33	6.61	7.63	9.04	10.71	18.6
	ST	0.54	0.44	0.66	1.01	1.07	24.6
Total							
Boys	Total	100.98	107.41	109.33	111.08	117.00	3.3
	SC	16.92	19.05	20.36	19.31	21.40	5.0
	ST	1.67	1.32	1.7	2.14	2.22	11.1
Girls	Total	79.37	90.71	97.92	103.79	109.61	8.1
	SC	11.94	14.95	16.66	17.44	19.58	12.1
	ST	0.91	0.91	1.44	1.79	1.84	23.2
All	Total	180.35	198.14	207.25	214.87	226.61	5.5
	SC	28.87	34.01	37.02	36.75	41.00	8.1
	ST	2.57	2.25	3.14	3.93	4.08	16.0

Source: Department of Education, GOB

The district-wise annual growth rate of enrolment from 2009-10 to 2013-14 is presented in Table A 10.16 (Appendix). The three districts recording the highest annual growth in

enrolment at both primary and upper primary classes are — Kishanganj (21.2 percent), Arwal (21.0 percent) and Katihar (16.2 percent). At primary level, three best performing districts are — Arwal (17.3 percent), Nawada (13.9 percent) and Kishanganj (13.7 percent). At the upper primary level, Katihar (41.4 percent), Araria (39.3 percent) and Madhepura (33.2 percent) are the best three districts. In general, a higher annual growth rate is observed in those districts where literacy rate is relatively low.

Dropout Rate

The success with respect to high enrolment becomes meaningful, only when the enrolled children are retained in the school. But substantial dropout before completing the desired education level is a problem in Bihar. All the factors behind such dropout may be broadly clubbed into three categories — economic factors, social and cultural factors, and school environment and infrastructure. In case of Bihar, all these factors are operative in varying degrees.

Table 10.19 : Dropout Rates at Primary, Upper Primary, Secondary and Higher Secondary Levels

Year		2009-10	2010-11	2011-12	2012-13	2013-14
Primary	Girls	41.00	35.30	30.74	26.27	23.57
	Boys	43.50	42.13	38.01	36.01	33.63
	Combined	42.50	39.27	34.80	31.68	29.11
Upper Primary	Girls	56.70	51.31	51.07	38.68	38.46
	Boys	60.20	57.87	58.61	52.41	52.39
	Combined	58.80	55.14	55.48	46.67	46.54
Secondary	Girls	67.00	58.85	62.71	59.51	57.61
	Boys	69.90	64.38	66.87	65.15	64.75
	Combined	68.80	62.24	65.18	62.80	61.78
Higher Secondary	Girls	73.40	69.42	64.67	NA	NA
	Boys	76.30	72.93	68.37	NA	NA
	Combined	75.20	71.61	66.98	NA	NA

Source : Department of Education, GOB

The dropout rates at primary, upper primary, secondary and higher secondary levels during 2009-10 to 2013-14 in Bihar are presented in Table 10.19. At all levels of education, these rates have continuously declined during the recent years. At the primary level, dropout rate recorded a decrease of 13.4 percentage points between 2009-10 (42.5 percent) and 2013-14 (29.1 percent). At the upper primary level, this decrease was 12.3 percentage points. This denotes that the dropout rates are declining rapidly at both the levels, promoting Universalisation of Elementary Education (UEE). The dropout rates at secondary and higher secondary levels are much higher than that at the elementary level. Such dropout rate was 61.8 percent in 2013-14 at secondary level, implying a decrease of 7.0 percentage point from

68.8 percent in 2009-10. Thus, only 38 percent of students enrolled in Standard I presently complete their secondary education in Bihar. The proportion of students completing the higher secondary education is even lower. It is heartening to note that, at all the levels of education, viz., elementary, secondary and higher secondary, the dropout rate of girl students is lower than that of the boys. As goals of elementary education has almost been achieved, universalisation of secondary education should now be promoted in Bihar. This will generate human capital to accelerate growth and social development in the state.

With a view to enhance enrolment, retention and attendance, constant monitoring for the retention of enrolled students is essential. In this context, a special attention needs to be given to the socially and economically disadvantaged sections of the society, like those belonging to the SC and ST category. Table 10.20 presents the dropout rate of SC and ST students at the primary, upper primary and secondary levels during 2009-10 to 2013-14 in Bihar. The SC and ST dropout rates have decreased progressively during this period. The dropout rate of SC girls has been lower than that of SC boys throughout the period, at both primary and upper primary stages. Remarkably, the dropout rate for girls in primary level decreased by 36.4 percentage points during the period 2009-10 to 2013-14, which is higher than in other two levels. Additionally, in upper primary and secondary levels, the dropout rate for SC girls has decreased by 29.3 and 16.4 percentage points during the above period. This is an important achievement for the state. Overall, the dropout rate is decreasing in all the levels for SC girls. For ST students, the girl dropout rate was lower than that of the boys throughout the period at all the levels, particularly at primary and upper primary stages. This trend of steady decline in dropout rates among SC/ST students is a sign of inclusive progress in educational sector.

Table 10.20 : Dropout Rates (SC & ST) at Primary, Upper Primary and Secondary Levels

Year	Primary			Upper Primary			Secondary		
	Girls	Boys	Combined	Girls	Boys	Combined	Girls	Boys	Combined
	Scheduled Caste								
2009-10	49.70	50.90	50.40	69.80	72.70	71.60	80.70	81.40	81.10
2010-11	35.90	40.90	38.80	63.80	68.20	66.50	76.80	78.00	77.60
2011-12	30.55	36.73	34.11	60.45	67.22	64.56	72.65	75.86	74.65
2012-13	24.30	36.25	31.15	48.99	61.42	56.45	65.05	70.57	68.44
2013-14	13.32	30.36	23.16	40.46	54.74	48.93	64.32	69.84	67.67
	Scheduled Tribe								
2009-10	15.60	8.10	10.90	20.10	11.90	14.80	62.10	66.40	65.00
2010-11	19.80	31.60	27.10	46.10	56.50	52.60	66.80	70.90	69.50
2011-12	NA	14.43	NA	22.67	43.50	35.68	32.59	49.26	43.49
2012-13	NA	NA	NA	NA	23.75	13.08	26.55	38.15	33.86
2013-14	NA	23.82	9.97	NA	21.68	12.70	23.48	37.64	32.33

Source: Department of Education, GOB

Number of Schools and Teachers

The total number of primary and upper primary schools in Bihar in 2012-13 was 69,911. Three districts performing better in terms of number of schools are Patna (3422), East Champaran (3157) and Gaya (3106). On the other hand, three districts with the least number of schools are Sheohar (422), Sheikhpura (485) and Arwal (529). The district-wise number of primary and upper primary schools is presented in Table A 10.17 (Appendix).

The Pupil-Teacher Ratio (PTR) is an important indicator of quality of education. The number of teachers needs to be increased with the growth in enrolment ratio. According to Manav Vikas Mission, the target for PTR in elementary education will be 42:1 based on enrolment and 32:1 based on attendance. The total number of teachers at primary and upper primary schools was 3.5 lakh in 2012-13. East Champaran (17,729), Madhubani (15,705) and Saran (15,536) were the best performers in 2012-13, whereas Arwal (2847), Sheohar (2320) and Sheikhpura (2190) were the worst performers. The district-wise number of teachers at primary and upper primary schools is presented in Table A 10.18 (Appendix).

Expenditure on Education

In Bihar, the level of expenditure on education has steadily increased in the last five years. Table 10.21 shows the expenditure on education, along with its share in total budget and in total expenditure on social services. The growth rate of total expenditure on education has been high at 17.4 percent. As regards its share in total expenditure and social services expenditure, these have remained nearly unchanged — around 18 percent of total expenditure and around 50 percent for social sector expenditure. Table 10.22, presents the breakdown of total expenditure on education in three components (primary, secondary and higher) in 2013-14 and 2014-15. It is evident that in both the years, primary education has the highest share of the total expenditure compared to other two categories. Compared to a share of 56.2 percent for elementary education in 2013-14, it was 68.3 percent in 2014-15.

Table 10.21 : Expenditure on Education

Year	Expenditure on Education (Rs. Crore)			Expenditure on Education	
	Plan	Non-Plan	Total	as percentage of total Budget	as percentage of expenditure on social services
2010-11	3356.97	4667.28	8024.25	15.83	49.70
2011-12	2901.18	6836.34	9737.52	16.18	49.84
2012-13	4949.63	8439.03	13388.66	19.35	54.79
2013-14	5008.33	8812.83	13821.16	17.00	48.37
2014-15	8258.51	9574.42	17832.93	17.19	48.92
CAGR	32.36	11.42	17.35	-	-

Source: State Government Finances, GOB

Table 10.22 : Expenditure on Education — Elementary, Secondary and Higher Education

Year		Expenditure on Education (Rs. Crore)		
		Plan	Non-Plan	Total
2013-14	Elementary	3428.20 (68.4)	4335.80 (49.2)	7764.00 (56.2)
	Secondary	1278.19 (25.5)	1677.98 (19.0)	2956.17 (21.4)
	Higher	301.94 (6.0)	2799.06 (31.8)	3101.00 (22.4)
	Total	5008.33 (100.0)	8812.84 (100.0)	13821.17 (100.0)
2014-15	Elementary	6922.59 (84.3)	5217.17 (54.5)	12139.76 (68.3)
	Secondary	1135.54 (13.8)	2184.05 (22.8)	3319.59 (18.7)
	Higher	151.73 (1.8)	2173.20 (22.7)	2324.93 (13.1)
	Total	8209.86 (100.0)	9574.42 (100.0)	17784.28 (100.0)

Source: State Government Finances, GOB

Note : The figures in the parentheses denote percentage share to total

Mid-Day Meal Scheme (MDMS)

With a view to enhancing enrolment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE), known as the Mid-Day Meal Scheme (MDMS), was launched as a Centrally Sponsored Scheme in whole of the country. Initially, it covered the children in primary education (Standard I-V). In 2007, the programme was revised and expanded to include children from upper primary group (VI-VIII).

Table 10.23 : Coverage of MDMS

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Class I-V					
Total Enrolment (in lakhs)	144.77	153.16	147.70	141.62	143.18
No. of Children Availing MDM (per day) (in lakhs)	80.35	68.55	85.22	94.89	94.36
Coverage Percentage	55.5	44.0	57.7	67.0	65.9
Class VI-VIII					
Total Enrolment (in lakhs)	43.37	52.45	52.87	57.57	60.59
No. of Children Availing MDM (per day) (in lakhs)	21.07	20.55	30.32	38.57	36.99
Coverage Percentage	48.6	39.2	57.4	67.0	61.0

Source : MDMS, GOB

It is an important intervention in elementary education sector to address two of the pressing problems for majority of children, viz., hunger and education. The objective of the scheme is to encourage children, belonging to disadvantaged sections, to attend school regularly and improve their nutritional status. This scheme presently covers all children studying in Classes I-VIII in all schools, including Madarsas and Maqtabas, in harmony with Sarva Siksha

Abhiyan (SSA). The overall situation regarding the coverage of the scheme is indicated in Table 10.23 for the period 2010-11 to 2014-15. In 2010-11, the coverage of MDMS at primary level was 55.5 percent, which increased to 65.9 percent in 2014-15. Similarly, the coverage of MDMS at upper primary level was 48.6 in 2010-11 and it is 61.1 percent in 2014-15. Thus, the coverage of MDMS at both the levels have increased in the recent years, although there was decline in coverage in some intervening years.

The district-wise coverage of MDMS at primary and upper primary levels is presented in Table A 10.19 and A10.20, respectively (Appendix). During 2014-15, the coverage of MDMS in 17 districts was above the state average of 65.9 percent at the primary level, compared to 20 districts in the previous year. The coverage of MDMS is above 70 percent in six districts —Siwan (79.3 percent), East Champaran (76.0 percent), Patna (74.9 percent), Sitamarhi (73.9 percent), Saran (70.8 percent) and Darbhanga (70.1 percent). The lowest coverage is recorded in Purnea (54.8 percent). At the upper primary level, there are 25 districts where the MDMS coverage was above the state average of 61.1 percent, compared to 19 districts in the preceding year. The best three districts in terms of coverage are — East Champaran (78.1 percent), Sitamarhi (75.5 percent) and Sheohar (73.4 percent). The lowest coverage is recorded in Madhepura (24.4 percent). Although there has been expansion in the coverage of MDMS in recent years, but more public participation is required to attain the desired target.

Sarva Shiksha Abhiyan (SSA)

The Right of Children to Free and Compulsory Education (RTE) Act 2009 was enacted by the central government to increase the quality as well as accessibility of elementary education. Sarva Shiksha Abhiyan (SSA) is the designated scheme for implementation of the RTE Act. The SSA is a flagship programme of the central government for achievement of Universalization of Elementary Education (UEE) in a time bound manner. Under the 86th amendment to the Constitution, free and compulsory education is a fundamental right for children in the 6-14 years age group.

The framework of the SSA has been revised in 2014-15 to include reimbursement for expenditure incurred for at least 25 per cent admissions of children belonging to disadvantaged sections in private schools. The programme seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants. The existing schools with inadequate teacher strength are also to be provided with additional teachers. The capacity of existing teachers is being strengthened by extensive training, grants for developing teaching-learning materials, and strengthening of the academic support structure at cluster, block and district levels. The SSA seeks to provide quality elementary education including life skills and has a special focus on girl's education and children with special needs. The programme also seeks to provide computer education to bridge the digital divide.

The SSA in Bihar is being implemented for 2.6 crore children in the age group of 6-14 years through the Bihar Education Project (BEP) Council. Along with SSA, the BEP is also responsible for other programmes like National Programme for Education of Girls at

Elementary Level (NPEGEL), a special component of SSA which provides additional support for enhancing girls' education, over and above the normal SSA intervention. The programme provides for setting up of a model school in every cluster where, through intense community mobilization and supervision, girls' enrolment in schools is promoted. This scheme is implemented in Educationally Backward Blocks (EBBs) where the level of rural female literacy is less than the national average of 46.1 percent and the gender gap is above the national average of 21.6 percent, as per 2011 census. The EBB Scheme has been delinked from the support of the central government with effect from 2015-16 and, as such, the scheme now stands transferred to the state governments. The Kasturba Gandhi Balika Vidyalaya (KGBV) is another scheme for setting up residential schools at upper primary level for girls belonging to the SC/ST, OBC and minority community. The scheme was merged with SSA with effect from April, 2007. Table 10.24 shows that, out of the total approved budget of Rs. 7044.83 crore of BEP, 47.9 percent has been spent during 2014-15, which is 20.0 percentage points lesser than the previous year.

Table 10.24 : Status of Fund Received and Expenditure by BEP

(Rs. crore)

Programmes	Approved AWP & B	Fund Releases				Total Expenditure	Exp. as percent of fund released	Exp. as percent of AWP&B	
		FC 13	GOI	GOB	Total				
2013-14	SSA	6735.6	946.00	2518.8	1154.36	4619.17	4554.37	98.6	67.6
	KGBV	200.22	0.00	91.33	49.86	141.19	90.78	64.3	45.3
	Total	6935.82	946.00	2610.13	1204.23	4760.36	4645.15	97.6	67.0
2014-15	RUSA	NA	0.00	7.40	4.00	11.40	11.40	100.0	–
	RMSA	91.83	0.00	137.66	25.09	162.75	162.75	100.0	177.2
	SSA	6953.00	970.00	2174.18	1290.32	4434.50	3330.39	75.1	47.9
	Total	7044.83	970.00	2319.24	1319.41	4608.65	3504.54	76.0	49.8

Note : AWP&B : Annual Work Plan and Budget

Source : Bihar Education Project, GOB

ASER Report Findings

In the recent years, Bihar has made considerable progress in universalising elementary education and encouraging students to continue to reach the secondary stage. In an effort to evaluate learning levels, Pratham, a reputed non-government organisation, has been conducting learning assessment tests in every state, including Bihar. The results of these tests are presented in Annual Status of Education Report (ASER).

Table 10.25 shows that, despite improvements in literacy figures, the quality of learning in Bihar is not high, as in most other states of the country. This quality has indeed been declining over the years, both in Bihar and India. As regards learning outcomes in the recent years, one can make out that, in Standard III, the percentage of students with satisfactory reading skills is lower in Bihar than the national average, while for mathematical skills it is nearly the same. For Standard V students, the percentage of students with satisfactory reading skills is same for both Bihar and India. However, for mathematical skills, the figures for Bihar are much higher than that of India. These results underline the necessity of improving the quality of elementary education throughout the country, including Bihar.

Table 10.25 : Percentage of Learning Outcomes based on ASER Report

Year	Standard III				Standard V			
	Reading Std. I Level Text		Simple Subtraction		Reading Std. II Level Text		Simple Division	
	Bihar	India	Bihar	India	Bihar	India	Bihar	India
2007	54.1	49.2	55.5	42.4	68.1	58.9	63.2	42.5
2008	51.7	50.6	44.9	38.9	63.9	56.3	52.5	37.1
2009	43.7	46.6	45.6	39.1	57.5	52.9	52.3	38.1
2010	44.9	45.7	44.3	36.3	58.4	53.7	51.7	36.2
2011	32.1	40.4	29.7	30.0	49.6	48.3	36.9	27.6
2012	31.1	38.8	28.1	26.4	44.4	46.9	31.3	24.9
2013	33.2	40.2	27.7	26.1	43.9	47.0	34.1	25.6
2014	31.9	40.3	24.2	25.4	48.2	48.1	34.9	26.1

Source: ASER Report, 2014

Higher Education

The higher education plays a significant role in developing a modern society. It equips young people with skills for gainful employment. With greater reliance on technology-intensive inputs in manufacturing and production, the need for highly specialized skill and knowledge is always high for spurring economic growth.

Table 10.26 : Institutions of Higher Education

Type of Institutions/Year	2013	2014
Universities		
Central University	1	2
State Public University	14	14
Institute of National Importance	3	3
State Open University	1	1
Institute Under State Legislative Act	1	1
Deemed University	1	1
Total	21	22
Research Institute	15	15
Colleges		
Government Colleges/Constituent College	278	278
Local Body Colleges/Affiliated College	387	416
P.G Center/Off-Campus Center	9	9
Recognized Centre	13	13
Total	687	716
Technical Institutes		
Education/Teacher Training Centre (Primary)	42	43
Engineering College	10	24
Total	52	67

Source : Department of Education, GOB

The higher education sector in Bihar comprises college and university education, both for general and technical streams (Table 10.26). Presently, 22 universities are functioning in the state, of which 21 are traditional universities and 1 of them is an open university. In 2014, there were 278 government colleges and 416 local body colleges. Providing professional training to the prospective school teachers is another component of the higher education system. Presently, there are 43 teacher training centres in Bihar. In 2014, there were 24 engineering colleges in Bihar, compared to 10 colleges in 2013. The district-wise details of affiliated and constituent colleges and technical colleges for 2013-14 and 2014-15 are given in Table A 10.21 and A 10.22 (Appendix). According to Table A 10.22, there are 483 colleges of Arts, Fine Arts, Social Work, Science and Commerce, 24 Engineering colleges, 62 Medical colleges and 125 colleges of other streams. Due to resource constraints, the state government alone is not able to fulfill the demand for higher education. Thus, a number of private educational institutes have been set up in Bihar, which are generally institutes of technical, medical and vocational education.

