

1. Introduction

The state of Punjab occupies an extremely important place in India. It is the country's largest grain producer, and plays a crucial role in defending India against military aggression. In the last century, the state's geographical boundaries have shifted twice—the violent partition of India in 1947 and the administrative division of Punjab state in 1966 into present day Punjab and the states of Haryana and Himachal Pradesh. In recent years, the state has also faced two periods of internal crisis. There was the Naxalite inspired Left movement of the 1960s and 1970s. The 1980s and early 1990s saw the state plunge into a militant movement. Yet, in spite of these disturbances, today human development indicators in Punjab rival the best in the nation.

Economic development in Punjab has been led by agriculture. In addition, thousands of small manufacturing units across the state have led to fairly high income levels. Investments in roads, rural electrification, safe drinking water, as well as schools and health centres, have provided the people of Punjab with the basic amenities of life still unavailable in large parts of the country.

In India, the Green Revolution was launched with special focus on Punjab. From being an importer of foodgrain, India now produces surplus food. This achievement has been possible largely because of the contribution of Punjab. The enterprise and hard work of the Punjabi farmers and the state and central government have played a major role in the state's agricultural achievement. In addition, Punjab's law and order agencies have, after prolonged struggle, been able to curb militancy.

However, amidst prosperity, pockets of deprivation remain. In southern and south-western Punjab, poverty rates are high. In Hoshiarpur district, the literacy level crossed 80 percent in 2001, but in Mansa district, literacy rates are only slightly higher than that of Bihar. While in India, between 1991 and 2001 the gender ratio rose from 927 to 933, in Punjab, it fell from an abysmal 882 in 1991 to an even lower 874 in 2001.

Certain communities are inevitably more deprived than others. Among all India's states, Punjab has the highest population of Scheduled Castes. Scheduled Caste communities constituted 28 percent of Punjab's population in 1991. The literacy rate of Scheduled Caste communities was only 41 percent in 1991, compared to a 58 percent literacy rate for the whole of Punjab in the same year. Only 31 percent of Scheduled Caste women were literate. Also land owned by Scheduled Castes is a mere tenth of their share of the total population.¹

¹ Data from the All India Agriculture Census for 1985-86 shows that just 4.5 percent of all agriculture operational holdings were with Scheduled Castes, and they operated just 2.02 percent of all area cultivated in the then Punjab. This situation improved somewhat by 1990-91, when Scheduled Castes operated 4.8 percent of all holdings and 2.4 percent of the land under agricultural operational holdings. (Statistical Abstract of Punjab 1997, ESO, Govt. of Punjab, 1997, pages 204-07, Statistical Abstract of Punjab 1999, ESO, Govt. of Punjab, 1999, pages 202-07)



Thus, development in Punjab has been uneven. The idea of human development calls for a concerted effort to identify, recognise and then remove with affirmative action, disparities between regions and communities. Addressing relative deprivations amongst regions and people in education, in health, in standard of living, in security, in dignity and in basic human rights, is a serious concern of human development.

A Human Development Report must identify, document and state these deprivations. To quote a speech during the presentation of the Budget of 2000-2001 to the state assembly. "Over the past fifty years or so... period has also given rise to serious socio-economic disparities.... There is an alarming chasm between the rich and the poor and the gap is increasing by each passing day".2

Human Development

From the second half of the last century, there has been a growing school of thought that material prosperity on its own does not necessarily amount to overall equitable growth. Economic improvement both in the developed nations and the developing nations did not on its own reduce poverty levels, improve health or end gender and social community-based discrimination.

In 1990, the United Nations Development Programme brought out the first global Human Development Report, a report produced under the leadership and inspiration of Mahbub-ul-Haq. These reports, apart from becoming a regular feature, attracted international and national attention towards the concept of "human development". They set in motion a debate on "people-centred" human development, which was a radical conceptual change from previous models. The reports talked of whom development was for and how it was affecting target groups. Only if the 'how' satisfied the criteria of human development, was it considered positive. The concept of "human development" derives its philosophical underpinnings from the works of Nobel laureate Prof. Amartya Sen, whose writings have given rise to a new vocabulary of development.

