

Quarterly Report on Employment Scenario

(New Series)



2016

Government of India
Ministry of Labour & Employment
Labour Bureau
Chandigarh



Quarterly Report

on

Employment Scenario in selected sectors (As on 1st Oct, 2016)

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March, 2017

FOREWORD

Employment is crucial for poverty reduction and in achieving growth with equity and pro-poor growth in India. Employment is also recognized as a human right. Better and more productive jobs can be translated into a reduction in poverty.

With a view to generate high quality accessible data on labour market for effective implementation of policies and welfare of labour, Government has decided to conduct new series of Quarterly Employment Survey (QES) on a large scale to assess employment situation in respect of selected sectors of Non-farm Industrial economy of India over successive quarters. Selected 8 sectors are Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and Information & Technology (IT)/Business Process Outsourcing (BPO). The present Quarterly Employment Survey (QES) is the 3rd in the series with large sample covering 8 major sectors.

Report of this survey contains detailed information on employment situation as on 1st Oct, 2016 in respect of 3rd Round at all India level in 8 selected sectors. It provides information on important characteristics of employment such as gender-wise employment, regular or contract and casual basis and part-time or full-time workers.

I am confident that this report will help policy-makers and Central Government/ State Governments, research scholars and stakeholders for making effective policies in the Labour market.

This Report is the outcome of efforts made by Expert Group under the chairmanship of Professor S.P. Mukherjee. In particular, I express my gratitude to Professor S.P. Mukherjee for extending necessary guidance and valuable suggestions all through the survey. I am also grateful to Ministry of Labour and Employment for giving the onerous responsibility of conducting the 'Quarterly Employment Survey' in a revamped manner.

I appreciate the efforts of the Officers of Labour Bureau associated with Quarterly Employment Survey (QES) in reaching towards its objective of the survey.I also thank the State/ UT Governments for extending wholehearted support & guidance to facilitate Labour Bureau for the 3rd round of QES. I am also thankful to all the selected units/ establishments for providing useful information on employment and extending cooperation to our field officers during the survey.

I look forward to your kind suggestions/comments to enrich the report further.

Place: Chandigarh (Daljeet Singh)

Date: 21.03.2017 Head of Department

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KEY FINDINGS OF THE SURVEY

- ❖ Quarterly Employment Survey (QES) is an establishment based Fixed Panel Survey in Non-Farm Industrial economy of India having 10 or more workers in eight selected sectors viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and IT/ BPO as recorded in the 6th Economic Census. Information was collected from around 10,630 units as a representative sample in these 8 sectors at all India level. Change estimates brought out by this survey, third in series, are based on 10576 units surveyed which are common to both, second and third round.
- Present report, third in the series of Quarterly Employment Survey (QES), presents key estimates of change in employment, as on 1st Oct 2016 over 1st July 2016, in 8 selected sectors by type of economic activity, gender, type of worker (employee or self-employee), employment status (regular, contractual and casual) and duration of work (part-time or full-time). Detailed Tables are presented in the **Annexure-I**.
- * Estimates from present Quarterly Employment Survey reveal that there was an overall increase of 32 thousand workers over the previous quarter i.e. 1st Oct 2016 over 1st July 2016, across 8 sectors at all India level. Manufacturing and IT/BPO sectors contributed with an estimated increase of total 0.50 Lakh workers whereas there was a decline of total 0.18 lakh workers in Construction, Trade, Accommodation & Restaurant and Education sectors. Further, there is no increase or decrease in Transport and Health sector.
- Over the last quarter there were positive changes across the Manufacturing sector (+24 thousand), IT/BPO sector (+26 thousand). however, the Construction sector (-1 thousand), the Trade sector (-7 thousand), the Accommodation & Restaurant sector (-8 thousand) and the Education sector (-2 Thousand) experienced a negative change in

- estimated employment over last quarter. Further, there is no change in Transport and health sector.
- Out of the total estimated change in employment of +32 thousand, Female workers accounted for 14 thousands increase and male workers accounted for 18 thousand increase.
- Out of total change in employment (+32 thousand), Self Employed experienced decrease of 1 thousand and Employees experienced an increase of 33 thousand workers.
- Out of 33 thousand increase of employees, Regular and Casual workers accounted for an increase of 78 thousand and 3 thousand respectively whereas Contractual workers accounted for a decrease of 48 thousand.
- Out of +32 thousand, total change in Employment, the change in composition of workers by time was + 0.69 lakh for full time workers and
 (-) 0.37 lakh for part-time workers over previous quarter.
- ❖ In manufacturing sector, out of total change in employment of (+) 24 thousand, a change of (+) 49 thousand in Male and (-) 25 thousand were observed in Female.
- ❖ In Manufacturing sector, out of total change in Employment of (+) 24 thousand, a change of (-) 1 thousand were observed in Self-Employed and (+) 25 thousand in Employees.
- ❖ In Manufacturing sector, total change in employees of (+) 25 thousand, a change of (-) 1 thousand in Regular workers, (+) 20 thousand Contractual and (+) 6 thousand in Casual workers was observed.
- In Construction sector, the composition of total change in Employment of (-) 1 thousand by gender shows a (+) 1 thousand change in male workers and (-) 2 thousand change in Female workers.

- Out of (-) 1 thousand change in Employment in Construction sector, there was a change of (-) 1 thousand in Self Employed and there is no change in employees in comparison to previous quarter.
- ❖ Trade sector observed a total change of (-) 7 thousand Workers with a change of (-) 1 thousand females and (-) 6 thousand males.
- ❖ Accommodation & Restaurant sector observed a total change of (-) 8 thousand workers and the change of (-) 8 thousand was observed in male workers only.
- ❖ IT/BPO sector observed a total change of (+) 26 thousand Workers with a change of (+) 15 thousand males and (+) 11 thousand females.

CHAPTER -I

INTRODUCTION

- **1.1** Labour Bureau, an attached Office of Ministry of Labour & Employment has been collecting and disseminating information on various facets of labour like wages, earnings, productivity, absenteeism, labour turnover, industrial relations, working and living conditions and evaluation of working of various labour enactments etc. Information disseminated by Labour Bureau plays an important role for advising Government for formulation and implementation of employment policies and procedures in the country.
- 1.2 It is now widely accepted that Labour Statistics plays an essential role for the formulation and evaluation of policies, which helps to increase understanding of common problems, explain actions and mobilize interests related to employment in the country. Labour Bureau works with independence and high professional standards to provide relevant, timely and reliable labour statistics in the country as well as to International organizations.
- **1.3** Labour Bureau had been conducting Quarterly Employment Surveys (QES) in some selected labour-intensive and export-oriented sectors to assess the effect of economic slowdown on employment in India since January, 2009. 28 such surveys had been conducted by Labour Bureau till December, 2015. Sample size for these surveys was limited to around 2000 units and 8 sectors in 11 selected states only.
- 1.4 Due to immense utility of QES, it has been decided by Ministry of Labour & Employment to conduct new series of QES on a large scale by enlarging the sample size and enhancing sector coverage under the survey so that employment situation for a sizeable segment of Non-Farm Industrial economy of India over successive quarters may be assessed. An Expert Group under the chairmanship of Professor S.P. Mukherjee had been constituted for guiding Labour Bureau in respect of statistical technicalities of the survey. Terms of Reference (TOR) and composition of Expert Group are given in **Annexure-IV**. On recommendations of the Expert Group, sample size has been increased to around 10,600 and 8 sectors covering all the States/UTs in the country.
- 1.5 Accordingly, report of first round was released with a total estimate of 205.22 lakhs employment in eight sectors at all India level as on 1st April, 2016 (reference period of the 1st quarter), whereas estimates from the

Second round of Quarterly Employment Survey reveals that there was an overall increase of 77 thousand workers over the previous quarter i.e. 1st July 2016 over 1st April 2016, across 8 sectors at all India level.