School Education Outcomes

- Bihar has made remarkable progress in bringing 23 lakh out-of-school children of 6-14 age group into schools. In 2005, approximately 12 percent children were out of school, which has now come down to 2 percent.
- Under the Vidyalaya Chalo Kendra programme, about 3.70 lakh children (through Prayas Kendra), about 12 lakh children (through Maktab Madarasa Navachari Kendra), about 1.41 lakh children of minority Muslim community (through Talimi Markaj Kendra), about 6 lakh children of Mahadalit community (through Utthan Kendra) and about 3.77 lakh children (through Utpreeran Kendra) have been added to the mainstream of the education system.
- Till date, 21 thousand new primary schools have been opened and about 19 thousand primary schools have been upgraded into middle schools.
- Under the Mukhyamantri Balika Poshak Yojana, fund for school uniform have been distributed for boys/girls in Classes I-VIII. In addition, free text books have also been distributed to every student. During 2014-15, free uniforms and text books has been distributed to 156 lakh students.
- Mukhyamantri Balika Cycle Yojna was started with the aim to attract girls for higher education. Under this programme, about 40 lakh girls studying in Class IX were provided monetary help to purchase cycles since 2007-08.
- Under the Mukhyamantri Balak Cycle Yojna, 39 lakh boys studying in Class IX were provided monetary help to purchase cycle since 2009-10.
- A programme named Mission Gunwatta has been initiated to impart quality skill development and vocational training in elementary education in the state.
- About 20 thousand teachers are being trained to make the teaching of science and mathematics in an effective and interesting manner.
- The state government plans to open higher secondary schools in every Gram Panchayat. Till date, 1292 such schools have already been opened. The opening of about 1000 more schools is under process in the current financial year.
- Till date, 31 colleges in Bihar have been accredited to NAAC.

Art, Culture and Youth

The youth population constitute a critical segment, as the future social, economic and political developments depend on them. India is one of the youngest nations in the world, with 27.5 percent of its population belonging to the age-group 15-29 years; in Bihar, the share is 24.2 percent. The state government has earmarked an amount of Rs. 134.47 crore in 2014-15 for different schemes of the Department of Art, Culture and Youth. For overall development of art, culture and youth, the state government has taken several steps:

- Framing of Bihar Police Sports Policy 2013 and formation of Selection and Talent Hunt Committee under this policy for appointment and promotion of sports persons.
- The construction work of an international standard Bihar Museum is in its last phase. It is spread over 13.50 acres of land, and the estimated cost is Rs. 498.49 crore.
- The construction work of an International Convention Centre at a cost of Rs. 490.00 crore is in progress. The Centre will also include a Gyan Bhawan and a Sabhayata Dwar.
- With a view to generate the feeling of nationalism and social service among the youth, different types of programmes are being organised by the students and teachers.
- To create awareness among the youth about national integration, blood donation, plantation, literacy, health, environment, etc., regular camps are being organised by volunteers.
- Steps are being taken to promote and conserve different forms of folk music, such as Rasanchauki (Madhubani), Chakchanda (Munger), Allaha Gayan (Jehanabad), Bhagait Gayan (Dhandiha, Madhubani), Bakhkho Gayan (Begusarai), Bajjika Gayan (Vaishali), Gorau Gayan (Saran), and Ramnandi Gayan (Lalpur, Darbhanga).
- Steps have been taken to promote and conserve different forms of folk dance such as Pamariya (Madhubani), Jhijhiya (Darbhanga), Dhobia Nach (Buxer), Kathaghorwa (Bakhtiyarpur), Godna (Nawgachhiya, Bhagalpur), Dhankatni, Domkacha (Begusarai), Vidapada Nach (Araria), Jharani (Madhubani), Tribal Dance and Tharu Folk Dance (Betiah, West Champaran),
- The action is being taken to constitute a Youth Welfare Board and frame a Youth Policy on the pattern of the Youth Policy of the central government. Opinions and suggestions are being invited from different associations on the Draft Proposal of the Youth Policy.

10.4 Social Welfare

To achieve the objective of development with justice, the state government is implementing special welfare programmes for Dalits, Mahadalits, Backward Classes, Extremely Backward Classes, Minorities, Women and other weaker sections.

Welfare of Scheduled Caste and Scheduled Tribe

The welfare of Scheduled Castes (SC) and Scheduled Tribes (ST) is essential for holistic development of a society. Towards this, the state government has formed a separate Department in April, 2007. The scheduled castes and scheduled tribes together constitute

about 17.3 percent of the state's total population, according to 2011 census. The districtwise data on share of scheduled caste and scheduled tribe population is presented in Table A 10.23 (Appendix). The districts with a share of more than 20 percent for scheduled caste and scheduled tribe population are — Nalanda, Kaimur, Gaya, Arwal, Nawada, Aurangabad, Vaishali and Sheikhpura. The Department of Scheduled Caste and Scheduled Tribe runs the following programmes for their social advancement:

- An amount of Rs. 396.00 crore was distributed among more than 36.77 lakh SC/ST students (Class I-X) in 2014-15. The target for 2015-16 is to cover 48.62 lakh SC/ST students. The rate of scholarship was enhanced three times in the recent past.
- The SC/ST students who pass examination of the Bihar School Examination Board in first division are awarded Rs. 10,000 under Mukhymantri SC/ST Medhavriti Scheme, started in 2008-09. In 2014-15, more than 20,000 boys and girls have been benefitted with an expenditure of Rs. 20.84 crore.
- The state government has decided in 2014-15 to award Rs. 8000 to the SC/ST boys and girls students who pass examination of the Bihar School Examination Board (Class X) in second division.
- The state government has also decided to award Rs. 15,000 and Rs. 10,000 to SC/ST girl students who pass Class XII examination in first and second division respectively. A total expenditure of Rs. 150.00 crore is expected under this scheme in 2015-16.
- At present, 80 residential schools are running for SC/ST students. The sanctioned strength of the schools were 30,560 in 2014-15. A sum of Rs. 17.50 crore will be spent for the construction of more such residential schools, with additional capacity of 560 students. The construction of 3 such residential schools has been started in Kishanganj, Motihari and Araria. The services of 680 retired teachers are being utilised for the vacant posts in residential schools.
- During 2006-07 to 2014-15, Rs. 77.00 crore has been distributed among 44,000 beneficiaries of SC community through Bihar State Schedule Caste Co-operative Development Corporation Limited.
- By 2013-14, 7 pre-examination Training centres were established in Patna, Darbhanga, Bhagalpur, Gaya, Muzaffarpur, Saran and Bhojpur districts. A student guidance centre is also functioning for SC students in Chandragupta Institute of Management, Patna since 2010-11.
- A high level committee under the Chairmanship of Chief Secretary has been constituted for inclusion of Tharu Tribe into the category of scheduled tribe in Bihar. Mainly they live in West Champaran district. In 2012-13, Rs. 35 crore has been sanctioned for construction of total 6 residential schools, out of which work has already started for 5 residential schools. In addition, there are general schemes of development for this tribe — road connectivity, establishment of special ITI, establishment of 400 seated residential school (5 boys and 5 girls), solar lamps, forest conservation, and promotion of Self-Help Groups (SHGs) and skill development schemes.

The total budget for SC/ST welfare increased from Rs. 1181.12 crore in 2014-15 to Rs. 1789.39 crore in 2015-16 (Table 10.27). However, the actual expenditure was Rs. 1006.32 crore in 2014-15, indicating 85.2 percent utilisation. The district-level data on physical and financial progress under major SC/ST welfare schemes in the state is presented in Table A 10.24 (Appendix).

Table 10.27 : Overview of Outlay Allocation of SC and ST Welfare

(Rs.crore)

Item	2013-14			2014-15			2015-16
	Budget	Actual Expenditure	Utilisation Percentage	Budget	Actual Expenditure	Utilisation Percentage	Budget
SC & ST	1042.48	904.78	86.8	1124.46	966.09	85.9	1469.74
Secretariat Service	3.10	2.44	78.7	3.26	3.02	92.7	3.78
Capital Outlay	57.10	13.67	23.9	50.40	34.21	67.9	291.87
Capital Outlay on Co-operatives	3.00	1.00	33.3	3.00	3	100.0	4.00
Other Administrative Service	–	–	–	–	–	–	20.00
Total	1105.68	921.89	83.4	1181.12	1006.32	85.2	1789.39

Source : Department of SC/ST Welfare, GOB

Mahadalit

Out of the 22 scheduled castes in Bihar, 21 are acutely deprived in terms of economic and social status. This was because the population belonging to these scheduled castes has not benefited much from the welfare programmes meant for them. This led to the constitution of the State Mahadalit Commission. The idea of Bihar Mahadalit Vikas Mission is to fulfill the basic necessities of all Mahadalit communities through their economic, social and cultural empowerment and ensure their full participation in development. The Bihar Mahadalit Vikas Mission has planned a number of schemes to attain that goal. The interventions of the state government for the Mahadalits include:

- The state government has started Mahadalit, Alpsankhyak Evam Ati Pichhara Warg Akshar Anchal Yojana in 2013. Under this programme, 27,953 literacy centres were opened and 20.70 lakh females were benefited by the programme.
- Through Bihar Mahadalit Vikas Mission, training on computer, DTH installation, spoken English and beautician is given to more than 1 lakh Mahadalit men and women under Dashrath Manjhi Kaushal Vikas Yojana. For all scheduled caste men and women, this training facility is being provided under Scheduled Caste sub-plan of Special Central Assistance Scheme. Out of the trained persons, more than 17000 persons have been employed.
- The state government has decided to appoint Vikas Mitras at each Gram Panchayat (rural) and ward (urban), dominated by Mahadalit community. This aims at an effective implementation of the various development and welfare schemes targeting the said community. A reservation of 50 percent is given to women in the selection of Vikas Mitras. Till date, 9460 Vikas Mitras have been appointed.

- Under Mukhya Mantri Mahadalit Radio Yojana, 17 lakh radio sets have been distributed as per the choice of individual families at an expenditure of Rs. 67.98 crore.
- A total of 4795 Community Hall-cum-Workshed are being constructed at an expenditure of Rs. 232.24 crore for the intellectual, cultural and sports development of Mahadalit community.
- SAHAYTA Call Centres have been established across the state which have provided the desired assistance to altogether 61,957 SC/ST callers. An amount of Rs. 52.00 lakh has already been spent on this scheme. An expenditure of Rs. 12.00 lakh is expected in 2015-16.
- The beneficiary contribution of Rs. 900 for construction of toilet is being given by Bihar Mahadalit Vikas Mission under 'Mahadalit Sauchalaya Nirman Yojana'. Till date, more than 3 lakh Mahadalit households have been benefited with an expenditure of Rs. 19.42 crore.
- To broadcast the programmes produced with the participation of Mahadalit people, action have been taken for establishment of Community Radio Stations in 19 districts — Patna, Muzaffarpur, Gaya, Vaishali, East Champaran, Nalanda and Saran. A sum of Rs. 41.00 crore is likely to be spent on this programme in 2015-16.

National Safai Karmachari Finance and Development Corporation (NSKFDC)					
Sl. No.	Name of the scheme	Maximum Limit	Rate of interest to		Repayment period
			State Channelising Agencies (SCA)	Beneficiaries	
1	Mahila Samridhi Yojana (MSY)	Rs. 50000	1 percent	4 percent	3 years*
2	Mahila Adhikarita Yogana (MAY)	Rs. 75000	2 percent	5 percent	5 years *
3	Micro Credit Finance (MCF)	Rs. 50000	2 percent	5 percent	3 years*
4	General Term Loan (GTL)	Rs. 15 lakh	3 percent	6 percent	10 years*
5	Swachhta Udyami Yojana – “Swachhta se Sampannta Ki Aur”				
	(a) Scheme for Pay and use toilets	Rs. 25 lakh	4 percent @		10 years**
	(b) Scheme for procurement of sanitation related vehicles	Rs. 15 lakh	4 percent @		10 years *
6	Sanitary Marts Scheme	Rs. 15 lakh	4 percent @		10 years*
7	Education loan (EL)		1 percent	4 percent#	5 years***
	– For study in India	Rs. 10 lakh			
	– For study abroad	Rs. 20 lakh			
8	Green Business Scheme	Rs. 1 lakh	1 percent	3 percent	6 years****

0.5% rebate for female beneficiaries
 * After implementation period of 3 months and moratorium of 6 months
 ** After implementation period of 6 months and moratorium of 6 months
 *** After termination of course with moratorium period of 1 year
 **** Including Moratorium of 6 months
 @ 1% rebate for women beneficiaries and 0.5% rebate for timely repayment

The Bihar State Schedule Caste Cooperative Development Corporation, Patna was established in 1978 for all-round development of scheduled castes. The district offices of the Corporation are working in 35 districts of Bihar. In 2013-14, Corporation had benefited 4218 people through its subsidy scheme, the total assistance being Rs. 13.04 crore. In 2014-15, 3653 people were benefited with a total assistance of Rs. 12.40 crore. The details are given in Table 10.28.

Table 10.28 : Achievements of Bihar State Scheduled Caste Cooperative Corporation

(Amount in Rs. lakh)

2013-14						2014-15					
No. of Beneficiaries	Term Loan	Bank Loan	Margin Money	Subsidy	Total	No. of Beneficiaries	Term loan	Bank Loan	Margin Money	Subsidy	Total
Mahila Samridhi Scheme (Upto Rs. 0.30 lakh)											
13	2.6	0.0	0.0	1.3	3.9	356	71.2	0.0	0.0	35.6	106.8
Mahila Samridhi Scheme (0.50) (Upto Rs. 0.50 lakh)											
234	46.8	0.0	0.0	23.4	70.2	69	27.6	0.0	0.0	6.9	34.5
Small Business Scheme (Upto Rs. 0.50 lakh)											
10	3.8	0.0	0.2	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
Micro Credit Finance Scheme (Upto Rs. 0.30 lakh)											
517	107.0	0.0	0.0	51.7	158.7	954	190.8	0.0	0.0	95.4	286.2
Micro Credit Finance Scheme (Upto Rs. 0.50 lakh)											
0.0	0.0	0.0	0.0	0.0	0.0	132	52.8	0.0	0.0	13.2	66.0
Term Loan Scheme (Upto Rs. 0.50 lakh)											
37	14.8	0.0	0.0	3.7	18.5	161	64.4	0.0	0.0	16.1	80.5
Term Loan Scheme (Upto Rs. 1.00 lakh)											
63	49.8	0.0	3.8	6.3	59.9	77	60.4	0.0	5.1	7.7	73.1
Subsidy Scheme (executed through Bank)											
3301	0.0	627.9	0.0	330.1	958.0	1806	0.0	343.5	0.0	180.6	524.1
Mahila Adhikarita Yojna											
43	25.8	0.0	0.0	4.3	30.1	98	58.8	0.0	0.0	9.8	68.6

Note : NSFDC - National Scheduled Caste Finance Development Corporation
 NSKFDC - National Safai Karmachari Finance Development Corporation
 Source : Department of SC/ST Welfare, GOB

Welfare of Backward and Extremely Backward Classes

In 2007-08, the state government has constituted the Department of Welfare of Backward and Extremely Backward Classes for overall development of these communities. In Bihar, 131 backward castes account for almost 60 percent of its population. The summary of financial progresses for welfare of backward and extremely backward population is presented in Table 10.29.

Table 10.29 : Financial Progress of BC and EBC Welfare

(Rs. crore)

Details	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Total Outlay	125.62	365.91	825.92	1375.79	1477.97	2467.31
Total Approved Amount	125.62	365.91	825.92	1193.10	1477.97	1341.26
Total Expenditure	115.17	355.05	817.48	1193.10	1445.40	1248.18
Utilisation percentage	91.7	97.0	99.0	86.7	97.8	93.1

Note : The figures for 2015-16 refers the period upto September, 2015

Source : Department of BC and EBC Welfare, GOB

The welfare measures undertaken for backward and extremely backward classes are as follows:

- Scholarships are provided to students from backward and extremely backward classes in elementary and secondary schools, colleges and technical institutions.
- Under Mukhyamantri Merit Scholarship Scheme for Extremely Backward Class students, an amount of Rs. 50.00 crore was disbursed as scholarship among 40 thousand students in 2014-15. An amount of Rs. 40.00 crore has been approved for 2015-16.
- Post-Matric scholarship was given to 2.44 lakh students belonging to backward and extremely backward category in 2014-15.
- A provision of Rs. 1380.27 crore has been made in the budget of 2015-16 to cover 1.15 crore students belonging to backward and extremely backward classes. An amount of Rs. 1275.25 crore has already been allotted to the districts. Out of this allocation, Rs. 1203.37 crore has already been spent till September, 2015.
- The construction of hostels in 8 districts at a cost of Rs. 9.35 crore under Jan Nayak Karpoori Thakur Extremely Backward Class Welfare Hostel Scheme has been completed. During 2015-16, they have started functioning.
- An amount of Rs. 7.20 crore has been spent during 2014-15 benefiting 2499 girl students for free uniforms, food and other necessities of students, and arrangement of residential facilities in high schools. A provision of Rs. 9.77 crore has been made for 2015-16.
- In 2015-16, an amount of Rs. 75 lakh has been sanctioned to benefit 3875 students with technical education.

The physical and financial details of allocation for different welfare schemes for the backward and extremely backward population is presented in Table 10.30.