The Human Development Report of the United Nations states that "the process of human development must transmit itself, essentially by means of enlarging the choices of all persons concerned....". The most critical of these wide ranging choices are to live a long and healthy life, to be educated and to have access to resources required for a decent standard of living. Hence,

Box 1.1: UNDP Human Development Reports

Mahbub-ul-Haq writing on Human Development Reports said "The central thesis of these reports is that it is people who matter—beyond the confusing maze of GNP numbers, beyond the curling smoke of industrial chimneys, beyond the endless fascination with budget deficits and balance of payments crises it is people who matter. People must be at the centre of our development debate—what really counts is how they participate in economic growth and how they benefit from it. Production processes are indispensable but they cannot be allowed to obscure human lives. The focus of our reports is on those human lives—how they change over time, how they contribute to national and global economic opportunities, how they share these opportunities, how the range of people's choices can be measured whether economic or political, whether individual or national. The study of people, in national and global settings, is our central preoccupation and our overwhelming mandate."

(Occasional Paper 1 - Human Development in a Changing World, UNDP, 1993)

² Speech of Finance Minister to the Punjab Vidhan Sabha, 22nd March 2000, Government of Punjab, Chandigarh, page 1, 2

to measure development, the most crucial indicators that were considered were quality of health, extent of education, level of employment and real income levels.

The Punjab Human Development Report

The Government of Punjab has undertaken a Human Development Report for the state as part of its commitment to development, as the state shows silent indications of the beginning of a crisis.

The economic growth of Punjab and many of its social indicators put the state on a unique trajectory. Would it be safe to say that a lesser number of infants die in Punjab than in Gujarat or Uttar Pradesh? Should we be satisfied that all our villages have roads and electricity, or that our income levels are amongst the highest in India? The challenge for Punjab is to derive its growth targets from those achieved by the developed nations and in some cases, from India's own states. If Kerala has an infant mortality rate of 12, a literacy of over 90 percent, then it is towards these goals that Punjab must strive. If only one out of five Punjabis in Hoshiarpur is illiterate, then we have to strive to ensure that in Bathinda, Sangrur, Firozpur, Muktsar, and Mansa—all of which have female literacy between 45 and 53 percent—female literacy rate rises to match that of Hoshiarpur (76 percent female literacy).

Structure of the Report

Punjab has reduced the number of its poor (income poverty³) to a mere six percent. In health, it is still behind Kerala, whose human development achievements are praiseworthy. And in education, it is among the best performing states of India.

However, Punjab's health and education compare poorly with those of countries like Vietnam and

Sri Lanka. Although in general, an individual living in Punjab may enjoy a far higher standard of living than in any other state with the exception of Kerala, there are regions in Punjab where literacy rates are as abysmally low as in some parts of Bihar. There are parts of the state where infants' lives are lost with greater regularity than in parts of Rajasthan.

Agriculture and manufacturing, the backbone of Punjab, are facing declining growth rates and an increase in the relative deprivation of different economic actors. Several sections of the Punjabi community have been left out of the new prosperity. Scheduled Castes still remain agricultural labourers and their literacy is a good 10 percent lower than that of the other communities. The migrant labourer, whose labour supports agriculture, suffers not only from the problems of migration, but is increasingly trapped in debt cycles and bondage. Along with the landless labourer, the crisis of peasant indebtedness affects small and marginal farmers as well.

The woman in Punjab has suffered discrimination. The statistics on gender ratio and particularly on Juvenile Sex Ratio imply that male female differential is alarming in Punjab and therefore a great cause of concern.

There are three dimensions in the structure of the report.

The first speaks of the state of human development of Punjab, looks at Punjab through its history, both before and since Independence and notes the successes that have been achieved.

The second profiles health and education and scrutinises development levels among the poor and marginalised.

³ The National Sample Survey Organisation undertakes periodic surveys of people who live below the poverty line based on expenditure levels at which they survive. This type of poverty is often referred to as income poverty, to distinguish it from other forms of poverty.

The third section looks specifically at the fundamental rights and human development of women, children, dalits, migrants and agricultural labourers.