1.6 Objective of the survey

The new series of Quarterly Employment Survey (QES) provides

- (i) Short-term (Quarterly basis) employment estimates for sizeable segment of Non-farm Industrial economy covering 8 important sectors of the Indian economy viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and Information & Technology (IT)/ Business Process Outsourcing (BPO).
- (ii) To measure relative change in employment situation over successive quarters in the segment of Indian Economy as described in (i) above.

The present survey collects information on the employment as on 01 Oct 2016 in respect of number of males/females, full-time & part-time, regular, contract & casual employment by economic activity.

1.7 Scope and coverage

QES is an establishment survey and provides change in non-agricultural/non- farm employment in the selected sectors. All establishments in 8 sectors viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and (IT)/(BPO), engaged in production or distribution of goods or services other than for the sole purpose of own consumption are selected on the basis of data of latest Economic Census (2012-13), is the scope of the survey. The scope of the survey was further limited to all the establishments having 10 or more workers in these 8 selected sectors. The 8 selected sectors constitute around 81 percent of the total employment of units with 10 or more workers.

In each of 8 Sectors, units are further divided into six size classes based on the size of employment viz. 10-39 workers, 40-99 workers, 100-499 workers, 500-999 workers, 1000-4999 workers and more than 4999 workers. The geographical coverage of the Quarterly Employment Survey (QES) has been extended to the entire country.

1.8 Sampling Design and Estimation procedure

The details of sampling design and estimation procedure used in the survey are given in **Chapter-II.**

1.9 Schedule/ Questionnaire of the Survey

The schedule for QES contains information on Identification particulars, establishment particulars, employment with breakup of characteristics such as gender, type and nature, vacancies details and social security benefits. A copy of the schedule is placed at **Annexure-III**.

1.10 Pilot Survey

A Pilot test of schedule was conducted in the states of Meghalaya and Assam under QES to develop field procedure, testing of schedule, cost of the survey, which helped in planning of the survey and training of investigators for filling the schedule.

1.11 Limitations of QES

The estimates of the present round QES are based on Sample Survey having some limitations as mentioned below:

- (i) The QES is basically an establishment survey for collecting information on employment in the unit; therefore, it does not provide any information on unemployment in the country. Unemployment is generally captured by household survey.
- (ii) The survey is based on either record or response of the unit. However, verification of record has not been resorted to for collection of data.
- (iii) The Fieldwork for 6th Economic Census was conducted during January, 2013 to April, 2014 in collaboration with State/UT Governments. Therefore, use of 6th Economic Census data as a frame has some limitations in measurement of current employment scenario in the country.
- (iv) The Collection of Statistics Act-2008, was not applied to QES. Hence, all the information provided by the selected unit/ establishment is on a voluntary basis.

CHAPTER II

EMPLOYMENT SCENARIO IN SELECTED SECTORS

- **3.1** Present Quarterly Employment Survey (QES) is the 3rd in the series with enlarged sample size selected in 8 major sectors of the Indian economy viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and (IT)/(BPO).
- **3.2** This chapter mainly deals with the information on changes in important characteristics of non-farm employment in the country having 10 or more workers in the 8 selected sectors under the present survey.
- **3.3** Information, in the present survey, was collected from 10,630 units from the panel, in the 8 sectors throughout the country, out of which 10576 units canvassed were common to both rounds of QES i.e. Previous (with reference date as 1st Jul 2016) and Present (with reference date 1st Oct 2016). The change estimates are generated on the basis of 10576 units common to both rounds. Field work for data collection for the present survey was carried out during Oct 2016 to Dec 2016 at all India level. Sector-wise details of number of units in sampling frame and common units surveyed in the present survey are given in the **Table-3.1**.

Ta	Table: 3.1: Sector wise number of common units surveyed 3rd Round of QES								
S. No.	Sector	Units in Frame	Common Sample (Covered between Previous and Current round of QES)						
1	Manufacturing	181412	5007						
2	Construction	8816	407						
3	Trade	52272	1525						
4	Transport	12796	499						
5	Accommodation & Restaurant	31112	1014						
6	IT/ BPO	5034	313						
7	Education	185525	1426						
8	Health	30478	385						
	Total	5,07,445	10, 576						

ESTABLISHMENTS

3.4 Distribution of Sample Establishments by rural & urban area

At all-India level, among the sample establishments covered under the survey, 71 per cent establishments were in urban areas and 29 per cent in rural areas. Sector-wise details by rural & urban are given in **Table 3.2**.

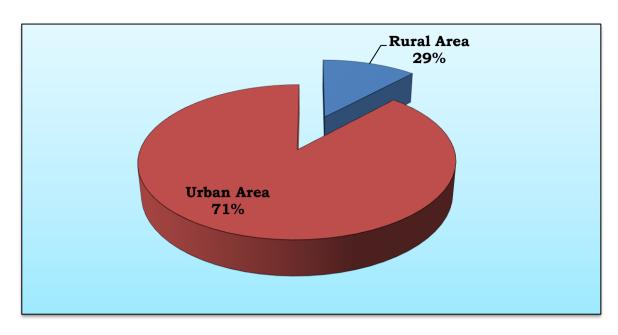


Figure 3.1: Distribution of Sample Establishments by rural & urban area

Table: 3.2: Percentage distribution of sample establishments by rural & urban area in 8 selected sectors and Total							
S. No.	Sector	(%) in Rural Area	(%) in Urban Area				
1	Manufacturing	36	64				
2	Construction	21	79				
3	Trade	16	84				
4	Transport	20	80				
5	Accommodation & Restaurant	16	84				
6	IT/ BPO	3	97				
7	Education	42	58				
8	Health	21	79				
	All Sector	29	71				

Sector-wise analysis reveals that highest percentage of 42 per cent samples units in rural area was recorded in Education sector and 97 per cent in IT/ BPO for urban area.

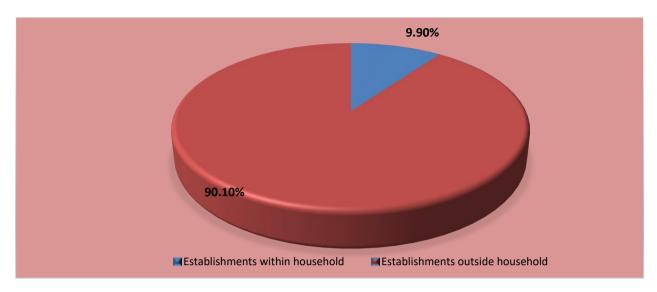


Figure 3.2: Distribution of Sample Establishments by location.

