Sectoral Unemployment in India: Case of 2020

*Amit Joshi

ABSTRACT

Hunger and starvation still haunt large sections of rural India. Seasonal and permanent forced migration imposes serious problems for rural India. People are forced to migrate due to water scarcity, market connectivity, lack of infrastructure, and unemployment. This paper aims at understanding the trend of unemployment in India corresponding to the rise in labor force over the years. Using secondary data of National Sample Survey Organization, we are able toassess unemployment situation in major Indian sectors. It is evident in this study that unemployment will be a major concern in coming years, where people will be migrating from agricultural sector to other sectors. Lesser opportunities in other sectors will pose a huge problem of unemployment. It is estimated that all sectors except construction and mining will suffer deceleration in employment. Indeed, the government needs to frame economic policies to increase domestic production to boost the situation.

Keywords: Unemployment, Compound Annual Growth Rate, Gross Value-Added, Labor force

1. Introduction

Marx stated different components of the reserve group of labors. The 'latent reserve' considers those labor force who are not in the market system, that is they may be either working as unpaid household labor or maybe eking as scanty support of oneself in the edge of 'Third World Economies'. The 'stagnant reserve' incorporates those able-bodied people who are very nearly never employed, either during the boom period or even during the recession. Labor force which comprises of the 'floating reserve', jump between employed and unemployed, with crest and trough of the business cycle. For the past few years, very extensive volume of literature has taken shape on the subject of unemployment; means of curbing unemployment by introducing many government schemes, training and development centers, skill enhancement centers, developing entrepreneurship skills, motivating startups, etc. have all been initialized to improve the employment conditions in India. Still, the unemployment condition in India is increasing at an alarming rate as the increase in gross domestic production is not compensating to the increase in labor force .

Ministry of labor and employment in India compiles and shares the statistics on unemployment. It is done once in 5 years. National Sample Survey Organization conducts the sample studies. Before 2017 only five-year sample studies were conducted but since 2017 India has started collecting monthly, quarterly and yearly statistics of employment and unemployment. A non-government entity, the Centre for Monitoring Indian Economy in 2016 published month unemployment statistics. In India

National Sample Survey organization conducts the most authentic survey as they include the remote areas of the subcontinent. The organization uses two approaches to estimate the activity status of a person. The two approaches are "usual status" unemployment and "current status" unemployment. The usual status approach considers those unemployed people who did not have gainful work for a considerable time in a year preceding the date of the survey. They are able-bodied people looking for work. The Usual Principal Activity Status (UPS) is determined considering the time period criteria and refers to the activity status on which the person has been involved for a long part of the year. If a person was 'working' and/or was 'searching or available for work' for a considerable part of the year preceding the survey date, then the person is considered as a part of Labor Force. The weekly status approach considers those people as unemployed who did not get any work for a considerable time during the seven days preceding the survey date. A person is employed if the person is included in any one or more productive activities for a minimum of an hour a day in any of the days of the reference week. If an able-bodied person looks for work but does not get indulge in any productive activity, the person is considered unemployed. When the current activity status of the person is observed for each day in the reference week, it is termed as a Daily status approach. It estimates whether the person is employed or unemployed or the person is considered as a part of the labor force on the basis of his each day activity. It adopts half day as a measuring unit for calculating unemployment or employment. A person indulges in work for four hours or more but up to eight hours a day is

*Assistant Professor, ICFAI Business School, ICFAI University, Dehradun

considered as employed for one full day. If the person works for one to four hours a day is determined as employed for half day. If a person does not do work even for one hour a day he is considered as unemployed for the whole day.

Different issues related to employment and unemployment mainly social, economic, and psychological have been researched extensively. There is a simultaneous increase in the labor force and GDP in India, it becomes important to estimate and understand that if both the growths do not trade off each other the country may undergo acute unemployment. With the help of employment elasticity and compound annual growth rate, employment in various sectors of the Indian economy can be projected in the coming years and will help the policymakers to address those issues with high precision.