Human Development and Governance

Through the period of militancy, Punjab witnessed many years of Governor's rule, when law and order was the priority of the state. In spite of efforts, development, good governance, civil service institutions, democratic institutions were relegated to the background. Now the State has emerged from the impact of this era and is on the path of good governance and development. The people's bodies & collectives have started getting the benefits of decentralisation under the various development programmes. Though Panchayati Raj Institutions have been strengthened and have been given certain powers, yet these are to be levelled as in Kerala, West Bengal, Maharashtra, Madhya Pradesh, Uttar Pradesh, Rajasthan and like.

Following the end of militancy and the establishment of popular government, public good faith needs to be restored. Affirmative action programmes should be initiated to demonstrate the state's commitment to public care by reinvigorating the bureaucracy and infusing government institutions with new enthusiasm to tackle welfare objectives.

Although Punjab has already undertaken the exercise of fiscal reforms yet a lot is required to be done in this direction. To overcome the fiscal deficits the unpleasant decisions such as right-sizing the Govt. machinery and disinvestment of non performing PSUS are still to be taken. Towards this end, Certain decisions of the militancy years, such as budgetary allocations for law and order can now be done away with.

The Human Development Report tries to chart a way by which a hitherto 'law and order state' can become a 'development state'.

Human Development in Punjab

National domestic product calculations, per capita incomes, trends in national sensex ratings, estimates of income and poverty and purchasing power of a population are used to measure growth. If the economy was doing well people were assumed to be "better off" and some would even say "happier".

However, pure economic growth or per capita incomes often do not reveal an accurate level of well-being. An individual may have a low income but if the state provides him a clean environment and proper education, he may enjoy a better quality of life than a richer person living in an urban slum. Further, estimates of per capita income hide many aspects of deprivation. A healthy life, the ability to read, write and be a part of the lettered world, the basic freedom to make choices, have access to basic amenities like drinking water, decent shelter and clothing, basic and adequate nutrition, and for the woman, to be as equal and as blessed as her brother or her husband these are not captured by simply measuring per capita incomes.

Morris D. Morris' work on Physical Quality of Life Index began a wide-ranging reassessment of the indicators that represent development.

In the late 1980s, a marriage took place between the ideas of Amartya Sen, Mahbub-ul-Haq and the United Nations Development Programme (UNDP) and the first global Human Development Report was released in 1990.

Although the impact was not dramatic, yet the idea that 'people-centred' development should be the cornerstone for nations gradually spread across the globe.

One of the most influential and debated parts of the Human Development Report has been the Human Development Index (HDI). Developed by Amartya Sen, the index offers an indicator to replace or be read alongside economic indicators.

The HDI combines three essential elements of a decent life. These are *longevity*—the opportunity to live a long and basically healthy life, *knowledge*—which brings empowerment and the capacity to interact equally with society, and finally *per capita income*—which provides access to a decent standard of living.

The Human Development Index

The National Human Development Report (2001) prepared by the Planning Commission, Government of India ranks the State second for HDI 2001 among 15 major States (Table 1.1) and ranks Punjab 12th for HDI 1991 calculated for 32 States and Union Territories (Table 1.2).

The Human Development Index (HDI) was developed in UNDP's first Human Development Report in 1990. The methodology used has undergone many changes over the thirteen years since the first report was published. Apart from the methodology that UNDP uses, countries, individuals, states, and smaller administrative units

have been experimenting, changing and improving the composition and methodology of these indices. Geography, data availability and relevance of index components, often change, leading to changes in index methodologies. In India, much work has taken place on changes in the HDI. The National Human Development Report 2001 reflected some of these changes in methodologies. At the state level, in creating their own district-level indices, Madhya Pradesh and Karnataka have modified UNDP's methodologies.

We have used UNDP's methodology for the districts of Punjab, with a few modifications depending on data.

Measuring of Human Development Longevity

Longevity is measured by expectancy of life at birth. This is a comprehensive indicator covering all aspects of health. It can be assumed, that if people in a society live longer, then by and large they would also be healthier, their environment cleaner, a greater number of their infants would survive their first year, female foeticide would decline and women would be better nourished.