Around 90.10% per cent of sample establishments covered under the survey were located outside the household as compared to 9.90 per cent of sample establishments were within households. The percentage distribution of sample establishments covered under the survey by rural & urban areas and by location is presented in the **Table-A1**.

3.5 Distribution of Sample Establishments by Usual Operational nature

At all-India level by operational nature, 93.64 per cent of sample establishments covered under the survey were of Perennial nature, 6.11 per cent of Seasonal and 0.25 per cent of Casual nature. Details of percentage distribution of sample establishments by usual operational nature for 8 sectors are given in the **Table-A2**.

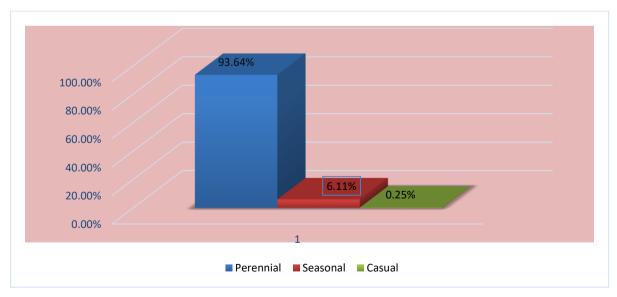


Figure 3.3: Distribution of Sample Establishments by Usual Operational Nature

3.6 Distribution of Sample Establishments by Ownership

The present survey reveals that 12.31 per cent sample establishments were under Government/ PSU ownership and 87.69 per cent under Private ownership. Ownership of Private sector (87.69%) is total of Propriety ownership (43.05%), Partnership (16.58%), Company (20.88%), SHG (2.19%), Co-operatives (0.98%), Non-profit Institutions (2.40%) and others (1.61%). The sector-wise details are placed in the **Table-A4**.

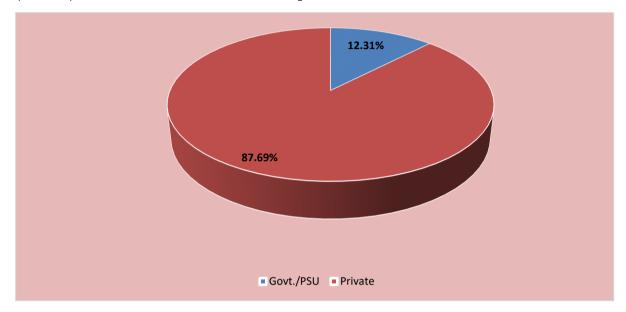


Figure 3.4: (%) Distribution of Sample Establishments by Ownership

CHANGES IN EMPLOYMENT: 1st OCT 16 OVER 1st JUL 16

Estimates from present Quarterly Employment Survey reveal that there was an overall increase of 32 thousand workers over the previous quarter i.e. 1st Oct 2016 over 1st July 2016, across 8 sectors at all India level. Manufacturing, IT/BPO sector contributed with an estimated increase of total 0.50 Lakh workers whereas there was a decline of total 0.18 lakh workers in Construction, Trade, Accommodation & Restaurant and Education sectors. Further, there was no increase & decrease in Transport and Health sector

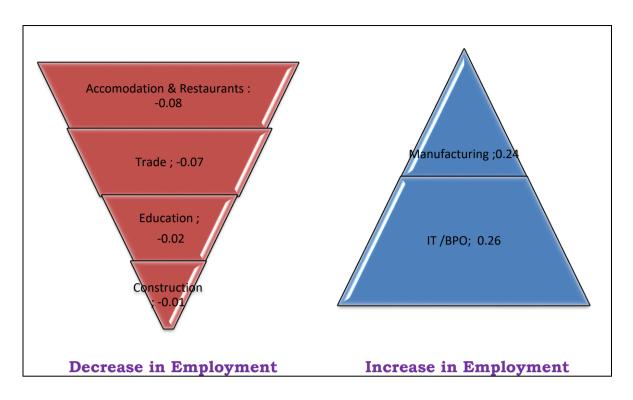


Figure 3.5: Sector wise Change in Total Employment (in Lakhs Growth)

3.7 Changes in Total Employment in Eight Selected Sectors

At all-India level, estimated change in employment in 8 selected sectors stood at +32 thousand in the country. Sector-wise composition of change in employment in eight sectors is given in **Table 3.3**.

Table 3.3: Estimated Change in Employment in eight selected sectors								
(in la								
S. No.	Sector	Total Change in Employment						
1	Manufacturing	0.24						
2	Construction	-0.01						
3	Trade	-0.07						
4	Transport	0.00						
5	Accommodation & Restaurant	-0.08						
6	IT/ BPO	0.26						
7	Education	-0.02						
8	Health	0.00						
	Total	0.32						

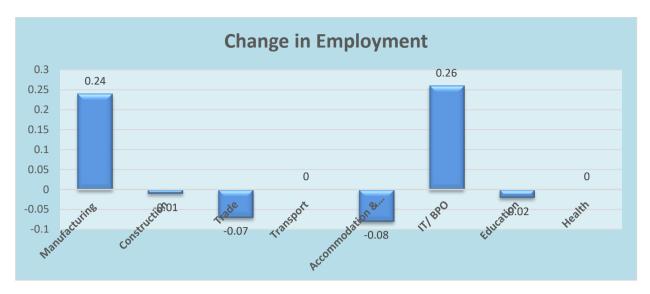


Figure 3.6: Sector wise Change in Total Employment (in Lakhs)

Table 3.3 reveals two sectors viz. manufacturing and IT/BPO sectors experienced a total increase of 0.50 lakh estimated employment, over previous round. IT/BPO sector experienced highest increase of 26 thousand workers followed by Manufacturing 24 thousand workers.

Four sectors viz. Construction, Trade, Accommodation & Restaurant and Education experienced a total decline of 0.18 lakhs in estimated employment over previous round. In Accommodation & Restaurant Sector there was a decline of 8 thousand workers followed by decline of 7 thousand workers in Trade and decline of 2 thousand and 1 thousand workers in Education and Construction Sectors respectively.

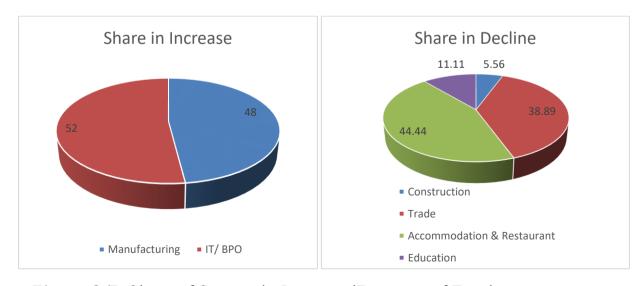


Figure-3.7: Share of Sectors in Increase/Decrease of Employment

3.8 Distribution of Change in Total Employment by Self Employee & Employee

Survey results revealed that, out of +32 thousand total change in Employment, Self-Employed contributed with a decrease of -1 thousand and Employees contributed with an increase of 33 thousand. Sector-wise details of Change in Total Employment by type of employment is presented in **Table 3.4**.