2. Status of unemployment in India

Unemployment is one of the growth indices of a country which projects the health of an economy. The unemployment rate is the most important measure of unemployment. It is the number of people unemployed divided by the people working under the labor force. In India, there are seven types of unemployment. The most common unemployment is Disguised Unemployment where even though the person seems to be employed but not needed. The person's productivity is zero. It is commonly found in the agricultural sector. India also faces Structural Unemployment, as there is a gap between the skill of the worker and job availability. The third most prominent unemployment in India is Seasonal Unemployment, as agriculture is the most dominant sector where more than fifty percent of the working population is engaged. Agriculture is seasonal in nature so the laborers are employed only till the season is favorable for agriculture the other types of unemployment in India include Vulnerable Unemployment wherein people are employed without any proper job contracts. Technological unemployment in which people lose their jobs because machines replace labor, Cyclical unemployment arise due to business cycle, and frictional unemployment occurs when people are unemployed for a short period during job switching. On June 1, 2019, The Periodic Labor Force Survey (PLFS) of the National Sample Survey Office (NSSO) released the data which show that the rate of unemployment in India during Financial Year 2018 was 5.3% in rural India and 7.8% in urban India, with overall unemployment rate of 6.1%. India's Unemployment Rate fell to 2.55 % in Dec 2018, from the previously estimated number of 2.56 % during Dec 2017. India's Rate of Unemployment from December 1991 to December 2018 had an average rate of 2.67 %.It reached to an all-time high of 3.18 % during Dec 2003 and as low as 2.27 % during Dec 2008. India's Population touched 1,332.00 million in March 2019. The country's Labor Force

Participation Rate (LFPR) fell to 51.93 % during Dec 2018. Table 1 shows India's Rate of Unemployment from the year 1991 to 2018.

Table 1: India's Unemployment Rate from 1991 to 2018

Year	Annual Unemployment rate
2007	2.399
2008	2.688
2009	2.475
2010	2.444
2011	2.519
2012	2.690
2013	2.823
2014	2.765
2015	2.782
2016	2.730
2017	2.557
2018	2.551

Source: www.ceicdata.co/world bank

According to State of India's Environment (SoE) In Figures, 2019 (ebook by By Rajit Sengupta, Kiran Pandey, the Young Indian population (age group 15years to 24 years) comprises of nearly one-fifth of India's population, according to the Census of 2011, till 2020, they are predicted to make up a third of the country's population The report states that the unemployment rate of Indian youth reduced to 32% in the age group between 20 years to 24 years, which comprises of 40% of India's labor force, is 32 percent. The unemployment rate among the educated population is alarming. It is 13.17% among people with minimum qualification as graduation from September-December 2018. During May-August 2017 the rate of unemployment was recorded to be 10.39 percent. The Periodic Labor Force Survey (PLFS) for the year 2017-2018 released by the National Sample Survey also show that the rate of unemployment grew with the level of education.

According to SoE, 2017, the primary reason for high rate of unemployment in India is due to lack of required skills for the available jobs. This requires immediate attention as India's population comprises 20 percent of the world's young population, and a major part of this young educated labor force is unskilled.

Report of the Union Ministry of Skill Development and Entrepreneurship highlight that 4.69 % of India's total labor force is skilled, as compared 52 % in the United

States of America, 68 % in the United Kingdom, 75 % in Germany, 80 % in Japan and 96 % in South Korea. The World Bank in 2019 estimated that India needs to generate 8.1 million jobs per annum to stabilize its employment rate. Identifying India's demographic dividend and the immediate requirement to generate jobs, the manufacturing sector has to create more job opportunities and provide good income opportunities. OECD on the economic outlook released in May 2019 reported that to eliminate structural bottlenecks and to enhance employment, the manufacturing sector has to play the dominant role. The International Labor Organization projects that 18.9 million of Indians will be unemployed during 2019-2020.

Indian Sectors

India is the second most populous country in the world but is also one of the fastest-growing economies in the world. According to the World Bank data, in 2017, India became the 6th largest economy with USD 2.59 trillion GDP shifting from France to 7th position. Indian economy is classified into different sectors based on the nature of the activities. Initially, all activities of economic nature were grouped under the primary sector which is also referred as Agriculture and allied sector. It includes those activities which use natural resources directly and forms the base for other products. The primary sector includes Agriculture, Mining, Fishing, Forestry, Dairy, etc. The development of wants, interest, and desire lead to the growth of the secondary sector or also known as the industrial sector, it constituted the industries where finished products are manufactured using natural materials made available from the primary sector. It includes Industrial production, fabric, sugar, etc. Examples of the manufacturing sector: Small workshops producing pots, artisan production, textiles, steel factories, chemicals, plastic, car. Food production such as brewing plants, food processing, Oil refinery. Core Industries (Electricity, steel, refinery products, crude oil, coal, cement, natural gas, and fertilizers). The third sector known as the Tertiary Sector or Service Sector helps in development of the primary and secondary sectors. Transportation, banking, insurance, finance, etc. are examples of the service sector.

3. Data and Methodology

Annual data during the period of 2006 to 2018 is used in the present study. The population and labor force are estimated in absolute values in thousands of workers. Absolute values in thousands of workers are used to measure employment.Real GDP at a constant price is measured in millions of rupees, and Gross Value Added of the agricultural, mining, construction, manufacturing, electricity, and the services sector are measured in millions at a constant price. The data for all these variables were sourced from the database of the government agencies, which include the National Sample Survey Organization, Central Statistical Organization, Eleventh five year plan of the Indian government, and Reserve bank of India.