Table 10.30 : Physical and Financial Details of BC and EBC Welfare Department

Year	No. of Beneficiaries	Fund Allocation (Rs. lakh)	No. of Beneficiaries	Fund Allocation (Rs. lakh)	No. of Beneficiaries	Fund Allocation (Rs. lakh)
	Stipend for students of primary, middle and high school		Post-Matric Scholarship		OBC Girls' Higher Secondary Residential School (12 nos.)	
2009-10	296315	2200.0	75483	2522.6	2400	300.0
2010-11	312630	2400.0	86210	4000	2440	512.0
2011-12	323313	2517	126938	15206.9	3080	485.0
2012-13	4300000	58696	225000	24628.2	800	100.0
2013-14	9800000	116824	36368	5815.0	2019	585
2014-15	12200000	105470	244121	36997	2499	726
	Mukhyamantri Medhavriti Yojana for EBC students		Stipend for students in technical courses		Construction of 38 Jannayak Karpuri Thakur Hostels for EBC Students	
2009-10	9000	900.0	830	17	Under Construction	1791
2010-11	46943	4694	830	17		1074
2011-12	53000	5300.0	850	17		160
2012-13	42000	4200.0	1650	30		187
2013-14	35000	3500.0	1500	30		935
2014-15	40000	4000	1500	30		500

Source : Department of Backward and Extremely Backward Class Welfare, GOB

Minority Welfare

According to 2011 census, the religious minorities constitute 17.3 percent of the population of Bihar, with 16.9 percent Muslims and 0.4 percent belonging to other religions like Buddhists, Jains, Sikhs, and Christians. Muslims constitute a large part of the population in Kishanganj (68.0 percent), Katihar (44.5 percent), Araria (42.9 percent) and Purnea (38.5 percent). The details are given in Table A 10.25 (Appendix).

Indian social structure is characterised by unity as well as diversity. The socio-economic status of minority population is generally lower in Bihar, as in other states of the country. Thus, to improve the socio-economic conditions of the minority communities through affirmative action and inclusive development, a separate Departments of Minority Welfare was established in Bihar in 1991. The information on some of the important programmes of the Department of Minority Welfare are presented below :

- In 2014-15, Mukhyamantri Alpsankhayak Vidyarthi Protsahan Yojana had benefited 22,715 minority students who passed the examination of Bihar School Examination Board in first division. Such students receive a grant of Rs. 10,000. Apart from this, since 2014-15, a sum of Rs. 8000 is given to those minority students, who pass the examination in second division. An award of Rs. 15,000 and Rs. 10,000 is also given to those minority girl students, who have passed the Class XII examination in first and second division respectively. For this, a sum of Rs. 86.21 crore was allotted for 2014-15 which was disbursed among 92,575 students.

- Under Muslim Divorcee Women Assistance Programme, a sum of Rs. 10 thousand is provided to each divorcee woman for self-employment. A total amount of Rs. 2.00 crore has been given to 2000 women under this scheme till 2014-15.
- Under a scheme for hostels for minority students in all the districts of Bihar, construction work of 100 bedded 34 hostels has already been completed. Of this, 22 hostels are already functioning and 12 hostels are likely to start soon. The construction work of more hostels for the minority students in 18 districts is under progress.
- Mazharul Haque Arbi-Farsi University has been appointed as the Nodal Agency for imparting physical training to candidates for appearing in the examination of Bihar Police Service Recruitment. Till 2014-15, 705 minority youths have received such training. Coaching was also imparted to 50 students for appearing in preliminary examination of UPSC and BPSC.
- The state government has decided to fence 8064 graveyards after indentifying them, under the scheme of Fencing of Graveyards. An amount of Rs. 618.82 crore has been released till date, out of which Rs. 29.47 crore has already been spent. Under this, 6152 schemes were approved, and 4777 graveyards have been fenced till now.
- Under Hunar Scheme launched in 2008-09, a total number of 13,768 girl children got training during Phase-1, out of which 11,345 passed out. During Hunar-2 (Phase-I), 1252 girl children received training. During Hunar-2 and 3 (Phase-II), a total of 14,613 girls were trained, out of which a total of 7477 girls have passed out.
- Under Hunar Scheme, an amount Rs. 2500 is given to each girl child to purchase instruments kit after they pass out. An arrangement has been made so that the amount is directly transferred to the account of the beneficiary. Till date, an amount of Rs. 6.05 crore has been distributed among the girls.
- An arrangement has been made to provide annual grant-in-aid to Waqf Boards. At the same time, a work plan has been prepared to detail the property of Waqf Board and computerize it as well. The annual aid of Bihar State Sunni Waqf Board has been increased from Rs. 20.00 lakh to Rs. 50.00 lakh to strengthen the Board. Similarly, the annual aid of Bihar State Shia Waqf Board has been enhanced from Rs. 7.50 lakh to 20.00 lakh.
- For better quality of education, computerisation of 188 Foukania and Fazil level institutions was done in phases. Further, 188 aided Madarsas, including 76 at wastania level, were activated. This step was taken to connect Muslim community with modern technology-aided computer education.
- Under the scheme for providing quality education, Rs. 30.86 crore has been sanctioned in 2015-16 for 1128 Madarsas.
- Till date, 1095 applications have been received for the affiliation of Madarsas. Further, applications for upgradation has been received from 504 affiliated Madarsas by Bihar State Madarsa Board. Out of this, 55 Madarsas have been upgraded and 45 new Madarasa have been affiliated, both without aid, after scrutiny.

- Under the Chief Minister Minority Education Loan Scheme, a loan for minority youths for technical and higher education at low interest rate is being provided since 2011-12. Till 2014-15, a loan amount of Rs. 10.75 crore has been distributed among 864 minority students.

10.5 Women Empowerment

Inclusive development cannot be attained unless women participate equally in the development process. It was during the Eighth Plan when empowerment of women was recognized and accepted as a distinct strategy for the first time. This was taken forward further in the Ninth Plan with the introduction of the concept of Women's Component Plan, whereby identified ministries were required to indicate the flow of funds to the women's programmes. Later, the Twelfth Plan has identified the key indicators for gender equity to be addressed in the planning process through economic, social and cultural empowerment. Since gender equality and women's empowerment is an important agenda, the state government has been publishing its gender budget since 2008-09. An overview of the gender budget for five years (2011-12 to 2015-16) is presented in Table 10.31. From the table, it emerges that the total outlay for women development has increased over the years, although it recorded a drop in 2015-16. The share of the outlay on women in total state budget has been about 11 percent, with some year-to-year variation.

Table 10.31 : Gender Budget Summary

(Amounts in Rs. crore)

Details	2011-12	2012-13	2013-14	2014-15	2015-16
Category I schemes for Women (100 % beneficiaries)	1995.64	2293.84	2740.20	3920.05	2996.06
Category II schemes for Women (30 % beneficiaries)	4092.48	5541.79	7007.98	8658.27	8362.95
Total outlays for women	6088.12	7835.63	9748.18	12578.32	11359.01
Total Outlays for related Departments	27841.55	34615.35	19003.48	33703.68	28059.94
Outlays for women as a percent of total outlays of related Departments	21.9	22.6	51.0	37.2	40.5
Total size of the state budget	60181.69	69206.57	80405.28	94697.94	120685.32
Share of outlays in the state budget (percent)	10.12	11.32	12.12	13.28	9.41
GSDP	243269.02	293615.93	343662.79	402282.99	474129.95
Outlays for women as percent of GSDP	2.5	2.7	2.8	3.1	2.4

Source : Department of Finance, GOB

In Table 10.32, the data is presented for the gender budget items under different departments. Here again, one notices decrease in outlays for both Category I and Category-II schemes in 2015-16, compared to 2014-15. It also emerges from the table that Rural Development, Social Welfare and Education are the three principal Departments, through which women-oriented programmes are implemented.

Table 10.32 : Overview of Gender Budget

(Rs. crore)

Name of Department	2014-15				2015-16 (BE)			
	Total Budget	Expenditure for women			Total Budget	Expenditure for women		
		Under Category I	Under Category II	Total		Under Category I	Under Category II	Total
Social Welfare	4370.7	412.8	1646.3	2059.1	3867.4	296.5	1628.8	1925.3
SC and ST welfare	1104.6	0.0	301.2	301.2	1396.1	0.0	413.6	413.6
Public Health Engineering	1403.8	0.0	192.3	192.3	1099.8	0.0	329.9	329.9
Minority Welfare	70.1	2.0	11.4	13.4	162.8	2.0	48.3	50.3
Education Department	16549.5	540.5	5371.0	5911.5	13804.0	517.1	4319.7	4836.7
Health	441.3	441.3	0.0	441.3	85.1	85.1	0.0	85.1
Rural Development	6330.8	2492.4	105.0	2597.4	4186.7	2056.6	549.0	2605.7
Urban Development and Housing	5.8	0.0	2.7	2.7	3.2	0.0	1.6	1.6
Panchayati Raj	98.6	0.0	49.3	49.3	224.6	0.0	112.3	112.3
Labor Resource	8.2	3.2	1.5	4.7	7.1	2.7	1.3	4.0
Planning and Development	700.0	0.0	210.0	210.0	898.8	0.0	269.6	269.6
BC and EBC Welfare	1463.4	8.3	436.5	444.8	1955.8	9.8	583.8	593.6
Revenue and Land Reforms	19.6	19.6	0.0	19.6	26.3	26.3	0.0	26.3
Art, Culture and Youth	30.4	0.0	9.1	9.1	45.7	0.0	13.7	13.7
Industry Department	79.0	0.0	23.7	23.7	99.1	0.0	29.7	29.7
Finance Department	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Agriculture Department	1015.5	0.0	297.8	297.8	187.0	0.0	56.1	56.1
Information & Tecnology	0.5	0.0	0.4	0.4	0.5	0.0	0.4	0.4
Building Construction	12.0	0.0	0.0	0.0	10.0	0.0	5.0	5.0
Total	33703.7	3920.1	8658.3	12578.3	28059.9	2996.1	8362.9	11359.0

Source : Department of Finance, GOB

Table 10.33 : Flagship Schemes to Address Gender Disparity

(Rs. crore)

Scheme	2010-11	2011-12	2012-13	2013-14	2014-15 (RE)	2015-16 (BE)
Lakshmbai Social Security Pension Scheme	85.92	106.43	149.60	134.58	282.00	150.00
Nari Shakti Yojana	10.00	30.00	0.00	1.20	1.20	1.20
Mukhyamantri Kanya Vivah Yojana	70.00	88.49	82.43	50.40	155.40	60.53
Mukhyamantri Kanya Suraksha Yojana	105.41	100.00	6.56	12.00	132.00	45.40
Total	271.33	324.92	238.59	198.18	570.60	257.13

Source : Department of Finance, GOB

The direct interventions by the state government to address gender disparity comprise two main heads: child protection (Kanya Suraksha Yojana to stop female foeticide) and social and economic security (Lakshmibai Social Security Pension scheme, Kanya Vivah Yojana and Nari Shakti Yojana) (Table 10.33). With an objective to empower women and make her self-reliant, the scheme Nari Shakti Yojana was launched in 2007-08. The programme envisages holistic empowerment of women in economic, social and cultural spheres. It addresses problems like lack of skills and resources, and inadequate access to protective and supportive services. The total expenditure under these flagship schemes has varied over the years. It was the highest in 2014-15 (Rs. 570.60 crore), but was much lower next year (Rs. 257.13 crore).

Economic Empowerment

- In order to include women in local self-governance, 50 percent reservation in Panchayati Raj Institutions and Urban Local Bodies was introduced by the state government. It aimed at providing equal rights, social status and opportunities to women.
- The state government has also provided for 50 percent reservation to women in primary school vacancies.
- A total of 3.76 lakh women's self help groups (SHG), covering 45.23 lakh families were formed till 2015, under Jeevika. Apart from other benefits, the SHGs promote small savings. At present, 15,224 village organisations and 261 cluster level federations are in operation. Considerable progress has also been recorded in the fields of institutions building, capacity building and financial inclusion.
- Between 2007-08 and 2014-15, through Jeevika's initiatives, 1.26 lakh SHGs were linked to banks. The progress in financial inclusion has also entailed institutional loan of Rs. 586.33 crore to the SHGs.
- Bihar State Women Empowerment Policy, 2015 is being implemented for economic, social, political and cultural advancement of the women. The policy strives to eliminate gender based discrimination and remove all hindrances restricting women's access to economic, social and political resources.
- Decision has been taken to award state level prize to one woman and district level prizes to 38 women (one from every district) for outstanding work in the field of economic and social development, education, health, cultural development, legal awareness, and environment conservation under Mukhaymantri Mahila Sashaktikaran Puraskar Yojana. Along with a citation, a cash prize of Rs. 1.00 lakh at state level and Rs. 50.00 thousand at district level is given to the awardee, every year on the eve of International Women Day (8th March).
- The state government is implementing Aajeevika Skills and Mahila Kisan Sashaktikaran project, after a re-structuring of the National Rural Livelihood Mission. It has sanctioned an additional exemption of 3 percent in the interest rate on the loans taken for initiating an enterprise by poor women under the scheme.
- An exemption of 100 percent is allowed on the vehicle tax for the three-wheelers, taxi, motor cabs, maxi cabs which are registered in the name of women and being operated by them.
- The state government has decided to raise a new women battalion in Bihar Armed Forces and establish Women Police Stations in all the districts of the state. A reservation of 35

percent is given to women in direct recruitment for the posts of constable and in appointing junior inspector in the police force. There is a proposal to establish a special battalion consisting of scheduled caste women

Social Empowerment

- The state government has established a Gender Resource Centre for capacity building on legal issues, related to violence against women and to conduct advocacy on issues related to women empowerment.
- The Samajik Punarvas Kosh Yojana is in operation in all the districts with a view to rehabilitate survivors of violence and human trafficking. An amount of Rs. 3000 (out of a total Rs. 6000 per survivor) is immediately paid to the survivors of human trafficking. A rehabilitation centre is in operation at Patna to provide staying facilities and long term relief to survivors of human trafficking.
- Mukhyamantri Kanya Vivah Yojana is operational since 2007-08. The scheme provides a financial assistance to poor families at the time of marriage of girls who have attained the age of 18. The scheme has multiple objectives of encouraging marriage registration, preventing child marriage, and encouraging girls' education. A total of 78,385 girls were benefited between 2007-08 and 2014-15. There has been an expenditure of Rs. 444.13 crore on this scheme.
- AASRA, a 50-bedded special residential home for mentally challenged women and girls, has been made functional in Patna.
- Women Helpline have been established and made functional in 38 district of Bihar under MukhyaMantri Nari Shakti Yojana to provide free psychological and legal aid to the victims of domestic violence. An amount of Rs. 44.45 lakh has been spent for running Women Helpline in 2014-15.

Table 10.34 : Number of Cases Registered and Disposed under Social Empowerment

Types of Cases	2013-14		2014-15		2015-16, upto Nov 15	
	Registered	Disposed	Registered	Disposed	Registered	Disposed
Domestic Violence	3488	2654 (76.1)	4016	3283 (81.7)	2701	2100 (77.7)
Dowry Abused	735	508 (69.1)	669	628 (93.9)	381	278 (73.0)
Dowry Death	25	17 (68.0)	14	16 (114.3)	47	44 (93.6)
Second Marriage	153	122 (79.7)	152	105 (69.1)	88	84 (95.5)
Assets Related	232	169 (72.8)	142	160 (112.7)	62	69 (111.3)
Rape & Trafficking Cases	99	65 (65.7)	86	107 (124.4)	33	32 (97.0)
Sexual abuse at office/ other places	132	94 (71.2)	119	84 (70.6)	63	60 (95.2)
Others	1695	1357 (80.1)	1821	1492 (81.9)	1189	1028 (86.5)
Total Cases	6559	4986 (76)	7019	5875 (83.7)	4564	3695 (81.0)

Note : Figures in parentheses denote the percentage of cases disposed
Source : Bihar State Women Development Corporation, GOB

Table 10.34 shows that there has been an increase in the number of cases registered and disposed of relating to offences against women. Out of all the cases, the registration of cases is the highest for domestic violence. It is interesting to note that about 82 percent of all cases were disposed of in 2014-15. Next to domestic violence were the cases registered under dowry abuse and 94 percent cases of such cases were disposed in 2014-15.

10.6 Labour Resource and Welfare

Achieving high rate of economic growth along with commensurate generation of productive and quality employment opportunities continues to be a major challenge for the state government. In Bihar, agriculture is the predominant source of livelihood for the majority of the population. Even in other sectors, the employment is largely unorganized in nature. Thus, to safeguard the interest of the labourers, the state government has taken several initiatives.

According to 2011 Census, the Work Participation Rate (WPR), defined as the proportion of workers (main and marginal) to total population was 33.4 percent in Bihar, compared to 39.8 percent in whole of India. (Table 10.35). The WPR in rural Bihar is 34.0 percent which is rather low; in the urban areas, it is even lower at 28.6 percent. Between 2001 and 2011, there has been notable decrease in the share of main workers in the rural areas, with an increase in the share of marginal workers. The same situation prevails in the case of both main workers and marginal workers in India.

Table 10.35 : Work Participation Rates in Bihar (2011)

(Percentage)

WPR		2001			2011			Changes Over the Period (2001 to 2011)		
		Total	Main	Marginal	Total	Main	Marginal	Total	Main	Marginal
India	Total	39.1	30.4	8.7	39.8	29.9	9.9	0.7	-0.5	1.2
	Rural	41.8	30.9	10.9	41.8	29.5	12.3	0.1	-1.4	1.5
	Urban	32.3	29.3	3.0	35.3	31.0	4.4	3.1	1.7	1.4
Bihar	Total	33.7	25.4	8.3	33.4	20.5	12.8	-0.3	-4.9	4.5
	Rural	34.7	25.7	8.9	34.0	20.3	13.7	-0.7	-5.4	4.8
	Urban	25.6	22.4	3.3	28.6	22.4	6.2	3.0	0.1	3.0

Source: 2011, Census of India

To expand the employment opportunities, the state government has taken several initiatives through Bihar Skill Development Mission. It has plans for skill upgradation of 1 crore youth by 2017. To help them obtain gainful employment, the skill upgradation scheme has a budget of Rs. 19.05 crore. Under this, the Industrial Training Institutes (ITI) have been established in all 38 districts and 9 women ITIs in all divisional headquarters. There are 71 government IITs, including 16 women ITIs were functional in the state, as on 2015-16. For modernization of ITIs, a budget of Rs. 11.00 lakh per ITI has been approved. The construction of new ITI buildings in Jamui, Banka, Thakurganj (Kishanganj) and Goghardiha has been completed, while the construction of ITIs at Arwal, Shivnagar (Madhubani) and Tetariya (Tekari) is under progress. Besides, the construction of Joint Labour Buildings in Muzaffarpur,

Darbhanga and Gaya are also under process. Table 10.36 gives the target of skill development programme during 2013-14 to 2017-18.