•	Table 3.4: Sector-wise Change of Employment in Self Employed & Employees									
S. No	Sector			Chan Em _l (i:						
		Self-Em	ployed	Emplo	yees	T	otal			
		Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16			
1	Manufacturing	0.11	-0.01	-0.23	0.25	-0.12	0.24			
2	Construction	0.02	-0.01	-0.25	0.00	-0.23	-0.01			
3	Trade	0.07	-0.01	0.19	-0.06	0.26	-0.07			
4	Transport	0.00	0.00	0.17	0.00	0.17	0.00			
5	Accommodatio n & Restaurant	0.03	0.02	-0.02	-0.10	0.01	-0.08			
6	IT/ BPO	0.00	-0.01	-0.16	0.27	-0.16	0.26			
7	Education	0.01	0.00	0.50	-0.02	0.51	-0.02			
8	Health	0.04	0.01	0.29	-0.01	0.33	0.00			
	Total	0.28	-0.01	0.49	0.33	0.77	0.32			

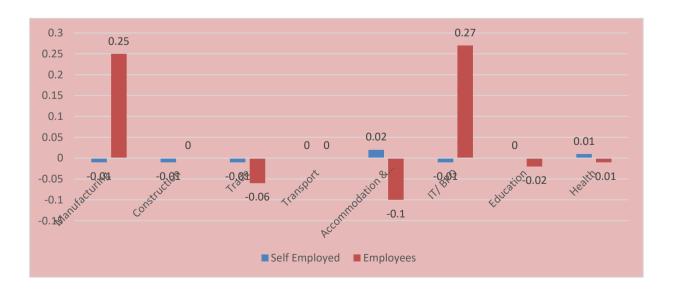


Figure-3.8: Sector wise Increase/Decrease by type of Employment

Table 3.4 reveals that in case of self-employed there is an increase in Accommodation & Restaurant and Health sector while in case of employees, there was an increase in estimated workers in Manufacturing and IT/BPO.

3.9 Distribution of Change in Total Employment by Gender

Out of the total estimated change in employment of +32 thousand, male workers accounted for 18 thousand increase and female workers accounted for 14 thousand increase at all India level.

	Table 3.5: Estimated Change in Employment in Eight Sectors by Gender (in lakh)								
		Ma	le	Fe	emale	Total Em	ployment		
S. No	Sector	Jul over Apr'16	Oct over Jul'1 6	Jul over Apr'1 6	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16		
1	Manufacturing	-0.02	0.49	-0.10	-0.25	-0.12	0.24		
2	Construction	-0.16	0.01	-0.07	-0.02	-0.23	-0.01		
3	Trade	0.18	-0.06	0.08	-0.01	0.26	-0.07		
4	Transport	0.09	-0.01	0.08	0.01	0.17	0.00		
5	Accommodation & Restaurant	0.01	-0.08	0.00	0.00	0.01	-0.08		
6	IT/ BPO	0.01	0.15	-0.17	0.11	-0.16	0.26		
7	Education	0.15	-0.32	0.36	0.30	0.51	-0.02		
8	Health	0.13	0.00	0.20	0.00	0.33	0.00		
	Total	0.39	0.18	0.38	0.14	0.77	0.32		

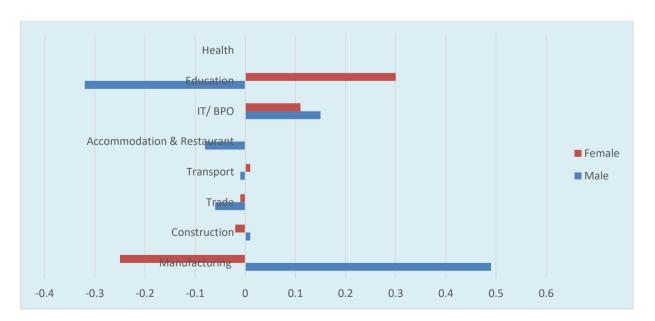


Figure-3.9: Change in Total Employment by Gender

As presented in **Table 3.5**, the maximum increase of 49 thousand among male worker was observed in Manufacturing Sector followed by 15 thousand and 1 thousand increase in IT/BPO and construction sectors respectively. However, highest decline among male workers, 32 thousand, was observed in Education sector followed by 8 thousand, 6 thousand and 1 thousand in Accommodation & Restaurant, Trade and Transport Sectors respectively.

Maximum increase among female workers, 30 thousand was observed in Education Sector followed by 11 thousand and 1 thousand in IT/BPO and Transport sectors respectively. Whereas highest decline among female workers, 25 thousand was observed in manufacturing Sector followed by 2 thousand and 1 thousand in Construction and Trade sectors respectively.

3.10 Distribution of Change in Total Employment by Duration of Work (Full Time/ Part Time)

Change in Total Employment by full-time/ part-time in respect of 8 sectors is presented in **Table-3.6**. The result reveals that there was an increase of 69 Lakh in Full time while a decrease of 0.37 Lakh in part time workers.

	Table 3.6: Change in Total Employment by Full Time/ Part Time (in Lakh)									
		Full T	'ime	Part 1	`ime	Total Employment				
S. No.	Sector	Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16			
1	Manufacturing	0.59	0.27	-0.71	-0.03	-0.12	0.24			
2	Construction	-0.20	0.05	-0.03	-0.06	-0.23	-0.01			
3	Trade	0.35	0.00	-0.09	-0.07	0.26	-0.07			
4	Transport	0.15	0.02	0.02	-0.02	0.17	0.00			
5	Accommodation & Restaurant	0.06	0.01	-0.05	-0.09	0.01	-0.08			
6	IT/ BPO	-0.18	0.3	0.02	-0.04	-0.16	0.26			
7	Education	0.59	0.00	-0.08	-0.02	0.51	-0.02			
8	Health	0.33	0.04	0.00	-0.04	0.33	0.00			
	Total	1.69	0.69	0.69	-0.37	-0.37	0.32			

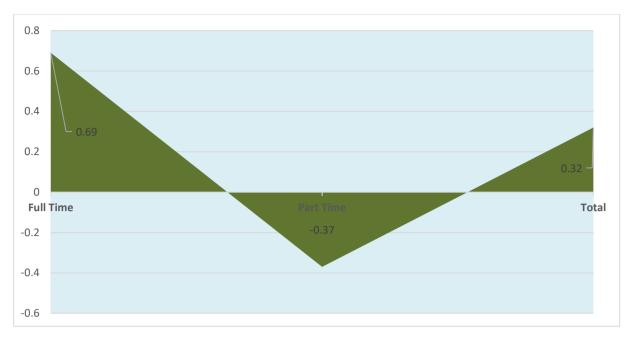


Figure-3.10: Change in Total Employment by duration of work as Full Time/Part Time (in lakhs).

