

## Structural Changes in Indian Rural Economy and Challenges to Rural Development

Dr M.Bhaskar

senior consultant in RTGS of government of Andhra Pradesh

### Abstract:

This abstract provides an overview of the essay on "Structural Changes in the Indian Rural Economy and Challenges to Rural Development." The essay explores the significant structural changes that have occurred in the Indian rural economy, including the shift from an agrarian-based economy to a more diversified one, increasing integration with the global economy, and the impact of technological advancements. It also highlights the challenges faced in rural development, such as poverty and inequality, limited access to resources and opportunities, environmental sustainability, and inadequate rural infrastructure. The abstract emphasizes the need for comprehensive and targeted interventions to address these challenges and ensure sustainable and inclusive rural development in India.

### 1 Introduction

India, with its vast rural population, plays a crucial role in the country's overall development. Over the years, the Indian rural economy has undergone significant structural changes, driven by factors such as urbanization, globalization, technological advancements, and policy interventions. While these changes have brought about positive transformations, they have also posed challenges to rural development. This essay explores the structural changes in the Indian rural economy and the challenges that need to be addressed for sustainable rural development.

One of the key structural changes in the Indian rural economy is the shift from an agrarian-based economy to a more diversified one. With urbanization and industrialization, there has been a decline in the share of agriculture in the rural economy. This shift has led to the emergence of non-farm activities, such as manufacturing, services, and small-scale industries, which have contributed to income generation and employment opportunities in rural areas. However, challenges remain in terms of ensuring the sustainability and inclusivity of these non-farm activities, particularly in terms of skill development, access to credit, and market linkages.

Another significant structural change is the increasing integration of the rural economy with the global economy. Globalization has opened up new avenues for trade, investment, and technology transfer in rural areas. It has facilitated the growth of agro-based industries, export-oriented agriculture, and the emergence of rural entrepreneurship. However, this integration has also exposed the rural economy to market fluctuations, price volatility, and competition from imported goods. Ensuring the resilience of rural communities in the face of these challenges requires strengthening market linkages, improving access to information, and promoting value addition and diversification of agricultural produce.

Technological advancements have also played a crucial role in transforming the Indian rural economy. The adoption of modern agricultural practices, irrigation systems, and mechanization has increased productivity and efficiency in the agricultural sector. However, the digital divide and limited access to technology in remote rural areas remain significant challenges. Bridging this divide requires investments in rural infrastructure, enhancing digital literacy, and promoting the use of technology for rural development, such as e-governance, e-commerce, and mobile banking.

Despite these structural changes, several challenges persist in rural development. One of the primary challenges is the persistence of poverty and inequality in rural areas. Rural communities, particularly marginalized groups such as small farmers, landless laborers, and women, continue to face limited access to resources, social services, and opportunities. Addressing these challenges requires comprehensive and targeted interventions, such as land reforms, rural credit facilities, social protection programs, and skill development initiatives.

Another challenge is the sustainability of natural resources and the environment. The rural economy heavily depends on natural resources, such as land, water, and forests, for livelihoods and agricultural production. Unsustainable practices, deforestation, water scarcity, and climate change pose threats to rural development. Promoting sustainable agriculture, conserving natural resources, and adopting climate-smart practices are essential for ensuring the long-term viability of the rural economy.

Furthermore, inadequate rural infrastructure, such as roads, electricity, healthcare facilities, and educational institutions, hampers rural development. Improving infrastructure is crucial for enhancing connectivity, access to markets, and the delivery of essential services. Investments in rural infrastructure, along with decentralized planning and governance, can help address this challenge.

In conclusion, the structural changes in the Indian rural economy have brought about positive transformations and opportunities for rural development. However, challenges such as inclusive growth, technological divide, poverty, environmental sustainability, and inadequate infrastructure need to be addressed for sustainable and inclusive rural development. By adopting a multi-dimensional approach, involving stakeholders at various levels, and implementing targeted interventions, India can ensure that the benefits of structural changes reach all sections of society and contribute to the overall development of the country.

The contribution of the rural areas in economy of India for the period 1970-71 to 2011-12 is seen from its share in national output and employment<sup>1</sup> (Table 2.1). The rural areas engaged 84.1 per cent of the total workforce and produced 62.4 per cent of the total net domestic product (NDP) in 1970-71. Subsequently, rural share in the national income declined sharply till 1999-00. Rural share in total employment also witnessed a decline but its pace did not match with the changes in its share in national output or income. The declining contribution of rural areas in national output without a commensurate reduction in its share in employment implies that a major portion of the overall economic growth in the country came from the capital-intensive sectors in urban areas without generating significant

employment during the period under consideration. Notwithstanding, the difference between the rural share in output and employment increased from 22 percentage points in 1970-71 to 28 percentage points in 1999-00.

