

## **Structural Transformation of the Indian Economy: Past performance and Way forward to 2047**

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### **1. Introduction**

The historical experience of different countries shows that structural transformation from low-productive to high-productive sectors led to higher economic growth and the creation of greater productive employment. Economists like Lewis (1954), Kaldor (1966) and Kuznets (1966, 1971) emphasised the relationship between structural transformation and economic growth. This is reflected in the economy transforming from agriculture to industry and services in terms of changes in the composition of output and employment. The literature on structural transformation is derived mostly from stylized facts than from economic theorising (Nayyar, 2019). For example, Kuznets (1971) summarises the results of his studies of the economic growth of nations in modern times based on stylized facts. He examines long-term trends in growth in total output and labour force change in production structure across countries. There are two sources of productivity. One is productivity increase within sectors. The second one is shifting workers from low-productivity sectors to high-productivity sectors. Countries focus on these both sources of productivity<sup>1</sup>.

The pattern of structural change observed by the advanced countries in the second half of the nineteenth<sup>th</sup> Century and the first half of the twentieth<sup>th</sup> Century has been that initially, the shares of agriculture in output and employment declined while that of manufacturing increased<sup>2</sup>. At the next stage, the share of output and employment in manufacturing declines while that of services rises. Nayyar (2019) examines the experience of structural transformation for 14 countries in Asia over 50 years from 1970-2016. The conclusions of this study on Asia-14 are the following (a) There were significant differences in the paths of structural transformation among these 14 Asian countries; (b) Countries like South Korea, Taiwan, and Singapore, followed by Malaysia, China and possibly Indonesia confirmed to the so-called classical pattern of change from agriculture to manufacturing (industry) and subsequently to services; (c) On the other hand, countries like India, Philippines, Pakistan, Turkey, Thailand, Sri Lanka, followed by Bangladesh and Vietnam later did not experience the classical pattern of structural change. In these countries, the agriculture sector was dominant in the 1970s but in 2016, the service sector was dominant although the

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<sup>1</sup> On structural transformation, see Diao et al (2017)

<sup>2</sup> This pattern is observed by Fisher (1935), Clark (1940) and Kuznets (1966, 1971)

changes were not uniform; (d) In many countries, as manufacturing has not been able to employ surplus labour in agriculture, service sector progressively became the largest employer; (e) Except South Korea, Taiwan, Singapore and Malaysia, the process of structural transformation is uneven and incomplete in the 14 Asian countries; (f) The progress of industrialisation is slow, particularly in South Asia; (g) The service sector has led economic growth in many countries and absorbed unskilled labour which may not be sustainable.

Against the above background, this paper examines the Indian experience and the way forward for the country on structural transformation by 2047.

## 1. India's experience in structural transformation

Regarding economic growth, India recorded 3.5 per cent per annum GDP growth from 1950-91980. It is well known that India moved beyond 'Hindu Rates of Growth'<sup>3</sup> in the last four decades and registered a growth rate of more than 6 per cent per annum. Particularly, the GDP growth rate was higher in the post-economic reform period. There have been significant changes in the structure of output and employment in the last five decades.

### 1.1. Structural change in output

- (a) The share of agriculture and allied activities in output declined from 41per cent in 1972-73 to 15per cent in 2019-20 – Around 25 percentage points over 50 years (Table 1)
- (b) The share of industry (consisting of mining, construction, manufacturing and utilities) rose from 24per cent in 1972-73 to 28per cent in 2004-05 but the share increased only marginally later. Similarly, the manufacturing share has increased from 13.3per cent in 1970 to 15.7per cent in 2011-12. It increased to 18per cent and 17per cent respectively in 2018-19 and 2019-20. In other words, there is only a marginal rise in the share of manufacturing in output over five decades.
- (c) In contrast to the share in manufacturing, the share of services in output rose significantly from 34.5 in 1970 to 55.3per cent in FY 2020- an increase of 21 percentage points over 50 years. In other words, **India 'leap frogged' from agriculture to services bypassing the manufacturing stage of development.**

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<sup>3</sup> The term 'Hindu rate of growth' was coined by late Prof. Rajkrishna.