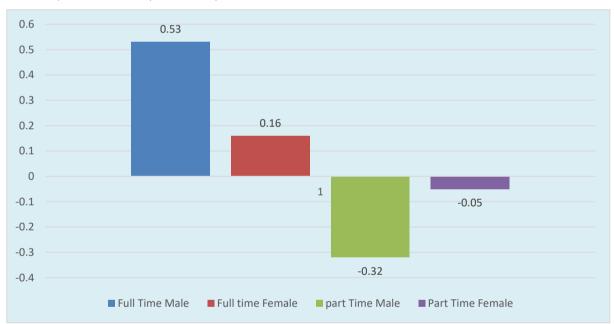


Figure-3.11: Change in Total Employment by Duration of Work and Gender (in lakhs)

3.11 Distribution of Change in Employees (Excluding Self-Employed from Total Employment) by Nature of Job

Table 3.7 reveal that there was an increase of 78 thousand and 3 thousand in Regular workers and Casual workers over previous quarter respectively whereas the Contract workers declined by 48 thousand.

	Table 3.7: Estimated Change in No. of Employees in 8 Sectors by nature of job (in lakh)								
		Reg	ular	Cont	tract	Cas	ual	Tot	al
S. No.	Sector	Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'16	Jul over Apr'16	Oct over Jul'1 6
1	Manufacturing	0.17	-0.01	-0.27	0.20	-0.13	0.06	-0.23	0.25
2	Construction	0.03	0.15	0.02	-0.03	-0.30	-0.12	-0.25	0.00
3	Trade	0.49	-0.02	-0.15	-0.04	-0.15	0.00	0.19	-0.06
4	Transport	0.23	-0.02	-0.03	-0.01	-0.03	0.03	0.17	0.00
5	Accommodation & Restaurant	0.04	0.02	-0.11	-0.09	0.05	-0.03	-0.02	-0.10
6	IT/ BPO	-0.15	0.10	0.00	-0.01	-0.01	0.18	-0.16	0.27
7	Education	0.38	0.33	0.14	-0.29	-0.02	-0.06	0.5	-0.02
8	Health	-0.07	0.23	0.37	-0.21	-0.01	-0.03	0.29	-0.01
То	tal Employees	1.12	0.78	0.77	-0.48	-0.49	0.03	0.06	0.33

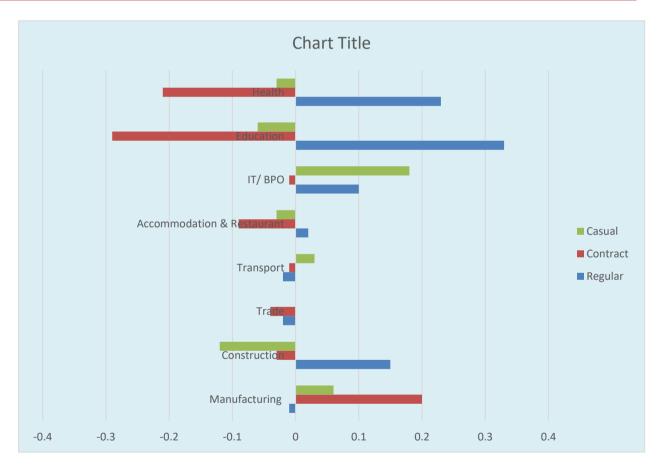


Figure 3.12: Distribution of Change in Total Employment by Nature of Job

Annexure-I

Detailed Tables

Table A1: Percentage Distribution of sample establishments area & sector wise

S. No.	Sector	Establis ho	hments ousehold	_	Establishments outside household		
		Rural	Urban	Total	Rural	Urban	Total
1	Manufacturing	46.37	53.63	10.17	34.44	65.56	89.83
2	Construction	25.37	74.63	16.46	19.71	80.29	83.54
3	Trade	39.04	60.96	9.57	13.13	86.87	90.43
4	Transport	36	64	5.01	19.62	80.38	94.99
5	Accommodation & Restaurant	27.27	72.73	13.02	14.51	85.49	86.98
6	IT/ BPO	16.67	83.33	5.75	2.37	97.63	94.25
7	Education	38.18	61.82	7.71	42.63	57.37	92.29
8	Health	20	80	10.39	20.58	79.42	89.61
	Total	38.97	61.03	9.90	27.88	72.12	90.1

Table A2: Percentage Distribution of sample establishments by usual operational nature

S. No.	Sector	Perennial	Seasonal	Casual
1	Manufacturing	88.70	10.96	0.34
2	Construction	91.40	7.62	0.98
3	Trade	98.68	1.25	0.07
4	Transport	94.59	5.41	0.00
5	Accommodation & Restaurant	98.42	1.28	0.30
6	IT/ BPO	99.04	0.96	0.00
7	Education	99.72	0.28	0.00
8	Health	99.74	0.00	0.26
	Total	93.64	6.11	0.25

Table A3: Percentage Distribution of sample establishments by currently operational status

S. No.	Sector	Fully	Partly
1	Manufacturing	94.09	5.91
2	Construction	94.59	5.41
3	Trade	98.10	1.9.
4	Transport	98.00	2.00
5	Accommodation & Restaurant	97.73	2.27
6	IT/ BPO	98.4	1.6
7	Education	98.95	1.05
8	Health	98.7	1.3
	Total	96.17	3.83

Table A4:Percentage Distribution of sample establishments by ownership type

S. No.	Sector	Govt./ PSU	Proprie tary	Partner -ship	Comp- any	SHG	Co- operat ive	NPI	Othe rs
1	Manufacturing	2.42	48.15	20.83	25.18	2.12	1.00	0.08	0.22
2	Construction	10.32	40.53	14.50	33.91	0.00	0.00	0.25	0.49
3	Trade	4.39	47.34	20.92	22.89	3.15	0.79	0.13	0.39
4	Transport	34.47	30.06	8.82	23.05	1.20	1.00	0.20	1.20
5	Accommodatio n & Restaurant	6.41	55.52	19.33	10.45	5.33	0.59	1.48	0.89
6	IT/ BPO	4.15	24.92	7.03	61.34	1.28	0.32	0.32	0.64
7	Education	47.69	22.79	2.59	1.54	0.84	1.82	14.38	8.35
8	Health	36.88	36.10	8.58	6.49	0.52	1.04	6.49	3.90
	Total	12.31	43.05	16.58	20.88	2.19	0.98	2.40	1.61

Table A5: Percentage Distribution of sample establishments by registration information

S. No.	Sector	Registered	Not Registered
1	Manufacturing	96.46	3.54
2	Construction	95.82	4.18
3	Trade	98.16	1.84
4	Transport	96.19	3.81
5	Accommodation & Restaurant	97.93	2.07
6	IT/ BPO	98.72	1.28
7	Education	97.19	2.81
8	Health	97.4	2.6
	Total	97.01	2.99

Table A6: Percentage Distribution of sample establishments by shift of operation

S. No.	Sector	1 Shift	2 Shift	3 Shift
1	Manufacturing	79.53	13.36	7.11
2	Construction	91.4	5.65	2.95
3	Trade	83.8	11.67	4.53
4	Transport	75.15	13.23	11.62
5	Accommodation & Restaurant	56.41	29.49	14.1
6	IT/ BPO	73.8	14.38	11.82
7	Education	91.52	8.06	0.42
8	Health	32.99	24.42	42.59
	Total	77.93	14.08	7.99