This study is carried out to understand the trend of unemployment and the labor force in India since 2006. To achieve this objective Compound Annual Growth Rate was determined. The trend analysis uses three variables i.e. Population growth, Labor force, and the Unemployment rate to project the unemployment rate during the year 2020. Employment elasticity using the arc method (CAGR method) has been used. The results obtained from employment elasticity shows the relationship between employment and growth in various sectors of India, which gives vital information about the labor market. Using the elasticity of labor and gross value added by various sectors, employment in India is projected for the year 2020.

4. Findings

4.1 Unemployment and labor force in India

National Sample Survey Organization (NSSO) incepted in 1950 to collect and tabulate the data which estimates three types of unemployment:

- Workers engaged in economic activity are considered 'Employed'

- Able-bodied people looking or available for work i.e. 'Unemployed'

- Neither seeking nor available for work i.e.' voluntarily unemployed'

The population of India engaged in economic activity and the population available for work constitutes the labor force of India. To generate gainful employment, with a good working environment, on a mega scale to absorb the escalating labor force, the government must devise a critical component in the strategy to achieve the objective of inclusive growth. Records show that the rate of growth achieved during the last decade has not generated a sufficient volume of good quality employment. The Indian labor market is categorized as rural and urban, the rural sector constitutes about 60% of the workforce and the urban sector comprises 40% of the workforce. From 2006-2007 to 2011-2012 the labor force in India show a compound annual growth rate of 1.96% but it decelerated to 1.62% from 2011-2012 to 2016-17. Corresponding to the increase in population the labor force in India is increasing at a higher rate which is 0.029% faster during 2006-07 to 2011-12 and 0.024% during 2011-12 to 2016-17 (see table 2)

Table 2: Population and Labor force in India

	In thousands ('000)			CAGR	
	2006-07	2011-12	2016-17	2006-07 to 2011-12	2011-12 to 2016-17
Population	1128310	1207971	1283242	1.37%	1.22%
Labor Force	438948	483659	524057	1.96%	1.62%

(Source: NSS CDS, 2014)

4.2 Employment and unemployment rates

The unemployment rate measures the number of people actively looking for a job as a percentage of the labor force. The formula for the same is given by-

Unemployment rate = (Unemployed Workers /Total labor force) X 100

The projections for increase in labor are revisited in the recent population projections shared by the National Commission on population and work done by the eleventh plan working group on labor force and employment projections. The annual rate of unemployment has decreased from 8.36% for the period 2006-2007 to 4.83%during the period 2011-12 and to 1.12% during the period of 2016-17. The main reason for the decreasing unemployment rate is growth of the labor force (see table 2). Table 3 shows the Status of Employment and Unemployment

Table3: Status of Employment and Unemployment

	In thousands ('000)		
	2006-2007	2011-2012	2016-2017
Employed	402238	460311	518204
Unemployed	36710	23348	5853
Unemployment Rate (% of labor force)	8.36	4.83	1.12

Source :(NSS, CDS, 2014)

The major weakness in the employee performance is not able to create enough employment opportunities so as to absorb the additional labor force which is added in the economy every year.

Indian economy is also suffering from disguised unemployment which is prevalent in the agricultural sector. Organized sector employment increased at 1.2% per annum during the year 1983–1994.It declinedto 0.3% per year in the period beyond 1994, (Source:11th five-year plan). This decline was due to a reduction in employment opportunities in public sector units. Though, the employment rate grew in the private sector 0.44% per year during 1983-94 and 0.58% per year during 1994-2005 in the private sector, yet the increase was not enough to trade off the decline in public sector employment. That the Indian economy need to develop the organized sector which provides quality employment, as compared to the unorganized sector.