 Table 1.1:
 Human Development Index for India – Combined

States/UTs	1981		1991		2001	
	Value	Rank	Value	Rank	Value	Rank
Andhra Pradesh	0.298	9	0.377	9	0.416	10
Assam	0.272	10	0.348	10	0.386	14
Bihar	0.237	15	0.308	15	0.367	15
Gujarat	0.360	4	0.431	6	0.479	6
Haryana	0.360	5	0.443	5	0.509	5
Karnataka	0.346	6	0.412	7	0.478	7
Kerala	0.500	1	0.591	1	0.638	1
Madhya Pradesh	0.245	14	0.328	13	0.394	12
Maharashtra	0.363	3	0.452	4	0.523	4
Orissa	0.267	11	0.345	12	0.404	11
Punjab	0.411	2	0.475	2	0.537	2
Rajasthan	0.256	12	0.347	11	0.424	9
Tamil Nadu	0.343	7	0.466	3	0.531	3
Uttar Pradesh	0.255	13	0.314	14	0.388	13
West Bengal	0.305	8	0.404	8	0.472	8
All India	0.302		0.381		0.472	

Source: Planning Commission (2002), National Human Development Report, 2001, Government of India.



Table 1.2: Human Development Index – 1991

States/UTs	Rural		Urban		Combined		Gender Disparity Index	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Andhra Pradesh	0.344	23	0.473	29	0.377	23	0.801	23
Arunachal Pradesh	0.300	28	0.572	15	0.328	29	0.776	18
Assam	0.326	26	0.555	19	0.348	26	0.575	30
Bihar	0.286	30	0.460	31	0.308	32	0.469	32
Goa	0.534	3	0.658	3	0.575	4	0.775	13
Gujarat	0.380	18	0.532	23	0.431	17	0.714	22
Haryana	0.409	15	0.562	17	0.443	16	0.714	17
Himachal Pradesh	0.442	12	0.700	1	0.469	13	0.858	4
Jammu & Kashmir	0.364	22	0.575	14	0.402	21	0.740	25
Karnataka	0.367	21	0.523	24	0.412	19	0.753	11
Kerala	0.576	1	0.628	9	0.591	3	0.825	2
Madhya Pradesh	0.282	32	0.491	28	0.328	30	0.662	28
Maharashtra	0.403	16	0.548	21	0.452	15	0.793	15
Manipur	0.503	7	0.618	12	0.536	9	0.815	3
Meghalaya	0.332	24	0.624	10	0.365	24	0.807	12
Mizoram	0.464	10	0.648	5	0.548	7	0.770	6
Nagaland	0.442	13	0.633	7	0.486	11	0.729	21
Orissa	0.328	25	0.469	30	0.345	28	0.639	27
Punjab	0.447	11	0.566	16	0.475	12	0.710	19
Rajasthan	0.298	29	0.492	27	0.347	27	0.692	16
Sikkim	0.398	17	0.618	11	0.425	18	0.647	20
Tamil Nadu	0.421	14	0.560	18	0.466	14	0.813	9
Tripura	0.368	20	0.551	20	0.389	22	0.531	29
Uttar Pradesh	0.284	31	0.444	32	0.314	31	0.520	31
West Bengal	0.370	19	0.511	26	0.404	20	0.631	26
Andaman & Nicobar Is.	0.528	5	0.653	4	0.574	5	0.857	1
Chandigarh	0.501	8	0.694	2	0.674	1	0.764	7
Dadra & Nagar Haveli	0.310	27	0.519	25	0.361	25	0.832	14
Daman & Diu	0.492	9	0.629	8	0.544	8	0.714	8
Delhi	0.530	4	0.635	6	0.624	2	0.690	10
Lakshadweep	0.520	6	0.545	22	0.532	10	0.680	24
Pondicherry	0.556	2	0.591	13	0.571	6	0.783	5
All India	0.340		0.511		0.381		0.676	

Source: Planning Commission (2002), National Human Development Report, 2001, Government of India.