Table 10.36 : Targets of Skill Development

(Figures in lakh)

Sl. No.	Departments	2013-14	2014-15	2015-16	2016-17	2017-18	Total
1	Labour Resource	3.25	3.66	4.27	4.47	4.67	20.31
2	Information Technology	1.00	1.13	1.31	1.38	1.44	6.25
3	Rural Development	2.00	2.25	2.63	2.75	2.88	12.50
4	Agriculture	3.00	3.38	3.94	4.13	4.31	18.75
5	Health	0.20	0.23	0.26	0.28	0.29	1.25
6	Science & Technology	0.50	0.56	0.66	0.69	0.72	3.13
7a	Animal Husbandry Directorate	0.50	0.56	0.66	0.69	0.72	3.13
7b	Fisheries Directorate	0.10	0.11	0.13	0.14	0.14	0.63
7c	Dairy Directorate including COMFED	0.25	0.28	0.33	0.34	0.36	1.56
8	Minority Welfare	0.25	0.28	0.33	0.34	0.36	1.56
9	Urban Development and Housing	0.50	0.56	0.66	0.69	0.72	3.13
10	Education	1.50	1.69	1.97	2.06	2.16	9.38
11	Social Welfare	1.40	1.58	1.84	1.93	2.01	8.75
12	SC/ST Welfare	0.60	0.68	0.79	0.83	0.86	3.75
13	Industries	0.80	0.90	1.05	1.10	1.15	5.00
14	Tourism	0.15	0.17	0.20	0.21	0.22	0.94
15	Home (jail)	0.12	0.12	0.12	0.12	0.12	0.12
Total		16.00	18.00	21.00	22.00	23.00	100.00

Source : Department of Labour Resource, GOB

The state government has also taken several initiatives to create job opportunities for the unemployed youth. The district and state-level employment-cum-guidance fairs are being organised under the vocational guidance programme. This programme provided 50,164 jobs in 2013-14 and 1,28,259 jobs in 2014-15. Every employment exchange has been computerized and provided a platform with online facilities to both the job seekers, as well as the employers. More than 2 lakh unemployed youths have already been registered online. Table 10.37 depicts the initiatives taken by the state government for computerization and online facilities in the employment exchange. In 2014-15, the financial achievement is almost 100 percent of the budget outlay, implying proper and timely completion of all the programmes.

Table 10.37 : Physical & financial Progress of Schemes for Modernization of Employment Exchanges

(Amount in Rs. lakh)

Programme	2013-14		2014-15		2015-16	
	Budget outlay	Finacial Achievement	Budget outlay	Finacial Achievement	Budget outlay	Finacial Achievement
Expansion of Employment services	8.80	7.72	50.60	50.10	90.00	31.88
E- Process of Employment Services operation	20.00	15.50	32.40	31.02	150.00	21.22
Strengthening of vocational guidance programme	67.00	49.11	90.00	77.18	185.00	80.50
Study, Evaluation, Research and Documentation & E.M.I promotion and Area skill Survey	17.00	6.75	-	-		0.00
Establishment of Overseas Bureau	15.00	15.00	15.00	-	3000.00	0.00
Scheme for development of weaker section	12.00	8.56	12.00	11.01	15.00	11.09
Sub-Total	139.80	102.64	200.00	169.31	1440.00	144.69
Construction of combined labour buildings	362.91	340.06	480.00	430.00	1000.00	229.78
Total	502.71	442.70	680.00	599.31	1440.00	519.16

Source : Department of Labour Resource, GOB

10.7 Social Security for Old and Disabled

Inclusive development cannot be achieved without the welfare of the old and disabled. Thus, in alliance with the central government, the state government is presently promoting several social security schemes for persons of old age, widows and disabled people. The total expenditure on the pension schemes increased from Rs.98.34 crore in 2005-06 to Rs. 2794.78 crore in 2014-15. Table 10.38 shows the summary of these welfare schemes, implemented by the central and state governments.

Apart from the above schemes, new initiatives are also being taken by the state government for the social security of senior citizens and those suffering from physical disabilities:

- An uniformity has been established to all the pension schemes by making the pension amount as Rs. 400 per month for every pensioner since July, 2014.
- The state government also contributes from its internal resources to the national pension programmes — Rs. 200 in National Old Age Pension, Rs. 200 in National Widow Pension, and Rs. 100 in National Disability Pension Scheme. This contribution costs an expenditure of Rs. 1200 crore every year by the state government.
- The state government has initiated Chief Minister Family Benefit Scheme from 2012-13. This provides one time grant of Rs. 20,000 in case of death, due to either accident or criminal activity. An amount of Rs. 1.10 crore and Rs. 2.00 crore have been spent in the 2013-14 and 2014-15 respectively under this scheme.
- Darbhanga, Banka, West Champaran, Supaul, Gaya, Kishanganj and Patna have been selected in the current year for opening of special school for blind girls known as

'DRISHTI'. The sanction has been given to start 'KOSHISH', a special school for deaf and dumb girls at Motihari.

Table 10.38 : Pension Schemes for Old Age, Widow and Persons with Disabilities

Schemes	2013-14			2014-15		
	Budget Outlay (Rs. lakh)	Expenditure (Rs. lakh)	No. of Beneficiary ('000)	Budget Outlay (Rs. lakh)	Expenditure (Rs. lakh)	No. of Beneficiary ('000)
Indira Gandhi National Old Age Pension Scheme	102520.0	95759.4	4294.6	152251.0	149438.1	4650.8
Indira Gandhi National Widow Pension Scheme	21600.0	15899.3	506.6			582.6
Indira Gandhi National Disability Pension Scheme	1100.0	926.0	40.1			520.0
National Family Benefit Scheme	7172.0	5876.8	29.4			27.0
NSAP (State Share)	-	-	-	82369.0	82369.0	5285.4
Laxmi Bai Pension Scheme	14462.6	13868.8	600.0	28200.0	28125.0	638.8
Bihar State Disability Pension Scheme	11450.0	10603.0	511.8	24300.0	24270.0	589.2
State Social Security Pension Scheme	1400.0	850.0	60.0	1680.0	1680.0	67.8
Kabir Funeral Grant Scheme	4600.0	2990.0	-	6000.0	6000.0	-
Chief Minister Family Benefit Scheme	600.0	107.0	-	200.0	200.0	-
Bihar Shatabdi Leper Welfare Scheme	400.0	184.0	-	350.0	325.0	-
Chief Minister Disabled Strengthening Scheme (SAMBAL)	4500.0	1588.4	-	3700.0	1200.0	-
Mukhyamantri Bhikshavritti Nivaran Yojana & Old Age Home (SAHARA)	50.0	0.0	-	850.0	850.0	-
Old Age Home	200.0	0.3	-	2950.0	450.0	-
Old Age Home Construction	200.0	0.0	-	2400.0	0.0	-
Bihar Aids Pirit Kalyan Yojna			-	100.0	100.0	-
BIHAR Strategic Integrated Projects	150.0	150.0	-	6800.0	200.0	-
Total	170404.6	148803.0	6042590	312150.0	295207.1	11893.7

Source: Department of Social Welfare, GOB

- Land has been provided at Patna, Purnea and Gaya for construction of 3 Old Age Homes. There are Old Age Home (SAHARA) in Patna, Gaya, Muzaffarpur, Purnea and Bhagalpur which are being managed by non-government voluntary organizations.

APPENDIX

Table A 10.1 : Number of Health Institutions (September, 2015)

Districts	District Hospital	Referral Hospitals	Sub-Divisional Hospitals	PHC	HSC	APHC	PHC + HSC + APHC	Population Per Health Institution
Patna	0	4	4	23	387	67	477	12038
Nalanda	1	3	2	20	374	43	437	6496
Bhojpur	1	3	2	14	302	27	343	7818
Buxar	1	0	1	11	161	28	200	8447
Rohtas	1	2	2	19	186	32	237	12231
Kaimur	1	2	1	11	197	19	227	7041

Gaya	1	2	2	24	440	47	511	8511
Jehanabad	1	2	0	7	92	30	129	8525
Arwal	1	0	0	5	64	28	97	7151
Nawada	1	2	1	14	325	34	373	5886
Aurangabad	1	3	1	11	216	60	287	8699

Saran	2	3	2	20	413	43	476	8182
Siwan	1	3	1	19	367	48	434	7586
Gopalganj	1	3	1	14	186	22	222	11286

W. Champaran	1	2	2	18	368	31	417	9325
E. Champaran	1	1	3	27	327	54	408	12347
Muzaffarpur	1	2	0	16	480	83	579	8249
Sitamarhi	1	1	2	17	212	36	265	12727
Sheohar	1	0	0	5	29	10	44	14583
Vaishali	0	2	2	16	336	29	381	9078

Darbhanga	0	2	1	18	259	50	327	11931
Madhubani	1	4	4	21	429	69	519	8499
Samastipur	1	1	4	20	362	46	428	9819

Begusarai	1	2	4	18	287	22	327	8894
Munger	1	0	2	9	154	21	184	7314
Sheikhpura	1	1	0	6	85	17	108	5785
Lakhisarai	1	1	0	6	102	13	121	8137
Jamui	1	3	0	10	279	27	316	5501
Khagaria	1	1	0	7	171	25	203	8131

Bhagalpur	1	3	2	16	258	55	329	9068
Banka	1	3	0	11	265	32	308	6522

Saharsa	1	0	1	10	152	26	188	10003
Supaul	1	2	1	11	178	20	209	10465
Madhepura	1	0	1	13	272	34	319	6236

Purnea	1	2	3	14	334	38	386	8328
Kishanganj	1	1	0	7	136	9	152	10977
Araria	1	2	1	9	199	30	238	11618
Katihar	1	2	2	16	345	45	406	7472

Bihar	36	70	55	533	9729	1350	11612	8842

Source : State Health Society, GOB

Table A 10.2 : District-wise Employment of Regular and Contractual Doctors

Districts	No. of Sanctioned Posts Currently		No. of Doctor Employed				No of Doctors Per Lakh Population
	Regular	Contractual	Regular		Contractual		
			2014-15	2015-16*	2014-15	2015-16*	
Patna	422	92	262	262	87	73	6
Nalanda	158	95	84	58	59	65	4
Bhojpur	194	65	82	82	44	61	5
Buxar	115	54	56	67	33	33	6
Rohtas	248	89	47	44	47	45	3
Kaimur	114	48	28	44	18	27	4
Gaya	272	106	82	70	86	69	3
Jahanabad	150	46	30	43	32	38	5
Arwal	80	20	22	15	16	16	4
Nawada	198	45	40	43	25	18	3
Aurangabad	97	47	68	37	30	28	3
Saran	165	94	74	74	55	74	4
Siwan	162	10	45	48	44	0	1
Gopalganj	101	69	48	31	40	45	3
W. Champaran	132	83	53	46	50	52	2
E. Champaran	190	128	86	60	102	90	3
Muzaffarpur	274	64	79	77	59	49	3
Sitamarhi	170	68	58	35	23	23	2
Sheohar	75	19	30	29	15	14	7
Vaishali	145	69	117	106	48	46	4
Darbhangha	190	72	54	53	63	48	3
Madhubani	235	85	76	51	59	65	3
Samastipur	192	95	105	100	54	48	3
Begusarai	122	94	52	51	54	51	3
Munger	110	44	34	46	30	31	6
Sheikhpura	93	24	32	30	16	21	8
Lakhisarai	114	30	28	25	21	14	4
Jamui	103	38	47	34	40	28	6
Khagaria	101	44	29	27	35	32	4
Bhagalpur	206	64	53	44	57	46	3
Banka	118	47	36	39	36	28	3
Saharsa	163	45	32	41	20	22	3
Supaul	182	48	56	47	29	33	4
Madhepura	190	67	26	20	27	31	3
Purnia	226	64	74	56	51	51	3
Kishanganj	83	28	29	21	9	9	2
Araria	179	36	41	39	18	19	2
Katihar	192	78	60	57	48	45	3
Bihar	6261	2314	2255	2052	1580	1488	3

Note : *-upto September 2015;
Source : State Health Society, GOB

A 10.3 : District-wise Employment of Grade A Nurses

Districts	No. of Sanctioned Posts Currently		No of Grade – A Nurse Employed				No. of Grade A Nurse Per lakh Population
	Regular	Contractual	Regular		Contractual		
			2014-15	2015-16*	2014-15	2015-16*	
Patna	46	120	27	158	101	23	3
Nalanda	59	88	19	92	51	32	4
Bhojpur	24	54	7	47	16	10	2
Buxar	74	30	3	33	19	2	2
Rohtas	20	88	7	32	48	18	2
Kaimur	44	38	2	17	25	9	2
Gaya	25	146	13	77	84	16	2
Jahanabad	34	85	15	60	65	3	4
Arwal	50	81	0	6	20	3	1
Nawada	175	82	10	67	42	13	4
Aurangabad	22	128	5	5	37	6	0
Saran	25	86	7	24	29	5	1
Siwan	16	110	3	14	9	2	0
Gopalganj	18	84	6	15	18	4	1
W. Champaran	37	120	28	50	28	8	1
E. Champaran	24	165	16	25	48	37	1
Muzaffarpur	54	152	15	53	17	1	1
Sitamarhi	17	116	9	15	61	14	1
Sheohar	9	34	0	2	9	5	1
Vaishali	44	118	7	45	68	49	3
Darbhanga	30	154	4	29	19	9	1
Madhubani	34	114	13	26	24	7	1
Samastipur	24	146	20	97	88	6	2
Begusarai	24	102	22	116	76	4	4
Munger	34	114	13	103	21	0	8
Sheikhpura	32	56	1	33	40	4	6
Lakhisarai	60	38	8	38	26	7	4
Jamui	13	62	3	31	51	12	4
Khagaria	13	48	10	59	43	6	4
Bhagalpur	165	108	8	75	95	7	3
Banka	18	64	8	60	45	7	3
Saharsa	30	52	17	30	37	38	4
Supaul	172	107	2	25	36	2	1
Madhepura	9	58	1	6	21	8	1
Purnia	112	110	12	62	96	9	2
Kishanganj	34	44	2	18	22	2	1
Araria	39	96	6	14	32	7	1
Katihar	28	104	7	47	54	17	2
Bihar	1688	3502	356	1706	1621	412	2

Note : *-upto September 2015;
Source : State Health Society, GOB

A 10.4 : District-wise Employment of ANM

Districts	No. of Sanctioned Posts Currently		No. of ANM Employed				No. of ANM Per Lakh Population
	Regular	Contractual	Regular		Contractual		
			2014-15	2015-16*	2014-15	2015-16*	
Patna	527	418	506	491	415	375	15
Nalanda	402	370	397	389	367	358	26
Bhojpur	367	350	313	295	344	345	23
Buxar	212	162	144	158	161	161	19
Rohtas	286	308	222	211	291	255	16
Kaimur	144	287	135	119	225	223	21
Gaya	483	541	450	479	487	487	22
Jahanabad	230	212	180	139	195	103	14
Arwal	85	79	55	65	65	62	18
Nawada	211	525	178	208	118	118	15
Aurangabad	340	308	253	280	302	292	23
Saran	512	643	323	291	432	382	17
Siwan	370	370	235	224	262	265	15
Gopalganj	266	186	201	199	133	113	12
W. Champaran	435	895	254	295	646	582	22
E. Champaran	419	503	291	316	476	470	15
Muzaffarpur	691	583	582	592	379	379	20
Sitamarhi	314	213	242	216	118	100	9
Sheohar	46	172	20	18	127	111	20
Vaishali	421	418	419	329	306	296	18
Darbhanga	358	419	208	220	312	312	14
Madhubani	584	702	368	283	299	299	13
Samastipur	476	486	456	494	434	437	22
Begusarai	370	360	350	382	328	347	25
Munger	159	165	147	141	161	159	22
Sheikhpura	124	97	107	105	91	90	31
Lakhisarai	138	102	132	125	101	100	22
Jamui	155	151	140	176	126	192	33
Khagaria	206	193	168	159	186	173	20
Bhagalpur	431	362	338	333	349	336	22
Banka	279	265	242	241	227	243	24
Saharsa	198	152	141	138	152	155	15
Supaul	212	246	70	68	187	186	11
Madhepura	196	153	78	77	99	87	8
Purnia	356	370	219	198	361	392	18
Kishanganj	166	186	91	78	155	149	13
Araria	274	290	137	129	193	216	12
Katihar	362	345	207	234	323	320	18
Bihar	11805	12587	8999	8895	9933	9670	18

Note : *-upto September 2015;
Source : State Health Society, GOB

Table A 10.5 : District-wise Employment of Asha Worker

Districts	No. of Sanctioned Posts (Contractual)	No. of ASHA workers			No. of ASHA Per lakh Population
		2012-13	2013-14	2014-15	
Patna	5842	3182	3018	3018	52
Nalanda	2880	2356	2313	2316	80
Bhojpur	2731	2264	2199	2188	80
Buxar	1708	1487	1474	1474	86
Rohtas	2962	2435	2430	2454	83
Kaimur	1628	1462	1462	1462	90
Gaya	4395	3493	3442	3448	79
Jehanabad	1126	871	870	870	77
Arwal	773	773	746	750	107
Nawada	2221	1920	1928	1956	88
Aurangabad	2542	2158	2142	2142	84
Saran	3955	3422	3385	3402	86
Siwan	3334	2939	2834	2822	85
Gopalganj	2564	2297	2336	2374	93
W. Champaran	3935	3064	3043	3108	79
E. Champaran	5099	3762	3906	4060	80
Muzaffarpur	4805	3812	3856	3858	80
Sitamarhi	3424	2827	2912	2919	85
Sheohar	656	570	572	572	87
Vaishali	3498	2856	2888	3019	86
Darbhanga	3941	3546	3100	3118	79
Madhubani	4487	3632	3682	3853	86
Samastipur	4266	3829	3779	3794	89
Begusarai	2973	2361	2410	2403	81
Munger	1369	956	956	952	70
Sheikhpura	637	476	476	476	75
Lakhisarai	1002	756	756	901	90
Jamui	1762	1513	1504	1505	85
Khagaria	1668	1409	1399	1468	88
Bhagalpur	3040	2236	2236	2232	73
Banka	2037	1814	1782	1809	89
Saharsa	1902	1472	1471	1471	77
Supaul	2229	1920	1912	2093	94
Madhepura	2004	1638	1655	1674	84
Purnea	3268	2696	2634	2709	83
Kishanganj	1690	1334	1280	1290	76
Araria	2812	2362	2365	2365	84
Katihar	3074	2547	2549	2720	89
Bihar	104239	84447	83702	85045	82