Table A7: Percentage Distribution of sample establishments by maintain of record on employment

	a .	Maintain record	d of Employment (%)
S. No.	Sector	Yes	No
1	Manufacturing	96.35	3.65
2	Construction	97.05	2.95
3	Trade	98.49	1.51
4	Transport	97.60	2.40
5	Accommodation & Restaurant	97.34	2.66
6	IT/ BPO	100.00	0.00
7	Education	99.37	0.63
8	Health	100.00	0.00
	Total	97.48	2.52

Table A8: Distribution of Change in Total Employment by gender & full time /part time (in lakh)

S1.	Sector	Full	Full Time		Time	Total	
No.	Sector	Male	Female	Male	Female	Male	Female
1	Manufacturing	0.47	-0.20	0.02	-0.05	0.49	-0.25
2	Construction	0.06	-0.01	-0.05	-0.01	0.01	-0.02
3	Trade	-0.01	0.01	-0.05	-0.02	-0.06	-0.01
4	Transport	0.01	0.01	-0.02	0.00	-0.01	0.01
5	Accommodation & Restaurant	0.01	0.00	-0.09	0.00	-0.08	0.00
6	IT/ BPO	0.19	0.11	-0.04	0.00	0.15	0.11
7	Education	-0.24	0.24	-0.08	0.06	-0.32	0.30
8	Health	0.01	0.03	-0.01	-0.03	0.00	0.00
	Total		0.19	-0.32	-0.05	0.18	0.14

Table A9: Distribution of Change in No. of Self-employed by gender and full time /part time (in lakh)

S1.	Sector	Full	Time	Part '	Time	Total		
No.	Sector	Male	Female	Male	Female	Male	Female	
1	Manufacturing	-0.01	0.00	-0.02	0.02	-0.03	0.02	
2	Construction	0.00	0.00	-0.01	0.00	-0.01	0.00	
3	Trade	-0.01	0.00	0.00	0.00	-0.01	0.00	
4	Transport	0.00	0.00	0.00	0.00	0.00	0.00	
5	Accommodation & Restaurant	0.01	0.00	0.00	0.01	0.01	0.01	
6	IT/ BPO	-0.01	0.00	0.00	0.00	-0.01	0.00	
7	Education	0.00	0.01	0.00	-0.01	0.00	0.00	
8	Health	0.02	0.00	-0.01	0.00	0.01	0.00	
	Total		0.01	-0.04	0.02	-0.04	0.03	

Table A10: Distribution of Change in No. of Employees by gender and full time /part time (in lakh)

S1.	Sector	Full	Time	Part	Time	Total	
No.	Sector	Male	Female	Male	Female	Male	Female
1	Manufacturing	0.48	-0.20	0.04	-0.07	0.52	-0.27
2	Construction	0.06	-0.01	-0.04	-0.01	0.02	-0.02
3	Trade	0.00	0.01	-0.05	-0.02	-0.05	-0.01
4	Transport	0.01	0.01	-0.02	0.00	-0.01	0.01
5	Accommodation & Restaurant	0.00	0.00	-0.09	-0.01	-0.09	-0.01
6	IT/ BPO	0.20	0.11	-0.04	0.00	0.16	0.11
7	Education	-0.24	0.23	-0.08	0.07	-0.32	0.30
8	Health	-0.01	0.03	0.00	-0.03	-0.01	0.00
	Total		0.18	-0.28	-0.07	0.22	0.11

Table A11: Distribution of Change in No. of Employee by employment status and gender (in lakh)

S1.	Sector	Regular		Contract		Casual		Total	
No.	Sector	Male	Female	Male	Female	Male	Female	Male	Female
1	Manufacturing	0.37	-0.38	0.11	0.09	0.07	-0.01	0.55	-0.30
2	Construction	0.13	0.02	-0.03	0.00	-0.08	-0.04	0.02	-0.02
3	Trade	-0.03	0.01	-0.03	-0.01	0.01	-0.01	-0.05	-0.01
4	Transport	-0.02	0.00	-0.02	0.01	0.03	0.00	-0.01	0.01
5	Accommodation & Restaurant	0.03	-0.01	-0.09	0.00	-0.03	0.00	-0.09	-0.01
6	IT/ BPO	0.08	0.02	-0.03	0.02	0.11	0.07	0.16	0.11
7	Education	0.16	0.17	-0.38	0.09	-0.10	0.04	-0.32	0.30
8	Health	0.06	0.17	-0.06	-0.15	-0.01	-0.02	-0.01	0.00
	Total	0.78	0.00	-0.53	0.05	0.00	0.03	0.25	0.08

Annexure II

Concepts and Definitions

The important concepts and definitions adopted for the Quarterly Employment Survey (QES) are explained below:

1.12.1 Enterprise

Enterprise is an undertaking engaged in production and/or distribution of goods and/or services other than for the sole purpose of own consumption, which has autonomy in respect of financial and investment decision making, as well as the authority for allocating resources for production of goods and services. It may be engaged in one or more economic activities at one or more locations. It is a sole legal unit. Thus an enterprise having a few branches located in different places, each branch including headquarter (main office) is to be listed separately as an establishment.

1.12.2 Establishment/ Unit

The establishment is a unit situated in a single location in which predominantly one kind of economic activity is carried out such that at least a part of the goods and/or services produced by the unit goes for sale. The establishment is a physical entity where mainly one entrepreneurial activity (or sometimes more than one, with no separate accounts) is carried out.

1.12.3 Non-Agricultural/Non- Farm establishment

Establishments engaged in activities other than agricultural activities (like crop production & plantation, growing of tea, coffee, rubber, tobacco etc.) will be termed as non-agricultural establishments.

1.12.4 Industrial Sector

Goods or service producing segment of the economy is defined as Industrial Sector. For this survey Industrial sector includes Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurant and IT/BPOs.

1.12.5 Employment / Worker

Employment in this survey is the number of persons Self-employed, employed either directly by the establishment on regular/ casual basis / contract basis or through a contractor on contract basis.

All persons engaged in an economic activity /establishment either as owner, members of the household working as co-owner or partner or helping the owner in running the establishment, whether hired or not, besides regular and salaried employees, casual/ daily wage labourers would be considered as workers for that establishment. For the present survey all paid and unpaid apprentices will also be regarded as workers. Persons, who despite their attachment to economic activity, abstained themselves from work for reason of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work, constitute workers.

1.12.6 Employee

Employee relates to the person engaged by the unit whether for wages or not, in work connected directly or indirectly with the process and includes all administrative, technical and clerical staff, supervision or management, as also labour in production/ services.

1.12.7 Self employed

Persons who operated their own establishment or were engaged independently in a profession or trade on own-account or with one or a few partners were deemed to be self-employed. The essential feature of the self-employed is that they have autonomy (decide how, where and when to produce) and economic independence (in respect of choice of market, scale of operation and finance) for carrying out their operation.