Direct estimates of district level life expectancy are not available, but we have data on district estimates for 1971, 1981 and estimated for 1991, all based on Census tables. Based on these tables, and the life expectancy of Punjab as a whole, projections have been made on life expectancy for districts. These estimates are applied for the HDI.

Knowledge

Knowledge is measured by two variables. UNDP uses enrolment of children aged five to 14 years in school, as it signifies the right of every child to be

in school all through these years. For the population above 14 years, the UNDP index uses literacy, as it represents the basic measure of having had the benefit of education.

This indicator poses problems in Punjab. Date on adult literacy, or literacy for ages 15 years and above, is available by district only for 1991, derived from Census data. Hence we have taken the total literacy rate for 2001, in place of adult literacy and continued to use school enrolment data for ages up to 14 years.

Adjusted Incomes

The third component of the HDI is income, or per capita income. Since, there are massive variations in per capita income figures even in a single district, these figures often do not provide a comprehensive picture. Furthermore, beyond a certain limit, income might create luxurious living which does not necessarily create general welfare for all. Such living by itself is not a problem, but such large income, as compared to the three other indicators used to measure HDI, may give an unnecessary high value to very large income.

Since very high income often become what economists call diminishing marginal returns, UNDP has devised a way of deflating income beyond a particular limit. For the Punjab district HDI, we also use a limit, and adjust income accordingly.

For the international HDI, in order that incomes across countries are compared on an equal footing, UNDP uses purchasing power parity adjustments for national income. This is not required for district income indices, as across districts, the purchasing power of the rupee does not change.

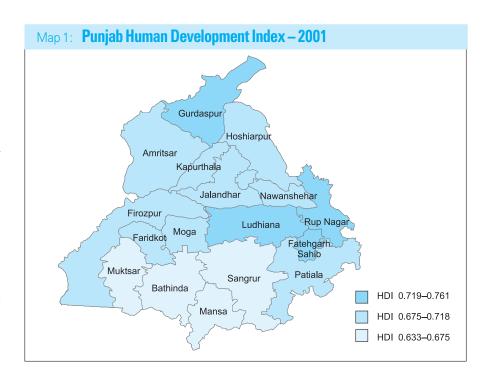
other. The second is that this index is not strictly comparable to the international index used in the UNDP Human Development reports. This is because of some differences in methodology and different maximum and minimum targets used for the income component of the index.

The HDI for the districts of Punjab have been assessed for the Human Development Report, and presented in Table 1.3. Ludhiana district tops the state with an index value of 0.761, followed by the districts of Rup Nagar, Fatehgarh Sahib, Gurdaspur and Hoshiarpur. Mansa, with an index value of 0.633, is the lowest in this table. The other districts in ascending order of index value are Muktsar, Sangrur, and Bathinda. The areas in south and south-western Punjab come lowest in the human development list.

The districts have been mapped on the basis of the Human Development Index and the Genderrelated Development Index (Map 1 and Map 2). The districts have been divided into three classes based on the HDI or GDI value keeping the class intervals equal.

District Human Development Index

The Punjab District Human Development indices have been developed for this report and are presented in Table 1.3 and Map 1. (For details please refer to technical notes.) While reading the table and analysing the indices, we must keep two factors in mind - one is to note the relative position of districts, as this relative ranking and difference between the index amongst districts representation of where districts stand vis-à-vis each



Gender-related Development Index

Compared to women, men usually get better access to education, better nutrition and medical care. Men are more gainfully employed, as well as have greater access to productive sources. Further, very often women get paid less for the same work than men do and their status varies widely even within the same family.

Table 1.3: Punjab Human Development Index – 2001

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District	HDI	Rank
Amritsar	0.700	9
Bathinda	0.674	14
F. G. Sahib	0.740	3
Faridkot	0.698	10
Firozpur	0.689	12
Gurdaspur	0.723	4
Hoshiarpur	0.718	5
Jalandhar	0.708	6
Kapurthala	0.707	7
Ludhiana	0.761	1
Mansa	0.633	17
Moga	0.683	13
Muktsar	0.651	16
Nawanshehar	0.707	7
Patiala	0.697	11
Rup Nagar	0.751	2
Sangrur	0.654	15
Punjab	0.667	

In order to assess this difference, UNDP has also generated a gender-sensitised development index, called the gender-related development index, or GDI. The parameters used are the same as for the HDI. The index assumes that men and women would share in development equally and benefit equally from it. This index compares the state of development of women with others.