Table 1. Structural Change: Share in GDP (per cent) in constant prices

	1972-73	1993-94	2004-05	2011-12	2018-19	2019-20
<b>Agriculture and allied activities</b>	<b>41.1</b>	<b>28.4</b>	<b>19.0</b>	<b>14.1</b>	<b>14.8</b>	<b>15.0</b>
Manufacturing	13.3	14.6	15.3	15.7	18.3	17.1
Construction	7.6	6.6	7.7	7.9	8.0	7.9
<b>Industry (Secondary sector)</b>	<b>24.4</b>	<b>26.8</b>	<b>27.9</b>	<b>27.5</b>	<b>31.2</b>	<b>29.7</b>
Trade, hotels, transport, communications.	14.5	18.1	24.5	27.5	19.9	20.3
Financing real estate and business services	7.9	13.3	14.7	18.1	21.3	21.9
Community, social and personal services	12.1	13.5	13.8	12.8	12.7	13.1
<b>Services (Tertiary sector)</b>	<b>34.5</b>	<b>44.8</b>	<b>53.0</b>	<b>58.4</b>	<b>53.9</b>	<b>55.3</b>
Non-agriculture	58.9	71.6	81.0	85.9	85.2	85.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Shares of GDP for 2018-19 and 2019-20 are not strictly comparable with earlier data because of a change in methodology.

Source: IHD (2014) for the period 1972-73 to 2011-12 at 2004-05 constant prices; National Accounts Statistics for 2018-19 and 2019-20 at 2011-12 constant prices.

Within services the share of trade, hotels, transport and communications rose from 14.5per cent in 1972-73 to 20.3per cent in 2019-20 - about a 6 percentage points rise over 50 years. But the highest rise in the share of GDP was noted in the high-value financing, real estate and business services. Their share increased from 8per cent in 1972-73 to 22per cent in 2019-20 -an increase of 14 percentage points.

## 1.2. Structural change in Employment

- (a) The share of agriculture in employment declined from 73.9per cent in 1972-73 to 42.5 per cent in 2018-19 – a decline of 31 percentage points over five decades (Table 2). This is a substantial decline although it is still high. Fig 1 also shows that the share of agriculture decelerated to 41.4per cent in 2018-19 from 61.9per cent in 1993-94 before rising slightly to 44.8per cent in 2020-21.
- (b) The share of the industry rose from 11per cent to 24per cent in five decades. This increase was mainly due to an increase in the share of construction. The share of manufacturing increased initially from 8.9per cent in 1972-73 to 10.5per cent in 1993-94. Subsequently, it was between 11.2per cent to 12.8per cent during 1993-94 to 2019-20. It shows that there was hardly any increase in the share of manufacturing in employment in the last four decades. The share of construction in employment was marginally higher than that of manufacturing in 2019-20 (Table 2).

(c) In contrast to the share of manufacturing, the share of services in employment increased significantly from 14.8per cent in 1972-73 to 30.7per cent in 2019-20 – an increase of 16 percentage points over 50 years. Within services, the share of trade, hotels and restaurants rose faster than other services. Their share increased from 5per cent in 1972-73 to 13per cent in 2019-20 – an increase of 8 percentage points. These jobs are mostly in the informal sector. Similarly, the share of transport and communications rose from 1.8per cent to 5.6per cent during the same period. The high-value financing, real estate and business services absorbed only around 3per cent of the workforce in 2019-20.