1.12.8 Full Time worker

Full-time worker is an employed person who works a minimum number of hours defined by his/ her employer.

1.12.9 Part Time worker

Part-time worker is an "employed person whose normal hours of work are less than those of comparable full-time workers".

1.12.10 Regular Worker

The person who has worked in non-farm enterprises and, in return, received salary or wages on a regular basis (i.e. not on the basis of daily or periodic renewal of work contract). This category included not only persons getting time wage but also persons receiving piece wage or salary and paid apprentices, both full time and part-time.

1.12.11 Contract Worker

As per the definition of contract worker, a worker is deemed to be employed as contract worker when he/she is hired in connection with the work of an establishment by or through a contractor. Contract workmen are indirect employees; persons who are hired, supervised and remunerated by a contractor who, in turn is compensated by the establishment. For the purpose of present survey, in addition to the above mentioned category of workers, the term contract workers includes workers whose work are governed by a contract agreement either in writing or oral directly by the establishment.

1.12.12 Casual Worker

A person, who is casually engaged in non-farm enterprises and, in return, received wages according to the terms of the daily or periodic work contract, is a casual worker.

Sampling Design and Estimation procedure

2.1 Introduction

An Expert Group was constituted under the Chairmanship of Professor S.P. Mukherjee for examining, finalizing the coverage as well as sample size, assessing the resources required in terms of man-power and financial and finalization of Report for Quarterly Employment Survey (QES). Expert Group in a series of meetings discussed the various issues in threadbare and finalized the sample size, sample design and survey methodology.

2.2 Unit of Enumeration

The unit of enumeration for the present round of QES are the establishments with 10 or more workers in the 8 selected sectors viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and (IT)/ (BPO), as selected in first Round of QES.

2.3 Classification of Industry

All eight sectors viz. Manufacturing (NIC-08; 10 to 33), Construction (NIC-08; 41, 42 & 43), Trade (NIC-08; 45,46 & 47), Transport (NIC-08; 49 to 53), Education (NIC-08; 85), Health (NIC-08; 86,87 & 88), Accommodation & Restaurants (NIC-08; 55 & 56) and IT/BPO (NIC-08; 62 & 63) are classified as per the National Industrial Classification (NIC)-2008 at two digit level.

2.4 Sampling Frame

The sample needed to be representative of establishment with 10 or more workers in eight sectors in India. The sampling frame used for present survey is all establishments with 10 or more workers in Sixth Economic Census (2012-13) in eight major sector viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and IT/BPOs.

2.5 Reference Date

The Third round of revised QES covered whole of the Indian Union. Each quarterly employment survey covers a period of 3 months which is termed a round. **The reference date** in the most of the information items is the first day of the quarter in which survey is conducted. For the present survey, the reference date is **1**st **Oct 2016**.

2.6 Sampling Design

For selecting a fixed Panel of 10600 units a Stratified Simple Random Sampling (Without Replacement) has been adopted for the new series of QES following the recommendation of the Expert Group under the chairmanship of Prof. S.P. Mukherjee. The new series of QES provides employment estimates for eight sectors viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and IT/BPOs selected on the basis of data of latest Sixth Economic Census (2012-13). The 8 sectors constitute around 81 percent of the Total Employment of units with 10 or more workers in the 6th Economic Census.

2.7 Sample Size

The sample size for the survey was around 10,600 units. Each of the eight sectors, within a state, is further divided into six size classes based on the size of employment. Accordingly number of units are being selected proportionately (Proportional allocation) to the number of units in the population (frame) in the respective strata viz State by Sector by Size Class (see **Table 3.1**) by using Simple Random Sampling (Without Replacement). Allotment of minimum of 10 sample units, at a sector level in each state (i.e. State X Sector), was ensured, further ensuring the proportional representation in each size class.

2.8 Stratification and selection of unit

Since the characteristics under study is mainly related to employment, which in turn is related to number of establishments, the stratification is done on the basis of size class (employment size of the establishment) and number of establishments. The sampling frame is divided within each state into eight strata viz. Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation & Restaurants and IT/BPOs. Further 8 of each stratum (sector) is divided into six sub-strata based on the size of employment (size classes 1 to 6) of an establishment viz. 10-39 workers, 40-

99 workers, 100-499 workers, 500-999 workers, 1000-4999 workers and more than 4999 workers. Thus the stratum/segment for the present sample design is **State** *X* **Sector** *X* **Size Class**. Accordingly, units were selected based on proportional allocation using simple random sampling (without replacement).

2.9 Estimation procedure:

2.9.1 Notations:

i = subscript for ith State/UT [i= 1 to 36]

j= subscript for j^{th} Sector [j=1 to 8]

k= subscript for kth Size Class [k= 1 to 6]

t= subscript for th unit

n= number of sample units surveyed in a particular stratum

N= Total number of units in a particular stratum

y= observed value of characteristic y under estimation.

 \hat{Y} = estimates of population total Y for characteristics y.

 n_{ijk} units are selected from N_{ijk} units in ijk^{th} stratum with equal probability without replacement.

The inflation factor for generating Level Estimates used in this design is

$$\frac{N_{ijk}}{n_{ijk}}$$

The previous round inflation factor is used in current round for generating Change Estimates (for measuring changes over successive quarters).

2.9.2 Estimation of aggregates for a particular sector:

The estimate Y of the characteristic y of the kth sub stratum (Size Class) within j^{th} stratum (Sector) in the i^{th} State denoted by \hat{Y}_{ijk} is obtained as:

$$\hat{Y}_{ijk} = \frac{N_{ijk}}{n_{ijk}} \sum_{t=1}^{n_{ijk}} y_{ijkt}$$

The overall estimate Y at the all India level is obtained by summing the stratum estimate over all strata belonging to all India.

$$\hat{Y} = \sum_i \sum_j \sum_k \hat{Y}_{ijk}$$

Annexure-IV

Description of Activity as per NIC-2008 code at 2-Digit Level

NIC - 2 Digit level code	Description of the Activity
10	Manufacture of food products
11	Manufacture of beverages
12	Manufacture of tobacco products
13	Manufacture of textiles
14	Manufacture of wearing apparel
15	Manufacture of leather and related products
16	Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
17	Manufacture of paper and paper products
18	Printing and reproduction of recorded media
19	Manufacture of coke and refined petroleum products
20	Manufacture of chemicals and chemical products
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products
22	Manufacture of rubber and plastics products
23	Manufacture of other non-metallic mineral products
24	Manufacture of basic metals
25	Manufacture of fabricated metal products, except machinery and equipment
26	Manufacture of computer, electronic and optical products
27	Manufacture of electrical equipment
28	Manufacture of machinery and equipment n.e.c.
29	Manufacture of motor vehicles, trailers and semi-trailers
30	Manufacture of other transport equipment
31	Manufacture of furniture
32	Other Manufacturing
33	Repair and installation of machinery and equipment
41	Construction of buildings
42	Civil engineering
43	Specialized construction activities
45	Wholesale and retail trade and repair of motor vehicles and motorcycles
46	Wholesale trade, except of motor vehicles and motorcycles
47	Retail trade, except of motor vehicles and motorcycles
49	Land transport and transport via pipelines
50	Water transport
51	Air transport
52	Warehousing and support activities for transportation