Source : State Health Society, GOB

Table A 10.6 : District-wise Number of Institutional Deliveries

District	Populati on share (2011)	Number of institutional deliveries				
		2010-11	2011-12	2012-13	2013-14	2014-15
Patna	5.6	60796 (4.4)	74704 (5.2)	68557 (4.7)	77716 (4.7)	67809 (4.4)
Nalanda	2.8	42025 (3.0)	45754 (3.2)	46747 (3.2)	46188 (2.8)	42106 (2.7)
Bhojpur	2.6	33088 (2.4)	38708 (2.7)	40846 (2.8)	42786 (2.6)	38321 (2.5)
Buxar	1.6	22392 (1.6)	26772 (1.9)	27227 (1.9)	24180 (1.5)	22439 (1.5)
Rohtas	2.9	30134 (2.2)	32284 (2.3)	32567 (2.2)	32568 (2)	28735 (1.9)
kaimur	1.6	22507 (1.6)	24000 (1.7)	22174 (1.5)	25609 (1.6)	23999 (1.6)
Gaya	4.2	39423 (2.8)	42936 (3.0)	43840 (3)	51636 (3.1)	51167 (3.3)
Jehanabad	1.7	20816 (1.5)	17092 (1.2)	24577 (1.7)	20557 (1.2)	27320 (1.8)
Arwal	0.7	12470 (0.9)	10123 (0.7)	9645 (0.7)	10388 (0.6)	9252 (0.6)
Nawada	2.1	28876 (2.1)	28915 (2.0)	29319 (2)	33031 (2)	29234 (1.9)
Aurangabad	2.4	30775 (2.2)	39018 (2.7)	36628 (2.5)	35704 (2.2)	33944 (2.2)
Saran	3.8	54257 (3.9)	51666 (3.6)	53740 (3.7)	52406 (3.2)	48548 (3.1)
Siwan	3.2	41917 (3.0)	43509 (3.0)	41348 (2.8)	45015 (2.7)	41242 (2.7)
Gopalganj	2.5	35563 (2.6)	39807 (2.8)	37756 (2.6)	40303 (2.4)	38537 (2.5)
W. Champarna	3.8	58858 (4.3)	62077 (4.3)	66070 (4.5)	73388 (4.5)	67821 (4.4)
E. Champaran	4.9	79239 (5.7)	57629 (4.0)	54881 (3.7)	67336 (4.1)	61057 (4)
Muzaffarpur	4.6	53583 (3.9)	51933 (3.6)	52071 (3.5)	55821 (3.4)	52975 (3.4)
Sitamarhi	3.3	29016 (2.1)	22580 (1.6)	31046 (2.1)	48544 (2.9)	45861 (3)
Sheohar	0.6	8692 (0.6)	7052 (0.5)	7513 (0.5)	9984 (0.6)	8294 (0.5)
Vaishali	3.4	51010 (3.7)	58105 (4.1)	61597 (4.2)	62862 (3.8)	59192 (3.8)
Darbhangha	3.8	41904 (3.0)	33541 (2.3)	44175 (3)	50747 (3.1)	46984 (3)
Madhubani	4.3	48550 (3.5)	47066 (3.3)	50875 (3.5)	54495 (3.3)	51774 (3.3)
Samastipur	4.1	79018 (5.7)	81921 (5.7)	80857 (5.5)	93664 (5.7)	87521 (5.7)
Begusarai	2.8	42910 (3.1)	51178 (3.6)	51134 (3.5)	57357 (3.5)	55974 (3.6)
Munger	1.3	27116 (2.0)	21907 (1.5)	19899 (1.4)	22839 (1.4)	20760 (1.3)
Sheikhpura	0.6	16138 (1.2)	12994 (0.9)	14006 (1)	13179 (0.8)	12817 (0.8)
Lakhisarai	1.0	12250 (0.9)	11021 (0.8)	13017 (0.9)	15996 (1)	14719 (1)
Jamui	1.1	20605 (1.5)	21430 (1.5)	18604 (1.3)	29343 (1.8)	17393 (1.1)
Khagaria	1.6	32121 (2.3)	29133 (2.0)	29210 (2)	36192 (2.2)	33966 (2.2)
Bhagalpur	2.9	32465 (2.3)	42941 (3.0)	40748 (2.8)	49883 (3)	50866 (3.3)
Banka	2.0	28915 (2.1)	29423 (2.1)	30678 (2.1)	36294 (2.2)	35601 (2.3)
Saharsa	1.8	31742 (2.3)	35971 (2.5)	35565 (2.4)	40902 (2.5)	39122 (2.5)
Supaul	2.1	34754 (2.5)	40564 (2.8)	42736 (2.9)	46227 (2.8)	44734 (2.9)
Madhepura	1.9	31650 (2.3)	32881 (2.3)	31937 (2.2)	37532 (2.3)	38029 (2.5)
Purnea	3.2	53257 (3.8)	57157 (4.0)	62121 (4.2)	73135 (4.4)	71390 (4.6)
Kishanganj	1.6	26017 (1.9)	27985 (2.0)	23588 (1.6)	26822 (1.6)	24541 (1.6)
Araria	2.7	38881 (2.8)	40368 (2.8)	40099 (2.7)	50818 (3.1)	49227 (3.2)
Katihar	3.0	31061 (2.2)	39815 (2.8)	51728 (3.5)	55576 (3.4)	52378 (3.4)
Bihar	100.0	1384791 (100.0)	1431960 (100.0)	1469126 (100.0)	1647023 (100.0)	1545649 (100.0)

Note : Number in perenthesis indicate percentage share of institutional deliveries

Source : State Health Society, GOB

Table A 10.7 : District-wise Coverage under Janani Suraksha Yojana (JSY)

(Figures in '000)

Districts	2010	2011	2012	2013	2014	2015
Patna	54	68	70	139	60	31
Nalanda	42	44	46	46	48	6
Bhojpur	32	37	40	42	39	23
Buxar	21	26	24	27	23	23
Rohtas	31	32	57	32	39	36
Kaimur	25	23	22	25	25	31
Gaya	39	42	42	100	51	28
Jehanabad	23	16	18	20	32	15
Arwal	13	10	10	10	9	34
Nawada	29	28	30	32	32	43
Aurangabad	31	36	38	35	34	35
Saran	53	51	52	51	60	22
Siwan	43	42	42	4	44	18
Gopalganj	36	39	38	39	40	11
W. Champaran	55	71	67	69	69	16
E. Champaran	88	60	56	63	66	36
Muzaffarpur	55	44	49	107	47	23
Sitamarhi	29	22	27	44	38	16
Sheohar	8	7	7	9	10	11
Vaishali	49	55	62	61	55	25
Darbhanga	43	39	40	89	48	32
Madhubani	48	48	47	54	47	14
Samastipur	82	79	82	89	77	34
Begusarai	42	50	51	55	57	28
Munger	24	24	20	22	29	21
Sheikhpura	16	13	13	13	23	42
Lakhisarai	12	11	11	15	19	47
Jamui	22	21	23	28	18	18
Khagaria	35	28	29	34	40	25
Bhagalpur	31	39	41	93	52	61
Banka	28	28	31	34	37	31
Saharsa	30	35	35	40	38	9
Supaul	34	40	40	46	47	6
Madhepura	31	32	32	36	34	28
Purnea	53	52	57	69	72	27
Kishanganj	25	25	24	25	27	30
Araria	38	41	38	50	50	42
Katihar	29	35	43	55	46	48
Bihar	1378	1395	1454	1802	1582	1025

Source : State Health Society, GOB

Table A 10.8 : Prevalence of Diseases (September 2015)

Districts	Acute Diarrhoeal Disease (Including acute gastroenteritis)	Bacillary Dysentery	Viral Hepatitis	Enteric Fever	Malaria
Patna	639	248	80	101	11
Nalanda	320	209	0	216	40
Bhojpur	332	266	0	32	0
Buxar	48	22	0	33	0
Rohtas	569	304	6	357	41
Kaimur	120	105	0	581	6

Gaya	266	217	2	162	141
Jehanabad	467	497	0	40	0
Arwal	10	40	0	23	0
Nawada	308	105	0	3	11
Aurangabad	155	57	0	19	1

Saran	59	4	0	276	2
Siwan	594	469	0	216	15
Gopalganj	125	42	6	50	3

W. Champaran	667	88	0	0	1
E. Champaran	542	294	0	539	0
Muzaffarpur	976	393	14	715	27
Sitamarhi	527	271	0	155	0
Sheohar	279	105	0	189	0
Vaishali	414	392	110	840	37

Darbhanga	188	535	7	116	7
Madhubani	749	368	9	250	33
Samastipur	782	574	0	478	4

Begusarai	852	535	0	620	5
Munger	115	107	0	6	19
Sheikhpura	30	8	0	2	0
Lakhisarai	156	21	0	26	2
Jamui	32	120	0	14	17
Khagaria	640	25	0	7	0

Bhagalpur	10	0	0	1	0
Banka	176	151	0	23	1

Saharsa	546	367	0	50	0
Supaul	187	122	0	126	0
Madhepura	68	40	0	10	0

Purnea	580	396	0	103	6
Kishanganj	108	20	0	11	0
Araria	110	93	0	214	35
Katihar	601	226	0	194	11

Bihar	13347	7836	234	6798	476

Source : State Health Society, GOB

(Continued)

Table A 10.8 : Prevalence of Diseases 2015

Districts	Fever of Unknown Origin (FUO)	Acute Respiratory Infection (ARI)/ Influenza Like Illness (ILI)	Pneumonia	Dog Bite	Any Other State Specific Disease	Unusual Syndromes Not Captured so far
Patna	854	1323	63	965	101	7
Nalanda	454	338	73	653	0	0
Bhojpur	55	1945	6	298	12	0
Buxar	72	1091	4	115	0	0
Rohtas	866	1223	105	157	0	0
Kaimur	1425	1086	15	113	0	0
Gaya	1965	1750	54	257	159	0
Jehanabad	1594	891	67	221	0	0
Arwal	54	602	8	2	0	0
Nawada	1169	217	16	146	92	188
Aurangabad	271	321	86	86	8	0
Saran	325	475	0	828	87	0
Siwan	1203	1927	25	367	14	28
Gopalganj	1710	1778	22	262	0	0
W. Champaran	196	1168	47	501	0	0
E. Champaran	591	476	136	357	0	0
Muzaffarpur	1719	1237	10	1365	594	0
Sitamarhi	345	933	79	571	7	0
Sheohar	200	208	0	251	0	0
Vaishali	1100	1263	238	483	0	0
Darbhanga	560	1604	21	182	13	91
Madhubani	757	2649	18	354	42	0
Samastipur	850	1608	14	228	69	0
Begusarai	1212	2458	5	474	0	0
Munger	156	615	17	37	0	0
Sheikhpura	295	894	0	61	0	0
Lakhisarai	32	711	0	64	0	0
Jamui	1208	1276	13	57	0	0
Khagaria	1703	1472	1	80	0	0
Bhagalpur	40	47	0	38	0	0
Banka	139	1222	8	86	0	0
Saharsa	1864	1630	11	74	0	0
Supaul	607	181	5	68	20	1
Madhepura	543	222	0	36	0	0
Purnea	842	1575	4	230	0	0
Kishanganj	5	21	0	33	1	0
Araria	619	116	4	148	29	21
Katihar	437	729	10	131	21	243
Bihar	28037	39282	1185	10379	1269	579

Source : State Health Society, GOB

(Concluded)

Table A 10.9 : District-wise Fund Disbursed to Health Societies

(Rs. lakh)

Districts	2010-11	2011- 12	2012-13	2013-14	2014-15			
					NRHM-A	NRHM-B	NRHM-C	Total
Patna	2402.1	3743.8	3739.6	4035.7	2510.7	2316.2	451	5277.9
Nalanda	2431	2668.4	2828.4	2963.2	2720.5	760.5	298.6	3779.5
Bhojpur	1795.6	1803.7	2340.6	2058.4	1737.1	485.1	426.2	2648.4
Buxar	1491.7	1289.9	1555.1	1382.9	1152.5	642.8	64.7	1860
Rohtas	1048.8	2292	2065.6	1932.7	1343.2	424.5	156.0	1923.7
Kaimur	1445.8	813.1	1715	1703.8	1210.8	528.9	120.4	1860.1
Gaya	2256.2	3104.5	3850.6	4590.6	2689.8	1041.2	325.5	4056.6
Jehanabad	928.1	1247	1549.4	1330	1111.3	332.3	92.6	1536.3
Arwal	594.8	723.1	689.5	920.8	498.1	270.1	61.0	829.2
Nawada	1569.2	1991.7	1825.1	1742.7	1449.3	400.5	198.8	2048.7
Aurangabad	1337.5	2327.4	2345.9	2594.1	1755.9	844.2	133.1	2733.3
Saran	1535.9	2596.1	2549.2	2851.6	1657.9	581.7	322.7	2562.3
Siwan	2692.9	2246.7	2346.6	2721	1695.1	565.8	276.8	2537.7
Gopalganj	1859.4	1344.2	1945.4	2520.8	1657.6	527.9	213.0	2398.6
W.Champaran	1883.1	2592.2	4427.3	3764.7	2867.8	707.3	244.8	3819.9
E.Champaran	2096.0	2461.9	4914.8	3917.9	3758.1	1259.5	520.7	5538.2
Muzaffarpur	1683.0	2627.8	4379.9	3438.9	1827.4	663.2	339.6	2830.2
Sitamarhi	1203.5	1592.9	1835.3	2506.6	1337.9	571.6	227.7	2137.2
Sheohar	456.2	423.3	1104.6	646.3	573.8	156.2	50.0	780.0
Vaishali	1321.3	2629.8	3828.7	4011.6	2090.7	1041.6	318.6	3450.9
Darbhanga	1400.2	1968.4	2501.0	3113.1	2041.8	460.5	330.7	2833.0
Madhubani	2671.0	2974.2	2777.0	3530.1	2088.2	608.9	376.7	3073.7
Samastipur	3197.4	3795.3	4567.2	4714.6	2975.9	491.0	405.9	3872.8
Begusarai	1893.8	2825.4	3053.9	3233.3	2187.8	1056.3	296.8	3540.9
Munger	1244.9	1150.1	1334.2	1945.4	916.1	427.2	170.0	1513.3
Sheikhpura	457.6	834.6	1033.7	814.9	718.9	190.3	56.4	965.7
Lakhisarai	427.8	681.4	1019.6	1046.2	857.6	221.9	108.8	1188.4
Jamui	822.7	1707.2	2036.2	1621.9	1458.4	746.8	245.6	2450.7
Khagaria	1876.9	1626.9	1949.9	1754.4	1634.9	408.7	278.7	2322.3
Bhagalpur	2317.8	2058.0	3810.3	3327.3	2132.8	856.8	277.9	3267.5
Banka	887.6	2177.5	2496.2	2321.6	1703.0	695.9	195.7	2594.6
Saharsa	1397.0	1505.2	1759.2	2093.9	1533.6	228.8	192.8	1955.2
Supaul	984.5	1886.9	2262.6	1858.3	1410.1	566.0	178.8	2154.8
Madhepura	1264.8	1874.2	1432.4	1952.0	1503.3	576.9	176.2	2256.4
Purnea	2811.1	3647.9	3764.2	3393.2	3047.2	1061.8	292.6	4401.6
Kishanganj	844.7	1087.6	1459.2	965.7	950.1	311.7	143.3	1405.2
Araria	1169.9	1598.9	2377.7	1972.3	1692.9	754.6	278.9	2726.4
Katihar	1608.8	2029.2	3416.6	3131.5	1591.3	886.6	252.9	2730.7
Bihar	59310.5	75948.2	94887.8	94424.3	66089.6	24671.6	9100.7	99861.9

Source : State Health Society, GOB

Table A 10.10 : District-wise Hand Pumps under National Rural Drinking Water Programme (NRDWP)

Districts	Number of handpumps installed				Slipped back Habitations /Water quality problems covered			
	2011-12	2012-13	2013-14	2014-15	2011-12	2012-13	2013-14	2014-15
Patna	1422	1481	1553	769	407	852	666	725
Nalanda	1473	1122	998	976	457	300	459	333
Bhojpur	1299	830	840	514	214	280	221	285
Buxar	63	425	341	643	75	121	147	217
Rohtas	1641	1024	1185	1011	328	97	227	316
Kaimur	409	426	452	578	164	28	158	234

Gaya	1869	1315	2105	1602	738	300	511	449
Jehanabad	599	769	831	185	67	84	140	145
Arwal	738	132	259	141	47	50	81	107
Nawada	842	464	726	817	372	136	256	309
Aurangabad	1407	468	789	898	183	239	202	248

Saran	592	1719	953	603	458	451	591	407
Siwan	961	1452	1643	693	355	628	379	346
Gopalganj	342	829	1165	553	170	273	350	275

W.Champaran	1154	1616	710	495	156	88	295	313
E. Champaran	1268	3397	1646	746	536	851	694	733
Muzaffarpur	1245	108	2297	550	347	104	153	395
Sitamarhi	1197	541	979	440	171	230	312	402
Sheohar	181	94	149	274	67	39	121	145
Vaishali	477	1082	1534	844	396	343	427	314

Darbhanga	981	2134	1160	989	131	432	412	398
Madhubani	2891	1885	1612	750	237	529	508	432
Samastipur	983	1046	931	1052	447	183	157	398

Begusarai	533	858	810	564	413	375	564	383
Munger	334	220	253	588	80	24	223	249
Sheikhpura	235	523	189	239	75	30	146	50
Lakhisarai	177	450	828	462	169	260	409	243
Jamui	742	639	444	819	416	568	334	246
Khagaria	39	299	416	303	80	30	119	28

Bhagalpur	549	1199	735	1159	301	90	523	522
Banka	355	780	472	674	325	323	418	481

Saharsa	0	639	713	413	112	375	311	418
Supaul	307	736	741	442	298	769	700	492
Madhepura	24	273	788	484	288	267	292	263

Purnea	317	143	1396	871	1101	595	320	320
Kishanganj	447	216	680	554	345	243	410	133
Araria	193	387	567	516	534	341	377	281
Katihar	0	205	399	76	183	32	174	201

Bihar	28286	31926	34289	24287	11243	10960	12787	12236

Source : Public Health Engineering Department, GOB

Table A 10.11 : District-wise Achievement in Individual Household Lantrine (IHHL) under Central Rural Sanitation Programme