**Table 1.1. Share of rural areas in total NDP and workforce**

			(per cent)
Year	Economy	Workforce	
1970-71	62.4	84.1	
1980-81	58.9	80.8	
1993-94	54.3	77.8	
1999-00	48.1	76.1	
2004-05	48.1	74.6	
2011-12	46.9	70.9	

After 1999-00, growth rate of rural economy picked up the pace and reached at par with the growth rate of urban economy. This led to stabilization in rural contribution in total NDP at around 48 per cent. The rural share in national NDP dropped slightly during 2004-05 to 2011- 12 despite acceleration in growth rate. On the other hand, the rural share in total workforce declined steadily from 76.1 per cent in 1999-00 to 70.9 per cent in 2011-12. Due to faster reduction in the rural share in total employment than in national NDP, difference between the rural share in output and employment narrowed down to 24 per cent by the year 2011-12.

These evidences show that urban economy overtook rural economy in terms of output but urban employment is less than half of the rural employment. This has serious implications such as wide disparity in worker productivity between rural and urban areas.

## 2 Rural share in output and employment across sectors

The sector-wise disaggregation shows significant changes in the contribution of rural areas in the national economy. Besides producing almost all agricultural produce, rural areas contributed around one third of non-farm output and 48.7 per cent of non-farm employment in the country (Table 2.2). The contribution of rural areas in different sectors of non-farm economy revealed large variation and interesting patterns.

**Table 1.2. Share of rural areas in total NDP and workforce across different sectors. (per cent)**

**Year Agriculture Manufacturing Construction Services Non-agri.**

	NDP	Emp.	NDP	Emp.	NDP	Emp.	NDP	Emp.	NDP	Emp.
1970-71	96.2	96.8	25.8	51.5	43.2	64.6	32.8	42.1	32.4	47.3
1980-81	94.9	95.9	31.8	48.1	45.6	58.8	34.0	41.7	35.0	44.9

1993-94	93.9	95.8	29.8	51.3	45.1	57.2	33.6	42.3	34.8	46.6
1999-00	93.2	96.6	41.6	51.5	43.3	57.6	27.1	40.7	31.8	45.8
2004-05	94.1	96.1	42.5	49.6	45.5	64.4	32.7	41.9	36.7	47.2
2011-12	95.1	95.9	51.3	47.4	48.7	74.6	25.9	39.6	35.3	48.7

Note: Employment, Non-agri. Includes manufacturing, construction, services and other sectors

The most striking change in rural share was observed in the case of manufacturing sector. Between 1970-71 and 2011-12, the share of rural areas in output of manufacturing sector doubled and exceeded the manufacturing production in urban areas. Rural areas contributed 51.3 per cent of manufactured output in year 2011-12. However, this sharp increase in the rural share in output did not fetch any increase in rural share in employment in manufacturing sector. On the contrary, rural share in total manufacturing employment in the country declined by 4.1 percentage points during the forty years ending with 2011-12. Clearly, manufacturing sector was shifting to rural areas but without commensurate increase in the employment. In the same period, the share of rural areas in construction sector output increased by 5.5 percentage points, while employment share increased by 10.0 percentage points. In case of service sector rural areas lost to urban areas in a big way after 2004-05 and accounted for 25.9 per cent of services output in the country in the year 2011-12. These changes indicate that rural employment has risen at a much faster rate in relatively low paid construction activities. The underlying reasons and implications of these changes are discussed in the later sections of the paper.

### 3 Sector-wise Changes in Output and Employment in Rural India

#### 3.1 Agriculture

The results presented in the earlier sections show that contribution of agriculture in rural output gradually declined. This is considered a desirable change for the progress in economic development. However, over-dependence on agriculture for employment emerged as a major challenge. Between 2004-05 and 2011-12, India first time witnessed reduction in workforce in agriculture. The rate of decline was 2.04 per cent. Despite this, agriculture employed 64 per cent of the total rural workforce who produced only 39 per cent of the total rural output during the year 2011-12. It is estimated that for bringing convergence between the share of agriculture in total output and employment, 84 million agricultural workers were required to be shifted to non-farm sectors in rural areas in the year 2011-12. This amounted to almost 70 per cent increase in non-farm employment, which looks quite challenging.