53	Postal and courier activities
55	Accommodation
56	Food and beverage service activities
62	Computer programming, consultancy and related activities
63	Information service activities
85	Education
86	Human health activities
87	Residential care activities
88	Social work activities without accommodation

Annexure-V

Confidential

Round	Origin	1 Substituted
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Government of India

Ministry of Labour Employment Labour Bureau, Chandigarh (Quarterly Employment Survey)

I. Identification Partico1. Establishment	ulars						
1a). Name & Address							
1b). Name of the Owner(Do Government/Public Sector Underto	epartment name,in case of aking (PSU)]						
1c). Location (Within a Househol permanent Structure Outside Hou							
2. Rural/Urban (Code: Rural	-1; Urban-2)						
3. Frame Serial No.(copy from	n sample list)						
4. Sample Serial No.(copy fro	om sample list)						
5. NIC as per Frame (3 dig (copy from sample list)	git level)						
6. Description of the Ecor	nomic Activity						
7. Description of goods provided	oroduced/traded						
8. NIC at the time of visit (to be filled by supervisor)	t (5 digit level)						
9. Person contacted							
9a). Name & Designation							
9b). E-mail							
9c). Phone/Mobile							
10. In case of Substitution, (Code: Unit not in existence-1, Unit lock Access denied -3, Adequate co-operation 9)Specify	ked out for some time /temporary	j shutdown-2,					
11. Whether the unit is- (Code: Enterprise by itself-1, Main Office-2, Unit/ Branch of an enterprise-3,) (In case of '3', Give name and address of the Main Office)							
11a) Address of Main Office							

II.	Particulars of establishments			
1.	Usual nature of operation (perennial – 1, seasonal – 2, casual -3)			
2.	Current Operational Status (fully -1, partly - 2)			
3.	Ownership Code			
4.	Registration Information: whether the			
	Unit is registered or not (<i>Yes -1, No -2</i>)			
	offices registered of flot (res 1) 110 2)			
5.	If Yes, then enter the registration information using codes (Yes-1	, No-	2)	
	5.1 Shops and commercial establishments Act			
	5.2 Companies Act, 1956			
	5.3 Central Excise/Sales Tax Act			
	5.4 Factories Act, 1948			
	5.5 Societies Registration Act			
	5.6 Co-operative Societies Act			
	5.7 Directorate of Industries			
	5.8 KVIC/KVIB/DC: Handloom/Handicrafts			
	5.9 Act related to Building & Construction			
	5.10 Registered with other agencies, Specify			
6.	Year Since Operational under current ownership	Υ	Υ	Υ
7.	No of Shifts in Operation			

Codes for Ownership: item 3					
Public					
Government / PSU	1				
Private:					
Proprietary	2				
Partnership	3				
Company	4				
Self Help Group	5				
Cooperative	6				
Non Profit Institution	7				
Others	9				

III.	Em	ployment and Vacanc	ies de	etails:						
A)		you maintain any reco s-1, No-2	ord of	emplo	oyment	in your t	ınit?			
В)	B) Total Employment(As on 1 st day of the respective quarter)									
S1. 1	Vo.	Category		Full Ti	me	Part '	Гіте	To	otal	
		0 ,	Ma	ale F	emale	Male	Female	Male	Female	
1		Self Employed								
2		Employee								
3	,	Total								
C)		any Formal Skill Deve ur unit? Yes-1, No-2	lopm	ent Pro	ogramn	e conduc	eted in			
If y	es, j	for your staff only-1, for o	thers-	2 , for s	staff of y	our unit E	others-3			
D)	Vá	acancies/Recruitment								
1	Cui	rrent Vacancies (as on 1	st da	y of cu	rrent qu	ıarter)				
2	Rea	sons for vacancies (Cod	e; Yes	s-1; No-2	2)					
-	Res	ignation								
=	Ret	irement								
=	No	n-availability of Skilled	Man	Power	•					
-	Oth	ners (please specify)					_			
3	Nu	mber of posts created d	luring	g prece	ding Qı	ıarter				
4	Nu	mber of persons recruit	ed dı	ıring p	recedin	g Quarte:	r			
E)	Em	ployment Details of th	ıe Qu	arter(/	As on 1^{st}	day of the	respective q	uarter)		
S. N	0.	Employment Statu	s			Total	Employmo	ent		
					Male		Female		Total	
1		Regular (not on contra	act)							
2		Contract								
3		Casual								
4										
	F)	Education and Traini	_			_ ,	`	t day of the	respective	
S1.	I	quarter)(no Employment Status	ot appi	iicabie f	or Healt		ation sector) nployment	<u> </u>		
No.	1	mpioyment status	Ma	tria /	Matric		Graduate		Trained	
				tric/ ndary		:/Seconda it Under	or above	Total	Trained	
				elow	-	aduate				
1	Reg	gular(not on contract)								

2	Contract			
3	Casual			
4	Total			

G) Employment Details for the Quarter (As on 1st day of the respective quarter)

(i) Health								
1	Total Employment (to be	copied from	III B)					
2	Clinical	inical						
2.1	Medical							
2.2	Nursing	Nursing						
2.3	Paramedical							
3	Non Clinical	Matric/	Matric/Secondary	Graduate	Total			
	1,021 02222002	Secondary	but Under	or above				
		or below	Graduate					
3.1	Regular (not on contract)							
3.2	Contract							
3.3	Casual							
	Total							

(i)	Education				
1	Total Employment (to				
2	Teaching				
3	Non Teaching				
3.1	Librarian				
3.2	Lab Technician				
3.3	Others	Matric/	Matric/Secondar	Graduate	Total
		Secondary	y but Under	or above	
		or below	Graduate		
3.3.1	Regular (not on				
	contract)				
3.3.2	Contract				
3.3.3	Casual				
	Total				

IV. Social Security Benefits

Sl.	Social security Schemes	Whether	If Yes, number of
No.		applicable	employees Covered
		(yes – 1, no – 2,	
		not known-3)	
1	2	3	4
1	The Employees' State Insurance Act, 1948		
	The Employees' Provident Funds &		
2	Miscellaneous Provisions Act, 1952 (EPF & MP		
	Act)		
3	The Employees' Compensation Act, 1923		
4	The Maternity Benefit Act, 1961 (M.B. Act),		
5	The Payment of Gratuity Act, 1972		
6	Payment of Bonus Act, 1965		
7	Others		
/	(Specify)		

V. Particulars of field operations

Name of the Investigator								
Contact No./Mobile								
Date of Visit	D	D	Μ	Μ	Υ	Y	Y	Υ
Signature of the Investigator								
Name & Designation of the State official assisted								
Name of the Supervisor								
Signature of the Supervisor with date								
Date of Scrutiny/inspection								
Name of the Officer/Consultant in charge								

VI. Comments by Investigator

VII.	Comments by Supervisor		