Districts	Percent Share in Population	2011-12	2012-13	2013-14			2014-15		
		Total (BPL and APL)		BPL	APL	Total	BPL	APL	Total
Patna	5.6	27518 (3.3)	26263 (3.3)	7450	6066	13516 (8.4)	1422	279	1701 (1.0)
Nalanda	2.8	19618 (2.3)	9991 (1.3)	448	254	702 (0.4)	700	413	1113 (0.7)
Bhojpur	2.6	29261 (3.5)	24566 (3.1)	1299	1434	2733 (1.7)	1199	275	1474 (0.9)
Buxar	1.6	3779 (0.4)	12335 (1.5)	1439	484	1923 (1.2)	3371	2746	6117 (3.7)
Rohtas	2.9	25707 (3.1)	19842 (2.5)	2488	1463	3951 (2.4)	3877	1885	5762 (3.5)
Kaimur	1.6	15666 (1.9)	15794 (2.0)	3267	2714	5981 (3.7)	3896	1378	5274 (3.2)
Gaya	4.2	31914 (3.8)	17949 (2.3)	4995	1798	6793 (4.2)	2811	1610	4421 (2.7)
Jehanabad	1.1	12924 (1.5)	1859 (0.2)	1063	671	1734 (1.1)	1420	489	1909 (1.2)
Arwal	0.7	10057 (1.2)	8142 (1.0)	282	172	454 (0.3)	4252	1304	5556 (3.4)
Nawada	2.1	25374 (3.0)	5604 (0.7)	1059	270	1329 (0.8)	2741	1410	4151 (2.5)
Aurangabad	2.4	17549 (2.1)	10322 (1.3)	801	642	1443 (0.9)	680	1125	1805 (1.1)
Saran	3.8	34427 (4.1)	19817 (2.5)	1520	415	1935 (1.2)	1449	677	2126 (1.3)
Siwan	3.2	40325 (4.8)	36264 (4.6)	4985	5843	10828 (6.7)	3408	948	4356 (2.6)
Gopalganj	2.5	19392 (2.3)	25202 (3.2)	463	476	939 (0.6)	4124	690	4814 (2.9)
W. Champaran	3.8	33897 (4.0)	32441 (4.1)	14396	6007	20403 (12.6)	2201	1757	3958 (2.4)
E.Champaran	4.9	43759 (5.2)	44148 (5.5)	6577	2532	9109 (5.6)	1592	336	1928 (1.2)
Muzaffarpur	4.6	45798 (5.5)	15434 (1.9)	1145	148	1293 (0.8)	1483	71	1554 (0.9)
Sitamarhi	3.3	8925 (1.1)	29876 (3.7)	7940	2214	10154 (6.3)	2073	10	2083 (1.3)
Sheohar	0.6	14843 (1.8)	13050 (1.6)	688	0	688 (0.4)	714	663	1377 (0.8)
Vaishali	3.4	25758 (3.1)	37032 (4.6)	4444	2354	6798 (4.2)	6603	2205	8808 (5.3)
Darbhanga	3.8	56949 (6.8)	47217 (5.9)	2541	2386	4927 (3)	1774	590	2364 (1.4)
Madhubani	4.3	6960 (0.8)	3983 (0.5)	3	1729	1732 (1.1)	7230	177	7407 (4.5)
Samastipur	4.1	40026 (4.8)	62167 (7.8)	2397	4130	6527 (4)	5255	461	5716 (3.5)
Begusarai	2.8	22293 (2.7)	28653 (3.6)	132	22	154 (0.1)	9795	1764	11559 (7)
Munger	1.3	3905 (0.5)	6163 (0.8)	2172	171	2343 (1.4)	4203	3304	7507 (4.5)
Sheikhpura	0.6	5016 (0.6)	10871 (1.4)	282	218	500 (0.3)	2080	2243	4323 (2.6)
Lakhisarai	1.0	15841 (1.9)	11900 (1.5)	1305	2224	3529 (2.2)	3939	750	4689 (2.8)
Jamui	1.7	12443 (1.5)	20491 (2.6)	2245	1814	4059 (2.5)	8168	3470	11638 (7)
Khagaria	1.6	16399 (2.0)	14652 (1.8)	1275	665	1940 (1.2)	1144	1127	2271 (1.4)
Bhagalpur	2.9	24685 (2.9)	22177 (2.8)	2566	2700	5266 (3.3)	1674	5843	7517 (4.5)
Banka	2.0	15809 (1.9)	13780 (1.7)	1512	1671	3183 (2)	5425	157	5582 (3.4)
Saharsa	1.8	14812 (1.8)	15806 (2)	972	1247	2219 (1.4)	2605	1198	3803 (2.3)
Supaul	2.1	22936 (2.7)	20534 (2.6)	1030	469	1499 (0.9)	482	963	1445 (0.9)
Madhepura	1.9	25793 (3.1)	19442 (2.4)	1204	939	2143 (1.3)	3018	178	3196 (1.9)
Purnea	3.2	27328 (3.3)	31051 (3.9)	6725	3721	10446 (6.5)	4935	645	5580 (3.4)
Kishanganj	1.6	11735 (1.4)	17347 (2.2)	1121	387	1508 (0.9)	1505	1004	2509 (1.5)
Araria	2.7	10777 (1.3)	14341 (1.8)	17	4	21 (0)	1377	978	2355 (1.4)
Katihar	3.0	19729 (2.3)	30193 (3.8)	4208	2736	6944 (4.3)	3776	1933	5709 (3.5)
Bihar	100.0	839927 (100.0)	796699 (100.0)	98456	63190	161646 (100.0)	118401	47056	165457 (100.0)

Note: Figures in parenthesis denote percent share;
Source : Public Health Engineering Department, GOB

Table A 10.12 : District-wise Achievement in Individual Household Lantrine (IHHL) under Central Rural Sanitation Programme

Districts	2013-14			2014-15		
	Sanitary Complex	School Toilets	Anganwadi Toilets	Sanitary Complex	School Toilets	Anganwadi Toilets
Patna	9	632	30	0	0	0
Nalanda	0	555	60	0	1	0
Bhojpur	0	0	0	0	285	0
Buxar	0	31	0	11	104	0
Rohtas	0	208	171	0	11	0
Kaimur	0	0	8	0	0	0

Gaya	0	224	34	0	0	0
Jehanabad	1	3	318	0	0	0
Arwal	0	10	0	0	29	9
Nawada	1	18	16	3	47	0
Aurangabad	0	274	93	0	0	0

Saran	0	200	0	0	0	0
Siwan	0	0	105	0	0	0
Gopalganj	2	0	0	0	0	0

W.Champaran	0	221	244	0	0	0
E.Champaran	0	133	4	0	8	0
Muzaffarpur	0	22	0	0	0	0
Sitamarhi	0	70	0	0	236	0
Sheohar	0	0	0	0	0	0
Vaishali	0	256	30	0	0	0

Darbhanga	3	358	48	0	0	0
Madhubani	0	726	2	0	4	0
Samastipur	0	0	0	1	162	0

Begusarai	0	28	50	0	0	0
Munger	0	54	0	0	0	0
Sheikhpura	0	35	13	3	75	0
Lakhisarai	0	111	10	0	51	0
Jamui	0	0	35	0	1	0
Khagaria	2	147	2	2	0	0

Bhagalpur	0	0	44	0	0	0
Banka	15	0	28	0	0	0

Saharsa	0	20	0	0	0	0
Supaul	0	0	0	0	31	0
Madhepura	0	8	28	0	0	0

Purnea	1	478	54	0	0	0
Kishanganj	2	232	0	0	1	0
Araria	0	0	0	0	0	0
Katihar	0	22	10	0	0	2

Bihar	36	5076	1437	20	1046	11

Source : Public Health Engineering Department, GOB

Table A 10.13 : Total Enrolment in Primary and Upper Primary Levels (All)

(lakh)

Districts	2011-12			2012-13			2013-14		
	Primary	Upper Primary	Total	Primary	Upper Primary	Total	Primary	Upper Primary	Total
Patna	5.63	1.83	7.46	7.23	3.08	10.31	7.25	3.22	10.46
Nalanda	4.99	2.52	7.51	5.46	2.71	8.17	5.46	2.71	8.17
Bhojpur	4.73	1.37	6.10	3.37	1.41	4.78	3.79	1.69	5.47
Buxar	3.01	1.22	4.23	3.23	1.33	4.56	3.23	1.33	4.56
Rohtas	3.13	1.03	4.16	3.17	1.06	4.23	3.22	1.08	4.30
Kaimur	2.72	1.06	3.78	2.86	1.11	3.97	3.43	1.56	4.98
Gaya	7.00	2.09	9.09	5.74	2.04	7.78	6.07	2.60	8.67
Jehanabad	1.79	0.56	2.35	1.65	0.61	2.26	1.56	0.71	2.26
Arwal	1.07	0.35	1.42	1.78	0.72	2.5	1.75	0.85	2.60
Nawada	2.32	1.02	3.34	3.02	0.97	3.99	3.53	1.28	4.82
Aurangabad	4.07	1.29	5.36	2.93	1.67	4.6	3.40	1.60	5.00
Saran	5.81	2.10	7.91	5.15	2.19	7.34	5.37	2.56	7.93
Siwan	4.50	1.72	6.22	4.60	2.12	6.72	4.62	2.18	6.80
Gopalganj	3.24	1.43	4.67	3.24	1.43	4.67	3.52	1.52	5.04
W. Champaran	5.71	1.23	6.94	5.48	1.49	6.97	5.67	1.77	7.44
E. Champaran	10.97	4.51	15.48	10.97	4.51	15.48	11.72	4.56	16.28
Muzaffarpur	7.80	2.11	9.91	8.75	2.91	11.66	9.96	4.31	14.28
Sitamarhi	4.74	1.55	6.29	4.95	1.68	6.63	5.06	1.74	6.80
Sheohar	0.94	0.33	1.27	0.92	0.26	1.18	0.92	0.26	1.18
Vaishali	5.04	1.74	6.78	5.03	1.74	6.77	5.03	1.74	6.78
Darbhanga	5.40	1.66	7.06	5.14	1.84	6.98	5.25	2.09	7.34
Madhubani	6.77	1.77	8.54	6.85	1.89	8.74	6.85	1.89	8.74
Samastipur	5.35	1.23	6.58	5.98	2.54	8.52	6.06	2.58	8.64
Begusarai	4.91	1.71	6.62	4.64	1.77	6.41	4.72	2.05	6.77
Munger	2.02	0.79	2.81	1.87	0.72	2.59	1.89	0.76	2.65
Sheikhpura	0.95	0.3	1.25	0.99	0.30	1.29	0.99	0.30	1.29
Lakhisarai	1.60	0.47	2.07	1.33	0.50	1.83	1.53	0.64	2.18
Jamui	3.06	0.85	3.91	2.71	0.91	3.62	3.11	1.13	4.23
Khagaria	2.39	0.78	3.17	2.36	0.89	3.25	2.36	0.89	3.25
Bhagalpur	4.32	1.48	5.80	4.20	1.49	5.69	4.17	1.79	5.95
Banka	3.16	1.02	4.18	2.89	1.09	3.98	3.18	1.30	4.48
Saharsa	3.55	0.62	4.17	3.76	0.65	4.41	3.91	0.68	4.59
Supaul	3.92	0.96	4.88	4.25	1.09	5.34	4.07	1.04	5.11
Madhepura	3.08	1.62	4.70	3.09	1.19	4.28	3.09	1.19	4.28
Purnea	5.40	1.22	6.62	4.93	1.64	6.57	4.94	1.68	6.62
Kishanganj	1.70	1.14	2.84	1.81	1.79	3.60	1.87	1.84	3.71
Araria	4.49	0.80	5.29	2.70	2.68	5.38	3.38	2.04	5.42
Katihar	5.21	1.07	6.28	5.49	2.35	7.84	5.28	2.27	7.55
Bihar	156.49	50.55	207.04	154.51	60.36	214.87	161.20	65.41	226.62

Source: Department of Education, GOB

Table A 10.14 : Total Enrolment in Primary and Upper Primary Levels (SC)

(lakh)

Districts	2011-12			2012-13			2013-14		
	Primary	Upper Primary	Total	Primary	Upper Primary	Total	Primary	Upper Primary	Total
Patna	0.95	0.24	1.19	1.3	0.66	1.96	1.30	0.65	1.95
Nalanda	1.12	0.43	1.55	1.97	0.85	2.82	1.97	0.85	2.81
Bhojpur	0.63	0.3	0.93	0.71	0.22	0.93	0.74	0.37	1.11
Buxar	0.39	0.17	0.56	0.41	0.18	0.59	0.41	0.18	0.59
Rohtas	0.49	0.11	0.6	0.49	0.12	0.61	0.46	0.12	0.58
Kaimur	0.56	0.18	0.74	0.59	0.16	0.75	1.02	0.46	1.48
Gaya									
Gaya	2.63	0.63	3.26	1.23	0.39	1.62	2.22	0.80	3.02
Jehanabad									
Jehanabad	0.46	0.11	0.57	0.33	0.13	0.46	0.38	0.16	0.53
Arwal									
Arwal	0.26	0.1	0.36	0.26	0.08	0.34	0.26	0.10	0.37
Nawada									
Nawada	1.08	0.2	1.28	0.68	0.22	0.9	1.10	0.30	1.40
Aurangabad									
Aurangabad	1.2	0.3	1.5	1.13	0.37	1.5	1.13	0.37	1.50
Saran									
Saran	1.26	0.45	1.71	0.62	0.24	0.86	0.81	0.34	1.15
Siwan									
Siwan	0.71	0.22	0.93	0.67	0.3	0.97	0.67	0.31	0.98
Gopalganj									
Gopalganj	0.44	0.2	0.64	0.44	0.2	0.64	0.60	0.26	0.85
W. Champaran									
W. Champaran	1.03	0.2	1.23	1.15	0.27	1.42	1.04	0.29	1.33
E. Champaran									
E. Champaran	1.26	0.17	1.43	1.17	0.35	1.52	1.17	0.35	1.52
Muzaffarpur									
Muzaffarpur	1.43	0.32	1.75	1.57	0.52	2.09	1.79	0.78	2.57
Sitamarhi									
Sitamarhi	0.76	0.24	1	0.54	0.18	0.72	0.56	0.19	0.75
Sheohar									
Sheohar	0.1	0.05	0.15	0.18	0.05	0.23	0.18	0.05	0.23
Vaishali									
Vaishali	1.29	0.36	1.65	1.28	0.35	1.63	1.28	0.36	1.65
Darbhanga									
Darbhanga	1.04	0.25	1.29	1.03	0.27	1.3	1.03	0.35	1.38
Madhubani									
Madhubani	1.19	0.23	1.42	1.23	0.23	1.46	1.23	0.23	1.46
Samastipur									
Samastipur	0.82	0.12	0.94	1.28	0.46	1.74	1.29	0.47	1.76
Begusarai									
Begusarai	0.86	0.4	1.26	0.76	0.24	1	0.79	0.29	1.07
Munger									
Munger	0.37	0.12	0.49	0.32	0.1	0.42	0.38	0.12	0.51
Sheikhpura									
Sheikhpura	0.23	0.06	0.29	0.24	0.06	0.3	0.24	0.06	0.30
Lakhisarai									
Lakhisarai	0.31	0.06	0.37	0.27	0.07	0.34	0.29	0.10	0.39
Jamui									
Jamui	0.63	0.13	0.76	0.55	0.16	0.71	0.60	0.20	0.80
Khagaria									
Khagaria	0.31	0.14	0.45	0.34	0.07	0.41	0.34	0.07	0.41
Bhagalpur									
Bhagalpur	0.48	0.14	0.62	0.54	0.18	0.72	0.55	0.23	0.78
Banka									
Banka	0.9	0.12	1.02	0.4	0.13	0.53	0.43	0.18	0.62
Saharsa									
Saharsa	0.72	0.07	0.79	0.72	0.07	0.79	0.76	0.07	0.83
Supaul									
Supaul	0.71	0.11	0.82	0.71	0.11	0.82	0.68	0.11	0.79
Madhepura									
Madhepura	0.6	0.2	0.8	0.48	0.16	0.64	0.48	0.16	0.64
Purnea									
Purnea	0.71	0.21	0.92	0.72	0.22	0.94	0.76	0.23	0.99
Kishanganj									
Kishanganj	0.14	0.03	0.17	0.17	0.05	0.22	0.17	0.05	0.22
Araria									
Araria	0.72	0.13	0.85	0.25	0.19	0.44	0.17	0.08	0.24
Katihar									
Katihar	0.57	0.15	0.72	0.98	0.4	1.38	1.03	0.42	1.45
Bihar	29.36	7.65	37.01	27.71	9.04	36.75	30.30	10.71	41.01

Source: Department of Education, GOB

Table A 10.15 : Total Enrolment in Primary and Upper Primary Levels (ST)

(lakh)

Districts	2011-12			2012-13			2013-14		
	Primary	Upper Primary	Total	Primary	Upper Primary	Total	Primary	Upper Primary	Total
Patna	0.03	0.00	0.03	0.04	0.00	0.04	0.04	0.01	0.05
Nalanda	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bhojpur	0.02	0.01	0.03	0.04	0.01	0.05	0.04	0.02	0.06
Buxar	0.02	0.01	0.03	0.02	0.01	0.03	0.02	0.01	0.03
Rohtas	0.02	0.01	0.03	0.03	0.01	0.04	0.03	0.01	0.04
Kaimur	0.08	0.02	0.10	0.08	0.02	0.10	0.11	0.04	0.15

Gaya	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
Jehanabad	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arwal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nawada	0.04	0.01	0.05	0.03	0.01	0.04	0.02	0.00	0.02
Aurangabad	0.01	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.02

Saran	0.17	0.05	0.22	0.08	0.04	0.12	0.09	0.04	0.13
Siwan	0.20	0.08	0.28	0.19	0.09	0.28	0.19	0.10	0.29
Gopalganj	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.05	0.18

W. Champaran	0.44	0.10	0.54	0.50	0.13	0.63	0.46	0.16	0.62
E. Champaran	0.03	0.00	0.03	0.05	0.02	0.07	0.05	0.01	0.06
Muzaffarpur	0.03	0.01	0.04	0.03	0.01	0.04	0.03	0.01	0.04
Sitamarhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheohar	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.00	0.02
Vaishali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Darbhanga	0.00	0.00	0.00	0.03	0.01	0.04	0.00	0.00	0.01
Madhubani	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01
Samastipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Begusarai	0.00	0.00	0.00	0.02	0.01	0.03	0.00	0.00	0.00
Munger	0.05	0.02	0.07	0.05	0.01	0.06	0.06	0.01	0.07
Sheikhpura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lakhisarai	0.03	0.00	0.03	0.04	0.01	0.04	0.03	0.01	0.04
Jamui	0.24	0.05	0.29	0.20	0.05	0.25	0.23	0.06	0.28
Khagaria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Bhagalpur	0.21	0.05	0.26	0.18	0.06	0.24	0.13	0.05	0.18
Banka	0.18	0.05	0.23	0.17	0.05	0.22	0.17	0.05	0.23