4.3 Employment in Indian sectors

As per the International Labor Organization, the unemployment rate in India has increased to 6.1% in 2018.Table 4 shows the employment situation in different industry sectors: -

Table4: Employment in Different Industry Sectors

Sectors	Employment (in millions) 2009-10	Employment CAGR (2005-2010)	Growth Rate CAGR (2005-10)	Employment Elasticity	Employment (2010-15)
Agriculture	243.21	-1.04	2.53	-0.41	240.68
Manufacturing	48.54	-2.29	7.85	-0.29	47.43
Mining	2.75	0.72	3.41	0.21	2.77
Electricity, Gas & Water Supply	1.18	-1.57	5.95	-0.26	1.16
Construction	52.16	12.29	7.64	1.61	58.57
Services	112.33	-0.07	8.52	-0.01	112.25

Source: compiled from various secondary sources-National Sample Survey Office

(NSSO), Central Statistics Office (CSO), Reserve Bank of India (RBI)

5. Analysis

Table 5 shows the projected employment in Indian industry sectors. The agriculture sector in India is known for underemployment and disguised unemployment. The analysis reveals that during the year 2000 the agricultural sector has contributed very less with a net decrease of 27.25 million agricultural workers. The policies pertaining to agriculture are required to be coherent and efficient so that the sector may develop to its complete potential. The agriculture in India is facing several challenges related to fulfilling future requirements for food, fuel, fiber, and eco-services in a sustainable way due to the changing climate and attitude of people.

Table5: Projected Employment in Indian Industry Sectors

Sectors	Employment (2014-15	Employment CAGR (2010-15)	GVA at constant price (2009-10)	GVA at constant price 2015	GVP growth rate CAGR (2010-15)	projected Employment elasticity for 2020	employment growth rate	projected employment 2020
Agriculture	240.68	-0.21	12,975.56	16057.15	7.36	-1.54	-11.32	213.43
Manufacturing	47.43	-0.46	12695.64	16839.38	9.87	-4.56	-45.06	26.06
Mining	2.77	0.14	2,789.70	2886.85	1.15	0.16	0.19	2.78
Electricity, Gas & Water Supply	1.16	-0.32	1,605.29	2140.47	10.07	-3.18	-32.02	0.79
Construction	58.57	2.35	6,476.39	8352.29	8.85	20.75	183.65	166.14
Services	112.25	-0.01	41,252.18	59197.48	12.79	-0.18	-2.29	109.68

Compiled from various secondary sources-National Sample Survey Office (NSSO), Central Statistics Office (CSO), Reserve Bank of India (RBI)

Employment in the manufacturing sector is worse affected with negative employment, and elasticity standing as high as-45.06,it may be attributed to the stringent public and monetary policies, global meltdown, etc. As a result, the employment may fall considerably to 26.06 million in 2019-20 from 47.43 million in 2014-15. The manufacturing sector is the base of the pyramid of growth in any economy, and this sector in India is most underutilized, Government should bring considerable changes in the economic policies to increase employment in this sector. This may include tax holidays, subsidies, reduction in the corporate taxes, expansionary monetary policy, etc. Services sector seems to be the most important sector in India. It is the fastest-growing sector since 1990.There has been a 5 percent growth in employment annually and on the other hand, there has been less than 2 percent growth on aggregate employment. This sector has a high caliber as India is the youngest country with a labor cost advantage. It is projected that there will be a marginal fall in the employment with the projected employment elasticity as -0.18. However, if considerable initiatives are taken such as promoting skill development strategies, imparting vocational training, etc. This sector has significant employment potential. Construction sector will be contributing the most in employment, with a projected employment rate of 20.75 million. Mining shows growth rate in employment.

6. Suggestion

Government needs to collaborate on knowledge generation and dissemination with public and private sectors – nationally, regionally, and internationally. Government needs to focus on efficient use of economic instruments which include social security, information, and technology, education and skill enhancement, regulation, training and development, payments, and

taxes. The government needs to develop coherent policy packages that can address the opportunities and challenges confronting the vulnerable sectors.

References:

1. B2B. (2017). Unemployment in India: Types, Causes and Measures – Civilsdaily. Retrieved September 18, 2020, from www.civilsdaily.com website: https://www.civilsdaily.com/unemployment-in-india-types-causes-and-measures/#:~:text=Usual%20Status%20approach%20records%20only

2. Islam, I., & Nazara, S. (2000). Estimating Employment Elasticiy for the Indonesian Economy. Jakarta, Indonesia: International Labour Office.

3. Kumar, A., & Meher, S. (2018). Trends of occupational pattern in India: An analysis NSSO. International Journal of Research in Social Sciences, 8(1), 463-476.

4. Leshoro, T. L. (2014). Empirical analysis of employment elasticity of growth in Botswana. Mediterranean Journal of Social Sciences, 5(2), 171.

5. National Sample Survey Office. (2009). Employment and Unemployment Situation in India 2009-10. Retrieved from http://mospi.nic.in/sites/default/files/publication_reports/NSS_Report_No_537.pdf

6. Press Trust of India. (2014). New GDP data with 2011-12 as base year in January. The Economic Times. Retrieved from https://economictimes.indiatimes.com/news/economy/indicators/new-gdp-data-with-2011-12-as-base-year-in-january/articleshow/45010542.cms?from=mdr