#### 3.2 Manufacturing

Manufacturing output in rural areas registered annual growth rate of 5.18 per cent between 1970-71 and 1993-94. The post-reform period (1993-94 to 2004-05) witnessed higher growth rate of 8.38 per cent, which further accelerated sharply to 15.87 per cent during 2004-05 to 2011-12 (Table 3.1). Significantly higher growth in manufacturing compared to other sectors raised its share in

rural NDP from 5.9 per cent in 1970-71 to 18.4 per cent in 2011-12 (Table 3.2) pointing to a clear trend towards industrialization in rural areas.

However, the signs of industrialization in rural areas were not visible through the changes in employment structure. Between 1972-73 and 1993-94, manufacturing sector added 10.29 million jobs (29% of incremental non-farm jobs) and its share in total rural employment increased from 5.3 per cent in 1972-73 to 7.0 per cent in 1993-94. During the next decade (reforms period) the sector added 7 million jobs (23.4% of incremental non-farm jobs) and its share in total rural employment increased only by 1 percentage point to 8.1 per cent in 2004- 05. During the recent period between 2004-05 and 2011-12, employment in the manufacturing sector increased merely by 1.2 million jobs (4.9% share in incremental non- farm jobs). Growth rate in manufacturing employment slowed down from 3.55 per cent in First period to 2.79 per cent in the second period and to 0.65 per cent in the third period (Table 3.1).

The results further reveal that rural areas contributed 58 per cent of the incremental manufacturing sector output in the country as compared to only 25 per cent share in incremental employment (5.3 million) between 2004-05 and 2011-12. This leads to the inference that manufacturing sector in rural areas used more capital-intensive production technology as compared to the urban areas after 2004-05. As the new industry in rural areas relied much more on capital than labour, it failed to address the goal of employment generation for rural labour-force.

**Table 5.1. Sub-sector wise changes in employment (usual status) in manufacturing and services sectors**

Sub-sectors Employment:

**usual status Compound growth Share in total employment (%) (million) rate (%)**

**2004-05 2011-12 2004-05 2011-12**

Wearing apparel	3.4	4.2	2.9	12.3	14.5
Tobacco products	3.4	3.6	0.8	12.3	12.5
Textile	4.5	3.6	-3.2	16.0	12.3
Non-metallic mineral products	3.4	3.6	0.8	12.3	12.5
Food products and Beverages	3.4	3.4	0.0	12.3	11.8
Machinery, metal products and transport equipment	2.1	3.0	5.7	7.4	10.4
Wood and wood products	4.1	2.8	-5.4	14.8	9.6
Furniture	1.7	1.5	-2.1	6.2	5.1
Chemical products	0.7	0.6	-2.6	2.5	2.0
Rubber and plastic products	0.3	0.4	1.1	1.2	1.3
Paper and printing, etc.	0.3	0.3	-0.3	1.2	1.2
Leather and related products	0.3	0.3	-1.8	1.2	1.0
Others	0.0	1.7	-	0.0	5.8

<b>Manufacturing sector- Sub total</b>	<b>27.6</b>	<b>29.0</b>	<b>0.67</b>	<b>100</b>	<b>100</b>
Wholesale and retail trade; repair of motor vehicles	18.5	18.8	0.3	38.9	36.0
Transport, storage and communication	8.6	10.0	2.3	18.0	19.2
Education	5.5	7.0	3.4	11.5	13.3
Hotel and restaurants	2.4	2.9	2.9	5.0	5.6
Public administration, defence and compulsory social security	2.7	2.7	-0.5	5.8	5.1
Health and social work	1.4	1.6	2.0	2.9	3.0
Financial intermediation	0.7	1.1	7.1	1.4	2.1
Others	7.8	8.2	0.7	16.4	15.7
<b>Services sector: Sub-total</b>	<b>47.6</b>	<b>52.3</b>	<b>1.4</b>	<b>100.0</b>	<b>100.0</b>

Within the manufacturing sector, wearing apparel, tobacco products, textile, non-metallic mineral products, and food products and beverages are the major employment generating sub-sectors (Table 5.1). Most of these sub-sectors witnessed either stagnation or fall in employment between 2004-05 and 2011-12. The lack of skills and technical knowledge appear to be the main barrier for rural workers to enter manufacturing sector. The NSS surveys show a depressing picture of the level of education and technical skills possessed by the rural workers. More than three-fourth of the total rural workforce of 15-59 years were not qualified even up to secondary level in year 2011-12 (Table 5.2). Further, only 1.3 per cent of the rural workforce of the age group 15-59 years possessed technical education<sup>8</sup>. Similarly, only 14.6 per cent of the rural workforce of age group 15-59 years received vocational trainings<sup>9</sup>, which aim to develop competencies (knowledge, skills and attitude) of skilled or semi-skilled workers in various trades. Gender-wise disaggregation reveals that female workers possess relatively low level of education and technical training as compared to male counterparts. These facts suggest that setting up of industries and improvement in infrastructure are not sufficient conditions for increasing employment in rural areas. Improvement in industrial infrastructure in rural areas must be accompanied by the effective human resources development programmes to impart necessary skills and training to rural youth to match the job requirement in manufacturing sector.