Saharsa	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01
Supaul	0.02	0.01	0.03	0.02	0.01	0.03	0.02	0.00	0.02
Madhepura	0.04	0.01	0.05	0.02	0.00	0.02	0.02	0.00	0.02

Purnea	0.25	0.09	0.34	0.30	0.11	0.41	0.32	0.12	0.44
Kishanganj	0.07	0.02	0.09	0.09	0.04	0.13	0.09	0.05	0.13
Araria	0.07	0.02	0.09	0.19	0.13	0.32	0.12	0.06	0.18
Katihar	0.21	0.03	0.24	0.48	0.17	0.65	0.54	0.18	0.72

Bihar	2.49	0.65	3.14	2.92	1.01	3.93	3.01	1.07	4.08

Source: Department of Education, GOB

Table A 10.16 : District-wise Annual Growth Rate of Enrolment (2009-10 to 2013-14)

Districts	ALL			SC			ST		
	Primary	Upper Primary	Total	Primary	Upper Primary	Total	Primary	Upper Primary	Total
Patna	13.09	21.87	15.47	14.86	43.63	21.71	23.03	-	17.32
Nalanda	12.24	11.03	11.76	26.31	30.96	27.63	-	-	-
Bhojpur	-0.14	6.89	1.74	7.55	15.04	9.58	-	-	-
Buxar	3.97	5.54	4.42	2.54	5.03	3.28	5.46	-6.27	0.91
Rohtas	2.50	4.25	2.93	0.08	2.12	0.48	19.51	5.00	13.96
Kaimur	7.85	11.43	8.90	16.61	24.45	18.75	11.70	12.99	12.00
Gaya	-2.14	8.44	0.47	-6.06	10.91	-2.74	-	-	-
Jehanabad	-1.82	12.13	1.57	-3.87	20.52	1.12	-	-	-
Arwal	17.33	31.37	21.04	1.20	5.57	2.35	-	-	-
Nawada	13.95	6.42	11.79	-1.14	12.99	1.39	-1.81	-	1.39
Aurangabad	4.70	5.49	4.99	6.09	22.49	9.25	-30.14	-1.65	-23.12
Saran	-1.08	1.09	-0.49	-2.22	0.91	-1.35	-	-	-
Siwan	10.81	27.47	15.10	32.87	45.85	36.37	-	-	-
Gopalganj	2.18	1.76	2.05	6.53	5.17	6.11	-	-	-
W. Champaran	-1.20	-5.41	-2.23	-6.88	-12.75	-8.23	14.66	9.91	13.50
E. Champaran	1.33	1.31	1.32	-2.16	24.32	1.90	16.57	-	25.94
Muzaffarpur	8.32	22.91	11.75	9.26	32.53	14.15	3.66	-7.72	0.70
Sitamarhi	3.21	10.20	4.78	-7.31	10.82	-3.88	-	-	-
Sheohar	-1.95	4.65	-0.68	-	-	-	-	-	-
Vaishali	1.84	6.08	2.84	2.88	12.43	4.58	-	-	-
Darbhanga	-0.88	12.77	2.21	3.95	24.21	7.51	-	-	-
Madhubani	3.34	5.80	3.85	8.87	14.74	9.69	-6.33	-	-2.75
Samastipur	4.01	27.03	9.02	14.65	47.05	20.35	-	-	-
Begusarai	-0.11	28.45	5.51	0.40	34.99	33.33	-	-	-
Munger	0.99	6.93	2.53	1.47	6.61	2.62	-3.29	-13.37	-5.55
Sheikhpura	2.03	1.80	1.98	1.87	2.86	2.05	-	-	-
Lakhisarai	-0.77	13.66	2.59	-0.32	-7.97	-2.32	-0.08	-20.60	-4.82
Jamui	1.34	-0.63	0.76	12.85	39.99	17.39	21.45	65.79	26.58
Khagaria	7.73	27.64	11.86	5.85	1.79	5.09	-	-	-
Bhagalpur	1.53	8.14	3.27	12.57	46.23	18.77	10.51	18.25	12.37
Banka	2.53	21.37	6.56	8.98	25.65	12.72	4.98	18.14	7.49
Saharsa	11.45	8.30	10.95	17.61	-0.53	14.94	2.15	-	4.96
Supaul	2.17	4.48	2.62	12.82	-6.92	8.35	-44.99	-	-45.29
Madhepura	0.28	33.23	5.76	6.76	30.00	10.95	-13.91	-36.17	-18.22
Purnea	-0.92	21.00	3.05	1.86	32.15	33.96	9.98	37.47	15.09
Kishanganj	13.65	33.21	21.22	7.17	33.77	11.55	15.21	46.34	22.34
Araria	-9.01	39.27	2.14	-31.42	-4.51	-25.55	28.08	84.76	39.98
Katihar	9.90	41.43	16.24	30.39	63.90	36.98	25.33	52.00	30.18
Bihar	3.36	12.05	5.54	5.36	18.98	8.22	13.89	24.64	16.31

Source: Department of Education, GOB

Table A 10.17 : District-wise Primary and Upper Primary Schools in Bihar (2013)

Districts	Primary	Primary with Upper primary	Primary with Upper Primary sec and higher sec.	Upper Primary Only	Upper Primary with sec. and higher sec.	Primary with Upper primary and secondary	Upper Primary with secondary	Total
Patna	2185	1166	4	16	8	24	19	3422
Nalanda	1332	809	3	6	3	35	6	2194
Bhojpur	1193	729	0	26	0	52	6	2006
Buxar	703	446	0	14	0	34	12	1209
Rohtas	1283	773	3	11	1	46	11	2128
Kaimur	659	522	0	1	0	18	4	1204
Gaya	1675	1376	8	1	0	45	1	3106
Jehanabad	554	334	1	7	0	16	2	914
Arwal	332	191	0	4	0	1	1	529
Nawada	971	674	0	2	1	23	3	1674
Aurangabad	926	949	0	10	1	39	5	1930
Saran	1507	945	7	16	10	45	5	2535
Siwan	1232	824	0	18	0	39	0	2113
Gopalganj	1085	648	0	2	3	39	7	1784
W. Champaran	1533	905	1	10	2	27	3	2481
E.Champaran	1822	1291	0	0	1	38	5	3157
Muzaffarpur	1762	1247	1	3	4	48	5	3070
Sitamarhi	1202	875	4	7	1	20	10	2119
Sheohar	229	181	1	1	3	7	0	422
Vaishali	1083	931	0	1	0	37	4	2056
Darbhanga	1415	894	4	5	11	35	5	2369
Madhubani	1965	1048	32	0	1	8	6	3060
Samastipur	1598	938	1	19	0	20	3	2579
Begusarai	809	705	4	3	2	32	5	1560
Munger	582	455	0	4	1	27	1	1070
Sheikhpura	246	223	1	2	0	10	3	485
Lakhisarai	453	278	0	0	0	15	1	747
Jamui	851	836	0	0	3	13	0	1703
Khagaria	534	501	0	3	0	30	1	1069
Bhagalpur	1053	763	1	6	5	51	18	1897
Banka	1100	834	1	3	0	21	3	1962
Saharsa	745	495	0	3	1	9	4	1257
Supaul	1078	657	0	11	0	5	1	1752
Madhepura	746	722	0	2	0	11	1	1482
Purnea	1083	828	6	0	2	17	2	1938
Kishanganj	795	492	3	1	1	36	0	1328
Araria	1131	620	0	0	1	26	1	1779
Katihar	1110	677	1	0	0	33	0	1821
Bihar	40562	27782	87	218	66	1032	164	69911

Source: District Information System for Education

Table A 10.18 : District-wise Number of Teachers at Primary and Upper Primary Level (2013)

Districts	Primary	Primary with Upper primary	Primary with Upper Primary sec and higher sec.	Upper Primary Only	Upper Primary with sec. and higher sec.	Primary with Upper Primary sec	Upper Primary sec	Total
Patna	5412	7419	26	91	175	177	125	13425
Nalanda	3626	5492	25	44	42	237	61	9527
Bhojpur	3827	5183	0	188	0	420	33	9651
Buxar	2027	3600	0	105	0	358	75	6165
Rohtas	3281	5941	20	81	11	383	85	9802
Kaimur	1959	4023	0	7	0	194	19	6202
Gaya	4113	7306	40	14	0	293	9	11775
Jehanabad	1398	2872	12	81	0	156	18	4537
Arwal	869	1925	0	38	0	6	9	2847
Nawada	2811	4041	0	20	16	147	20	7055
Aurangabad	2365	5652	0	81	20	336	35	8489
Saran	6087	8716	55	181	71	414	12	15536
Siwan	5231	7850	0	262	0	500	0	13843
Gopalganj	4320	5981	0	15	54	394	53	10817
W.Champaran	5702	6666	7	63	36	237	19	12730
E. Champaran	6978	10334	0	0	11	380	26	17729
Muzaffarpur	5167	8985	58	12	84	429	23	14758
Sitamarhi	3110	6978	43	40	21	194	45	10431
Sheohar	654	1517	14	11	30	94	0	2320
Vaishali	3473	7559	0	13	0	434	29	11508
Darbhanga	5207	7301	23	53	72	347	12	13015
Madhubani	7008	8320	255	0	22	62	38	15705
Samastipur	5028	7558	0	152	0	176	0	12914
Begusarai	3016	7180	21	23	12	351	12	10615
Munger	1305	2928	0	10	6	285	2	4536
Sheikhpura	568	1487	20	6	0	79	30	2190
Lakhisarai	1520	2448	0	0	0	124	15	4107
Jamui	1788	4582	0	0	19	116	0	6505
Khagaria	1551	3854	0	32	0	121	3	5561
Bhagalpur	3418	5790	4	57	66	434	81	9850
Banka	2210	3343	1	11	0	111	24	5700
Saharsa	2482	5448	0	29	12	96	13	8080
Supaul	3011	4723	0	58	0	41	10	7843
Madhepura	1933	5283	0	15	0	91	7	7329
Purnea	3170	6238	84	0	9	180	21	9702
Kishanganj	2388	3791	25	7	0	422	0	6633
Araria	3835	4724	0	0	20	270	6	8855
Katihar	4764	5915	10	0	0	372	0	11061
Bihar	126612	208953	743	1800	809	9461	970	349348

Source: District Information System for Education

Table A 10.19 : District-wise Coverage of MDMS (Class I-V)

Districts	2012-13			2013-14			2014-15		
	Total Enrolment (in lakhs)	No. of Children Availing MDM (perday) (in lakhs)	Coverage (%)	Total Enrolment (in lakhs)	No. of Children Availing MDM (perday) (in lakhs)	Coverage (%)	Total Enrolment (in lakhs)	No. of Children Availing MDM (perday) (in lakhs)	Coverage (%)
Patna	5.27	2.92	55.40	5.27	3.40	64.46	5.25	3.93	74.92
Nalanda	3.43	2.01	58.80	3.43	2.28	66.34	3.49	2.15	61.46
Bhojpur	3.24	1.88	58.00	3.17	2.21	69.77	3.21	2.21	68.85
Buxar	2.48	1.46	59.00	2.47	1.63	66.05	2.45	1.55	63.25
Rohtas	3.71	2.22	59.70	3.72	2.52	67.94	3.73	2.45	65.75
Kaimur	2.37	1.69	71.20	2.27	1.55	68.12	2.32	1.47	63.07
Gaya	5.73	3.53	61.60	5.80	3.74	64.56	5.92	3.64	61.53
Jehanabad	1.60	1.17	72.80	1.60	1.06	66.11	1.52	1.00	65.79
Arwal	1.01	0.77	76.90	0.97	0.65	67.44	1.01	0.64	63.54
Nawada	3.06	2.05	67.10	3.04	2.13	70.10	3.24	2.05	63.21
Aurangabad	3.73	2.32	62.20	3.73	2.48	66.33	3.72	2.41	64.71
Saran	5.41	2.79	51.70	5.22	3.56	68.17	5.31	3.76	70.81
Siwan	4.05	2.40	59.30	3.91	2.71	69.20	3.96	3.14	79.32
Gopalganj	3.56	2.11	59.30	3.23	2.32	71.80	3.31	2.24	67.82
W. Champaran	5.37	3.10	57.80	5.37	4.24	79.07	7.23	4.91	67.87
E. Champaran	7.20	4.03	55.90	7.26	4.86	66.92	5.78	4.39	76.04
Muzaffarpur	6.11	3.41	55.80	6.15	4.10	66.72	6.13	4.03	65.78
Sitamarhi	5.03	2.96	58.70	5.04	3.38	67.03	4.90	3.62	73.87
Sheohar	1.04	0.63	60.50	1.04	0.65	62.17	0.96	0.67	70.03
Vaishali	4.15	2.36	56.80	4.07	2.45	60.29	4.21	2.45	58.14
Darbhanga	5.11	2.61	51.10	5.11	3.33	65.19	5.00	3.51	70.14
Madhubani	6.27	2.59	41.40	6.39	4.01	62.81	6.25	4.36	69.84
Samastipur	5.86	3.26	55.60	5.86	4.15	70.77	5.86	3.97	67.70
Begusarai	4.23	2.56	60.50	4.09	2.90	70.94	5.01	2.75	55.04
Munger	1.71	1.09	63.40	1.70	1.10	64.94	1.72	1.03	59.76
Sheikhpura	0.86	0.56	65.40	0.86	0.61	70.98	0.91	0.61	67.27
Lakhisarai	1.27	0.94	73.80	1.37	0.98	71.01	1.41	0.97	68.78
Jamui	2.74	1.49	54.30	2.48	1.95	78.40	2.93	1.86	63.55
Khagaria	2.49	1.36	54.50	2.50	1.55	61.92	2.54	1.72	67.66
Bhagalpur	3.93	2.91	74.10	3.99	2.72	68.24	3.97	2.68	67.44
Banka	2.66	1.59	59.90	2.67	1.85	69.36	2.69	1.73	64.36
Saharsa	3.65	1.93	52.90	3.65	1.95	0.00	3.13	1.90	60.71
Supaul	3.23	2.02	62.40	3.21	2.11	0.00	3.21	2.00	62.27
Madhepura	3.41	2.01	58.80	3.39	2.15	0.00	4.73	2.89	61.06
Purnea	5.09	2.78	54.60	5.07	3.08	0.00	4.91	2.69	54.84
Kishanganj	2.89	1.85	63.90	2.89	1.80	0.00	2.97	1.79	60.32
Araria	4.38	2.61	59.70	3.94	2.49	0.00	4.13	2.40	58.14
Katihar	5.49	3.30	60.10	4.75	2.62	0.00	4.16	2.78	66.73
Bihar	142.82	83.25	58.30	140.70	93.28	66.30	143.18	94.36	65.90

Source: Directorate of Mid Day Meal Scheme, GOB

Table A 10.20 : District-wise Coverage of MDMS (Class VI-VIII)

District	2012-13			2013-14			2014-15		
	Total Enrolment (in lakhs)	No. of Children Availing MDM (perday) (lakhs)	Coverage (%)	Total Enrolment (lakhs)	No. of Children Availing MDM (perday) (lakhs)	Coverage (%)	Total Enrolment (lakhs)	No. of Children Availing MDM (perday) (lakhs)	Coverage (%)
Patna	2.12	1.12	52.6	2.17	1.42	65.71	2.3	1.47	63.99
Nalanda	1.29	0.65	50.3	1.32	0.89	67.63	1.36	0.96	70.35
Bhojpur	1.39	0.75	54.1	1.39	0.91	65.46	1.44	0.92	63.59
Buxar	1.1	0.6	54.4	1.1	0.71	64.73	1.18	0.72	61.17
Rohtas	1.76	0.99	56.3	1.83	1.13	61.72	1.83	1.18	64.59
Kaimur	1	0.59	59.1	1	0.64	64.3	1.08	0.68	62.89
Gaya	2.22	1.24	55.9	2.26	1.29	56.98	2.29	1.35	58.83
Jehanabad	0.64	0.4	62.8	0.64	0.44	69.26	0.69	0.46	66.72
Arwal	0.45	0.32	70.7	0.48	0.27	56.2	0.49	0.28	57.29
Nawada	1	0.54	53.8	1.05	0.69	65.52	1.16	0.72	62.28
Aurangabad	1.47	0.86	58.5	1.47	1.04	70.93	1.64	0.89	53.99
Saran	2.3	1.22	52.9	2.34	1.53	65.61	2.47	1.67	67.59
Siwan	1.88	0.95	50.2	1.86	1.22	65.51	1.89	1.25	66.11
Gopalganj	1.45	0.79	54.8	1.47	1	68.27	1.53	1.05	68.65
W. Champaran	1.64	1	60.9	1.64	1.27	77.62	2.69	1.71	63.77
E. Champaran	2.5	1.4	56.1	2.52	1.84	73.1	1.79	1.4	78.15
Muzaffarpur	2.49	1.21	48.8	2.39	1.63	68.2	2.71	1.8	66.65
Sitamarhi	1.61	0.93	57.6	1.67	1.12	66.76	1.72	1.3	75.5
Sheohar	0.28	0.15	54.4	0.28	0.22	78.81	0.33	0.25	73.43
Vaishali	1.97	0.96	48.8	1.98	1.23	62.22	2.07	1.12	54.34
Darbhanga	1.88	0.97	51.7	1.88	1.23	65.16	2.08	1.29	62.26
Madhubani	2.49	1.44	57.8	2.64	1.84	69.63	2.79	1.89	67.72
Samastipur	2.31	1.34	58	2.35	1.66	70.59	2.58	1.7	66.09
Begusarai	1.67	0.88	52.6	1.73	1.17	67.59	1.8	1.25	69.67
Munger	0.73	0.41	55.6	0.76	0.49	64.14	0.8	0.48	59.3
Sheikhpura	0.34	0.2	59.3	0.35	0.23	65.49	0.37	0.25	66.42
Lakhisarai	0.51	0.25	48.6	0.54	0.39	72.99	0.61	0.39	64.08
Jamui	0.98	0.49	49.9	0.97	0.67	68.71	1.06	0.65	61.36
Khagaria	0.94	0.53	56.1	0.94	0.5	53.15	1.05	0.68	64.81
Bhagalpur	1.54	0.91	58.9	1.57	1.17	74.9	1.73	1.17	67.88
Banka	1.06	0.59	55.4	1.11	0.73	65.41	1.12	0.68	60.25
Saharsa	0.87	0.51	58.2	0.87	0.6	68.55	1.09	0.63	58.17
Supaul	1.28	0.66	51.6	1.31	0.79	60.11	1.38	0.78	56.74
Madhepura	1.21	0.76	62.5	1.24	0.81	65.13	3.5	0.85	24.44
Purnea	1.57	0.85	54.4	1.59	0.95	59.68	1.72	0.85	49.57
Kishanganj	0.89	0.47	52.3	0.89	0.54	61.25	0.97	0.54	55.54
Araria	1.28	0.74	57.6	1.36	0.7	51.66	1.34	0.69	51.58
Katihar	1.33	0.81	60.9	1.33	1.15	86.51	1.93	1.01	52.5
Bihar	53.45	29.46	55.1	54.27	36.11	66.54	60.59	36.99	61.05