The GDI shows that Rup Nagar tops all districts in women's development, followed by Kapurthala and Hoshiarpur (Table 1.4). Fatehgarh Sahib and Gurdaspur, which were third and fourth among the HDI districts slip down to 16th and 15th positions respectively. There is considerable movement of districts in ranking comparisons between HDI and GDI. Districts with GDIs much lower than HDI and those whose GDI ranks are slipping, must be targeted to improve the social and economic status of women

Gender-related Development Index Table 1.4: **in Punjab – 2001**

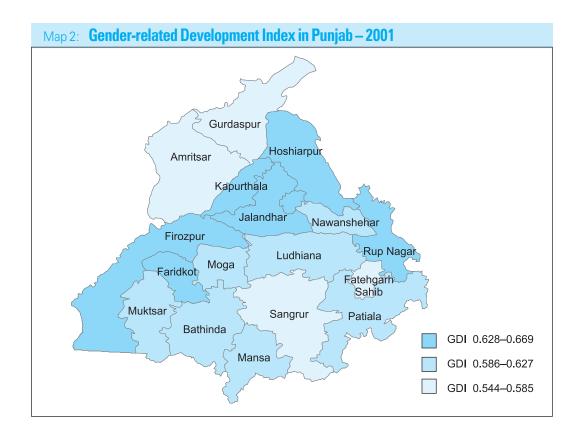
District	GDI	Rank
Amritsar Bathinda F. G. Sahib Faridkot Firozpur Gurdaspur Hoshiarpur Jalandhar Kapurthala Ludhiana Mansa Moga Muktsar Nawanshehar Patiala Rup Nagar Sangrur Punjab	0.544 0.625 0.556 0.643 0.643 0.565 0.645 0.632 0.652 0.619 0.586 0.607 0.606 0.623 0.600 0.669 0.575 0.614	17 7 16 4 4 15 3 6 2 9 13 10 11 8 12 1
i diijab	0.014	

There are two problems regarding the Punjab GDI. One is that since it is not affected by gender ratios, low gender ratios are not reflected in the GDI. Secondly, female work participation rates in Punjab are very low and prevent women from becoming economically empowered. Yet the GDI is insensitive to low female work participation rates.

The Measures

The true value of HDI indices lies in the fact that they enable us to make comparisons of HDI and show how far districts have to travel before they achieve a level of development that can be called satisfactory. While the level of satisfaction is highly subjective, 4 there are still some broad objectives

⁴ As individuals it will be very difficult to cite any particular state that satisfies all, but we can say with confidence that there are some achievements that are both necessary and which will provide a better quality of life to all and provide greater measure of satisfaction to more people.



that people, especially their government, can form for themselves and pursue.

The HDI tells us what some of these broad goalposts are. When the planning process begins, the general framework of human development helps considerably. If we need to push life expectancy to 85 years, then we need to ensure an infant mortality rate (IMR) of about 10, and ensure that even the poorest and most deprived group of people do not have an IMR of more than 20 or 30. If we talk of universal enrolment till class five, then it means providing a functional school to every child and ensuring that every child attends school throughout these five years.

In India, the concept of human development already exists in some form in traditional, political and social discourse, for example, the call for Bahujan Hitaaya and Bahujan Sukhaay. The idea of human development was also integral to Gandhiji's call to work for the *Daridra Narayan*, the poorest of the poor.

Simultaneously, in order to measure and assess development, we would use result-based indicators, and not input-based indicators. Let us take two examples from health – we would refer to fertility rate⁵ rather than couples effectively covered to assess the success of our efforts in population control, and IMR rather than target coverage of immunisation for the success of basic health programmes.

Regional indices provide guidance on which geographical areas are most in need of attention and investment.

⁵ Fertility rate or Total Fertility Rate (TFR) is the estimated average number of children a women would have in her life time.