## Conclusions

The empirical evidences on the changes in rural economy during the past four decades lead to following conclusions and strategic options to promote pro-

employment and equitable growth in the rural areas. About half of the national income and more than two third of the total employment is generated in rural areas. Apart from producing almost all agricultural output, rural areas contributes about half of the manufacturing and construction sectors output and one quarter of the services sectors output in the country. The rural areas are characterized with the low level and wide disparity in worker productivity.

The declining rural share in national output without a commensurate decline in its share in total employment during the past four decades implies that a much faster growth in capital-intensive sectors in urban areas did not generate adequate employment to absorb rural labour. The higher dependency on rural areas for employment is a major reason for low level of per worker income. Temporally, contribution of rural areas in total output and employment registered striking changes across different sectors.

The production base of manufacturing sector shifted to rural areas significantly, but without a commensurate increase in rural employment during the past forty years preceding 2011-12. The services sector lost heavily to urban areas both in terms of output and employment. It was only the construction sector where rural share in both output and employment improved and employment grew at a faster rate as compared to output. Although construction activities improve rural infrastructure and have a multiplier effect on the economy, proportionately less output growth than the employment indicates a limited productive employment generation capacity in this sector.

During the four decades from 1970-71 to 2011-12, rural output increased almost seven times (at constant prices) and rural economy has now turned more non-agricultural with the share of agriculture in rural income reduced to 39 per cent. However, the rural employment during this period could not even double. In fact the employment growth decelerated over time and reached a negative range after the year 2004-05. The decline in rural employment between 2004-05 and 2011-12 was due to withdrawal of labour force from the agriculture sector, majority of whom did not join the non-farm sectors. The employment insensitive growth in rural areas warrants special attention towards the non-farm sectors, particularly manufacturing and services sectors, to provide productive employment to the rising population and labour force leaving agriculture.

## References

- Abraham, V (2013): "Missing Labour or Consistent „De-feminisation“?," *Economic & Political Weekly*, Vol 48, No 31, pp 99-108.
- Aggarwal, A and N Kumar (2012): "Structural Change, Industrialization and Poverty Reduction: The Case of India," *Development Papers 1206*, Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations, South and South-West Asia Office, New Delhi.

- Chand, R and S K Srivastava (2014): "Changes in the rural labour market and their Implication for Agriculture," *Economic & Political Weekly*, Vol 49, No 10, pp 47-54.
- Chand, R., R Saxena and S Rana (2015): "Estimates and Analysis of Farm Income in India, 1983-84 to 2011-12," *Economic & Political Weekly*, Vol 50, No 22, pp 139-145.
- Kannan, K P and G Raveendran (2012): "Counting and Profiling the Missing Labour Force," *Economic & Political Weekly*, Vol 47, No 6, pp 77-80.
- Maurya, N K and J V Vaishampayan (2012): "Growth and Structural Changes in India's Industrial Sector," *International Journal of Economics*, Vol 6, No 2, pp 321-331.
- Mazumdar, I and N Neetha (2011): "Gender Dimensions: Employment Trends in India, 1993-94 to 2009-10," *Economic & Political Weekly*, Vol 46, No 43, pp 118-126.
- Papola, T S (2012): "Structural Changes in the Indian Economy: Emerging Patterns and Implications," ISID Working Paper No 12, Institute for Studies in Industrial Development, New Delhi.
- Pradhan, K C (2013): "Unacknowledged Urbanization: New Census Towns of India," *Economic & Political Weekly*, Vol 48, No 36, pp 43-51.
- Rangarajan, C, P I Kaul and Seema (2011): "Where is the Missing Labour Force?" *Economic & Political Weekly*, Vol 46, No 39, pp 68-72.
- Rangarajan, C, Seema and E M Vibeesh (2013): "Developments in the Workforce between 2009-10 and 2011-12," *Economic & Political Weekly*, Vol 49, No 23, pp 117-121.
- Srivastava, S.K., Chand, R., and Singh, J. (2017): "Changing Crop Production Cost in India: Input Prices, Substitution and Technological Effects", *Agricultural Economics Research Review*, Conference Issue.
- Thomas, J. J. (2012): "India's Labour Market during the 2000s: Surveying the Changes," *Economic & Political Weekly*, Vol 47, No 51, pp 39-51.