Source: Directorate of Mid Day Meal Scheme, GOB

Table A 10.21 : District-wise Colleges of Bihar

Districts	Affiliated College	Constiuent College	Affiliated College	Constiuent College
	2013-14		2014-15	
Patna	49	39	72	39
Nalanda	20	6	23	6
Bhojpur	20	6	21	6
Buxar	11	5	11	5
Rohtas	29	8	29	8
Kaimur	8	2	8	2
Gaya				
Gaya	23	7	25	7
Jehanabad	7	3	7	3
Arwal	3	1	3	1
Nawada	5	4	5	4
Aurangabad	9	5	9	5
Saran				
Saran	20	12	6	12
Siwan	7	7	6	7
Gopalganj	4	5	1	5
W.Champaran				
W.Champaran	7	4	8	4
E. Champaran				
E. Champaran	2	7	2	7
Muzaffarpur	12	19	13	19
Sitamarhi	3	6	5	6
Sheohar	0	0	0	0
Vaishali	9	7	12	7
Darbhanga				
Darbhanga	26	22	27	22
Madhubani	19	18	19	18
Samastipur	15	15	15	15
Begusarai				
Begusarai	4	6	6	6
Munger	2	7	2	7
Sheikhpura	2	2	3	2
Lakhisarai	3	2	3	2
Jamui	2	2	3	2
Khagaria	0	5	1	5
Bhagalpur				
Bhagalpur	13	13	13	13
Banka	7	2	9	2
Saharsa				
Saharsa	6	9	5	9
Supaul	4	3	4	3
Madhepura	8	5	8	5
Purnea				
Purnea	10	6	10	6
Kishanganj	4	2	5	2
Araria	7	2	8	2
Katihar	7	4	9	4
Bihar				
Bihar	387	278	416	278

Source : Department of Education, GOB

Table 10.22 : Districtwise Colleges of Bihar up to 2014-15

Districts	Arts Fine Arts, Social Work, Science & Commerce	Engineering	Medical	Others	All Colleges
Patna	68	4	10	29	111
Nalanda	24	2	2	1	29
Bhojpur	18	0	7	2	27
Buxar	12	0	0	4	16
Rohtas	35	0	1	1	37
Kaimur	6	1	2	1	10
Gaya	24	2	3	3	32
Jehanabad	9	0	0	1	10
Arwal	4	0	0	0	4
Nawada	9	0	0	0	9
Aurangabad	13	1	0	0	14
Saran	13	1	1	3	18
Siwan	11	0	1	1	13
Gopalganj	3	0	1	2	6
W.Champaran	5	0	1	6	12
E. Champaran	8	1	0	0	9
Muzaffarpur	21	1	4	6	32
Sitamarhi	9	0	0	2	11
Sheohar	0	0	0	0	0
Vaishali	12	1	4	2	19
Darbhanga	19	2	7	21	49
Madhubani	21	0	4	12	37
Samastipur	20	0	4	6	30
Begusarai	7	1	1	3	12
Munger	8	0	0	1	9
Sheikhpura	5	0	0	0	5
Lakhisarai	5	0	0	0	5
Jamui	4	0	0	1	5
Khagaria	5	0	0	1	6
Bhagalpur	19	1	3	3	26
Banka	7	1	0	3	11
Saharsa	8	0	1	5	14
Supaul	7	0	0	0	7
Madhepura	12	0	1	0	13
Purnea	11	2	1	2	16
Kishanganj	4	2	1	0	7
Araria	8	1	0	1	10
Katihar	9	0	2	2	13
Bihar	483	24	62	125	694

Source : Department of Education, GOB

Table A 10.23 : Percentage Share of SC and ST Population (2001 to 2011)

Districts	2001		2011	
	SC	ST	SC	ST
Patna	15.5	0.2	16.0	0.2
Nalanda	20.0	0.0	21.2	0.1
Bhojpur	15.3	0.4	15.6	0.5
Buxar	14.1	0.6	14.7	1.6
Rohtas	18.1	1.0	18.5	1.1
Kaimur	22.2	2.8	22.7	3.6
Gaya	29.6	0.1	30.5	0.1
Jehanabad	18.9	0.1	19.8	0.1
Arwal	18.9	0.0	20.2	0.1
Nawada	24.1	0.1	25.5	0.1
Aurangabad	23.5	0.1	24.4	0.0
Saran	12.0	0.2	12.0	0.9
Siwan	11.4	0.5	11.7	2.6
Gopalganj	12.4	0.3	12.5	2.4
W. Champaran	14.3	1.5	14.1	6.4
E. Champaran	13.0	0.1	12.8	0.2
Muzaffarpur	15.9	0.1	15.7	0.1
Sitamarhi	11.8	0.1	11.9	0.1
Sheohar	14.4	0.0	14.7	0.0
Vaishali	20.7	0.1	21.1	0.1
Darbhanga	15.5	0.0	15.7	0.1
Madhubani	13.5	0.0	13.1	0.1
Samastipur	18.5	0.1	18.9	0.0
Begusarai	14.5	0.1	14.6	0.1
Munger	13.3	1.6	13.5	1.6
Sheikhpura	19.7	0.0	20.7	0.1
Lakhisarai	15.8	0.7	15.3	0.8
Jamui	17.3	4.8	17.2	4.5
Khagaria	14.5	0.0	14.9	0.0
Bhagalpur	10.5	2.3	10.5	2.2
Banka	12.4	4.7	12.2	4.4
Saharsa	16.1	0.3	16.7	0.3
Supaul	14.8	0.3	15.9	0.5
Madhepura	17.0	0.6	17.4	0.6
Purnea	12.3	4.4	11.9	4.3
Kishanganj	6.6	3.6	6.7	3.8
Araria	13.6	1.4	13.6	1.4
Katihar	8.7	5.9	8.6	5.9
Bihar	15.7	0.9	16.0	1.3

Source: Census, RGI,GOI

Table A 10.24 : District Level Overview of SC/ST Welfare

Districts	Maintenance of Residential School (SC)						Hostel Maintenance (SC)		
	Amount Alloted (Rs. lakh)			Physical Achievement (No.)			Amount Alloted (Rs. lakh)		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Patna	369.2	414.0	448.4	745.0	978.0	621.0	50.3	50.3	214.7
Nalanda	227.4	222.9	316.6	489.0	639.0	747.0	12.3	12.3	13.7
Bhojpur	272.6	265.0	388.7	517.0	750.0	714.0	33.5	11.0	25.7
Buxar	131.0	154.2	173.8	243.0	336.0	324.0	9.8	35.1	11.1
Rohtas	234.4	238.2	339.0	518.0	680.0	738.0	30.4	30.4	29.5
Kaimur	204.3	220.9	314.0	421.0	484.0	538.0	12.2	78.0	66.8
Gaya	888.2	896.0	1426.6	1957.0	3202.0	2954.0	12.8	27.4	15.1
Jehanabad	43.0	80.6	161.5	106.0	421.0	425.0	8.0	33.1	10.8
Arwal	43.0	57.7	129.2	0.0	152.0	339.0	0.0	4.0	0.0
Nawada	205.7	250.0	363.2	496.0	872.0	957.0	21.5	13.6	17.7
Aurangabad	43.0	45.7	134.2	97.0	262.0	235.0	6.0	9.0	6.1
Saran	117.5	126.6	134.2	274.0	369.0	385.0	11.1	0.0	12.9
Siwan	85.9	49.5	133.7	105.0	170.0	206.0	15.9	29.6	28.4
Gopalganj	105.9	120.7	182.3	272.0	358.0	359.0	15.6	8.0	16.0
W. Champaran	161.5	165.5	264.4	524.0	561.0	592.0	15.8	29.0	18.8
E. Champaran	114.5	101.2	136.2	290.0	311.0	291.0	25.6	25.1	29.6
Muzaffarpur	305.5	308.2	473.4	776.0	1009.0	1057.0	24.5	11.9	33.6
Sitamarhi	90.6	82.8	174.4	275.0	351.0	390.0	17.5	17.1	27.6
Sheohar	43.0	44.1	50.5	0.0	0.0	0.0	1.0	19.5	1.3
Vaishali	111.5	127.9	193.2	270.0	301.0	311.0	12.9	1.5	15.1
Darbhanga	45.5	90.1	137.6	99.0	107.0	118.0	29.5	28.1	37.6
Madhubani	335.8	329.4	426.8	833.0	871.0	891.0	18.5	27.9	21.0
Samastipur	154.3	150.3	297.1	374.0	542.0	615.0	15.0	11.7	10.8
Begusarai	88.1	131.4	134.8	267.0	297.0	310.0	1.0	1.3	3.3
Munger	109.5	121.9	133.0	276.0	298.0	289.0	11.7	10.8	14.6
Sheikhpura	43.0	52.5	129.2	157.0	197.0	191.0	1.0	12.9	1.3
Lakhisarai	43.0	54.0	146.5	69.0	122.0	203.0	3.9	25.9	3.7
Jamui	43.0	52.9	138.4	76.0	216.0	229.0	1.0	14.1	1.3
Khagaria	115.2	117.3	150.5	269.0	369.0	381.0	17.0	4.5	15.8
Bhagalpur	143.8	153.8	228.2	369.0	414.0	351.0	19.8	10.1	58.1
Banka	43.0	48.2	144.9	81.0	187.0	212.0	14.6	4.2	9.9
Saharsa	98.9	106.3	212.2	281.0	282.0	380.0	9.1	34.1	50.6
Supaul	23.0	44.8	129.2	102.0	133.0	127.0	15.3	18.0	8.3
Madhepura	43.0	52.5	136.2	70.0	58.0	179.0	6.9	15.6	16.3
Purnea	157.2	142.0	146.3	289.0	376.0	391.0	21.7	13.2	36.2
Kishanganj	130.4	118.0	194.3	276.0	274.0	347.0	3.3	13.1	7.8
Araria	112.0	121.9	142.2	273.0	285.0	274.0	10.8	4.3	12.4
Katihar	137.4	102.4	144.3	261.0	394.0	390.0	18.6	23.9	21.0
Bihar	5663.6	5960.7	9109.2	12797.0	17628.0	18061.0	555.2	719.6	924.1

Source: Department of SC/ST Welfare, GOB

(Contd...)

Table A 10.24 : District Level Overview of SC/ST Welfare (Contd.)

Districts	Stipend (SC & ST)							
	Financial Allotment (Rs. in Lakh)				Physical Achievement (No.)			
	2011-12	2012-13	2013-14	2014-15	2011-12	2012-13	2013-14	2014-15
Patna	5038.94	3966.34	4532.7	4040.18	204680	164495	148862	177953
Nalanda	2386.68	2552.94	2389.3	1393.52	164020	105018	116774	88668
Bhojpur	1075.76	1103.72	1641.3	1400.76	98113	84691	99951	115836
Buxar	1088.4	1379.05	1627.1	1532.28	93772	47981	64099	69067
Rohtas	2131.95	1763.35	2178.8	1595.22	167670	87908	107420	104903
Kaimur	1712.12	1731.78	1887.9	1480.98	122086	83292	101664	79367
Gaya	4244	4493.19	5322.8	5284.95	210299	229581	272195	293847
Jehanabad	763.94	776.38	1083.7	902.63	50559	47005	47356	49412
Arwal	385.08	397.4	407.21	385.22	36261	24231	31648	32749
Nawada	1538.65	1476.07	2339.3	1899.83	160136	97822	147041	170563
Aurangabad	1829.19	1655.26	3710.3	2866.03	120352	106322	278442	184999
Saran	2527.8	2175.73	2467.7	2412.18	190935	83333	149887	149035
Siwan	1706.55	1560.59	1889.7	1496.44	103668	62669	82920	97739
Gopalganj	1008.07	1324.72	1606.8	1332.89	73801	70033	140309	82015
W. Champaran	2448.51	3003.3	2258.6	2337.36	259830	162035	190880	193004
E. Champaran	1883.15	1790.09	1391.4	1541.7	132933	100393	99675	126757
Muzaffarpur	2015.51	3131.19	2579.1	2328.77	144025	108638	146146	161624
Sitamarhi	869.9	1078.32	1313.9	913.81	80839	61195	101304	87333
Sheohar	259.35	318.35	223.7	221.75	22170	18489	22308	20910
Vaishali	1898.7	1885.84	1734	1663.48	204993	105253	127227	125549
Darbhanga	1656.67	2008.37	1816.4	1692.10	93556	89647	128519	147413
Madhubani	1806.3	1945.41	1714.1	1639.36	132126	144181	138976	137263
Samastipur	1981.91	2230.03	1844.2	1299.34	130677	114556	137162	94595
Begusarai	947.75	982.53	1232.7	911.11	72879	64095	89955	76411
Munger	754.1	855.38	1023.4	819.35	63536	38912	44717	47654
Sheikhpura	347.45	444.54	508.78	430.53	20581	19159	24901	28753
Lakhisarai	430.91	548.3	589.84	491.24	34232	30968	42094	42650
Jamui	957.11	1266.82	896.71	933.19	71914	89772	76960	70042
Khagaria	673.93	741.57	608.49	584.86	52102	25441	38889	56214
Bhagalpur	1186.25	1727.08	1781.8	2048.21	110704	75255	86185	121448
Banka	996.85	766.02	969.9	1095.69	64045	47807	63146	58360
Saharsa	844.09	810.3	664.61	599.09	62848	56712	62826	56627
Supaul	689.93	945.92	989.74	882.2	60724	56402	69038	65850
Madhepura	1169.48	974.35	1009.1	692.12	78580	68924	65158	41371
Purnea	1401.37	1632.84	1355	1490.53	58647	77247	93659	94594
Kishanganj	353.82	383.32	388.93	663.51	34236	28644	25069	34716
Araria	665.22	606.88	617.89	478.42	52462	37237	55376	43572
Katihar	1109.78	1116.02	945.46	905.04	87425	35688	72874	61559
Bihar	54785.2	57549.3	61541.9	54685.87	3922416	2951031	3791612	3690422

Source: Department of SC/ST Welfare, GOB

(Concluded)

Table A 10.25 : Percentage Distribution of Population by Religion

District	Hindu			Muslim			Other Religions		
	1991	2001	2011	1991	2001	2011	1991	2001	2011
Patna	92.2	91.8	91.7	7.5	7.8	7.5	0.3	0.4	0.7
Nalanda	91.5	92.4	92.8	8.5	7.5	6.9	0	0.1	0.3
Bhojpur	93.4	92.6	92.3	6.5	7.3	7.3	0.1	0.1	0.5
Buxar		93.4	93.3		6.2	6.2		0.5	0.6
Rohtas	90.5	89.7	89.4	9.3	10.1	10.2	0.1	0.2	0.5
Kaimur		90.1	89.5		9.5	9.5		0.3	0.9
Gaya	88.4	88.2	88.3	11.5	11.6	11.1	0.1	0.2	0.6
Jehanabad	91.9	91.7	92.9	8.1	8.2	6.7	0	0.1	0.4
Arwal			90.5			9.2			0.4
Nawada	88.9	88.6	88.5	11.1	11.3	11	0	0.1	0.5
Aurangabad	90.5	90.1	90.2	9.5	9.7	9.3	0	0.1	0.5
Saran	90.2	89.6	89.4	9.8	10.4	10.3	0	0.1	0.3
Siwan	82.8	81.7	81.4	17.2	18.2	18.3	0	0.1	0.3
Gopalganj	83.4	82.9	82.7	16.6	17.1	17	0	0.1	0.3
W. Champaran	79.2	78	77.4	20.6	21.2	22	0.2	0.8	0.6
E. Champaran	81.5	80.8	80.1	18.4	19.2	19.4	0.1	0.1	0.4
Muzaffarpur	85.1	84.6	84	14.8	15.3	15.5	0.1	0.1	0.5
Sitamarhi	80.3	78.7	78.1	19.7	21.2	21.6	0	0.1	0.3
Sheohar		84.3	84.2		15.5	15.1		0.1	0.7
Vaishali	90.5	90.4	90.2	9.4	9.5	9.6	0	0.1	0.2
Darbhanga	77.9	77.2	77.3	22.1	22.7	22.4	0	0.1	0.3
Madhubani	83.3	82	81.4	16.7	17.9	18.2	0	0.1	0.4
Samastipur	89.9	89.4	89.2	10.1	10.5	10.6	0	0.1	0.2
Begusarai	87.6	86.5	86	12.3	13.4	13.7	0	0.1	0.3
Munger	91.7	91.9	91.6	8.1	7.9	8.1	0.2	0.2	0.4
Sheikhpura		92.7	93.7		7.2	5.9		0.1	0.4
Lakhisarai		95.5	95.6		4.4	4.1		0.1	0.4
Jamui		86.7	86.7		12.2	12.4		1.1	1
Khagaria	90.3	89.6	89.2	9.7	10.3	10.5	0	0.1	0.3
Bhagalpur	86	82.2	81.9	13.9	17.5	17.7	0.1	0.4	0.4
Banka		87.6	87.1		11.8	12.3		0.6	0.5
Saharsa	85.4	85.5	85.7	14.5	14.4	14	0.1	0.1	0.3
Supaul		82.3	81.2		17.4	18.4		0.3	0.4
Madhepura	89.6	88.6	87.6	10.3	11.4	12.1	0	0.1	0.3
Purnea	65.3	62.3	60.9	34.5	36.8	38.5	0.2	0.9	0.6
Kishanganj	33.8	31.9	31.4	65.9	67.6	68	0.3	0.6	0.6
Araria	59.4	58.5	56.7	40.4	41.1	42.9	0.2	0.3	0.4
Katihar	59.9	57	54.9	39.9	42.5	44.5	0.2	0.5	0.7
Bihar	84.2	83.2	82.7	15.7	16.5	16.9	0.1	0.2	0.4

Source: Census, RGI, GOI