Table 2. Structural Change: Share in Employment (per cent)

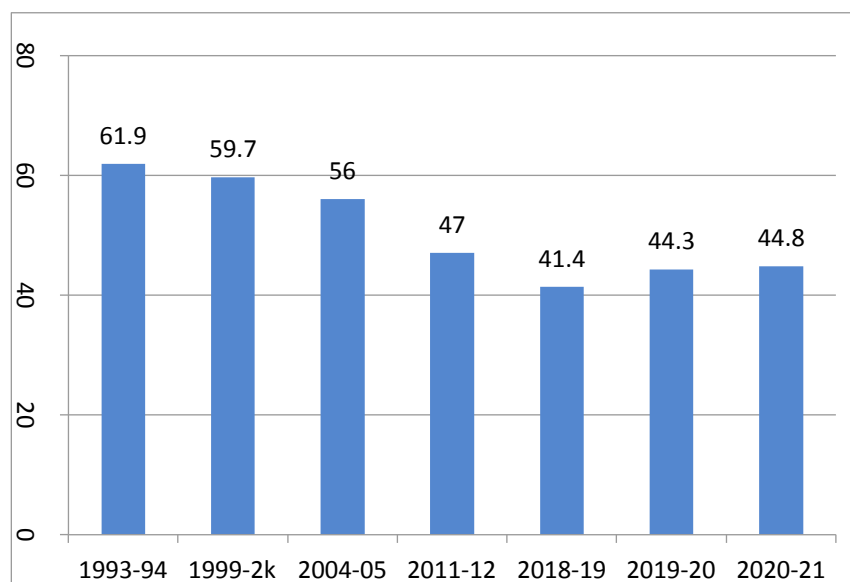
	1972-73	1993-94	2004-05	2011-12	2018-19	2019-20
<b>Agriculture and allied activities</b>	<b>73.9</b>	<b>64.8</b>	<b>58.5</b>	<b>48.9</b>	<b>42.5</b>	<b>45.6</b>
Manufacturing	8.9	10.5	11.7	12.8	12.1	11.2
Construction	1.8	3.1	5.6	10.6	12.1	11.6
<b>Industry (Secondary sector)</b>	<b>11.3</b>	<b>14.7</b>	<b>18.1</b>	<b>24.4</b>	<b>25.2</b>	<b>23.7</b>
Trade, hotels and restaurants	5.1	7.4	10.2	11.4	12.6	13.2
Transport, storage and communications	1.8	2.8	3.8	4.4	5.9	5.6
Financing, real estate, business services	0.5	0.9	1.5	2.6	3.4	3.1
Community, social and personal services	7.4	9.4	7.7	8.2	10.5	8.9
<b>Services (Tertiary sector)</b>	<b>14.8</b>	<b>20.5</b>	<b>23.4</b>	<b>26.7</b>	<b>32.3</b>	<b>30.7</b>
Non-agriculture	26.1	35.2	41.5	51.1	57.5	54.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: IHD (2014) for the period 1972-73 to 2011-12; PLFS for 2018-19 and 2020-21

(d) Structural transformation in terms of employment shows that the decline in agriculture is absorbed by construction and services in the informal sector like trade, hotels, and restaurants<sup>4</sup>. The share of the non-farm sector in rural areas has increased over time. It rose from 19.3per cent in 1977-78 to 44.6per cent in 2019-20 for rural males while it increased from 11.8per cent to 24.3per cent for females. If we combine males and females, the share of non-farm in total rural employment is around 40per cent in 2019-20

<sup>4</sup> Basole (2022) shows that India pulled workers out of agriculture but not from informal sector. The structural change is from agriculture to construction and informal services.

Fig 1. Percentage share of the workforce in agriculture



Source: Damodaran (2022)

### 1.3. Labour reallocation and productivity across sectors: India and China

Ghose (2020) examines the structural transformation in the Indian economy and compares it with China as given in Table 3. It shows that the scale of reallocation was smaller in India than in China in both periods. In the second period 1994 to 210, around 20per cent of the workers in agriculture moved to non-agriculture in India while the corresponding period for China is 48per cent. It is smaller in India than in China because of differences in the absorption of reallocated workers in different sectors. In China, it is absorbed by the manufacturing sector and services while in India low productive construction and informal sector services absorbed the labour (Table 3).

Table 3. Labour Reallocation across sectors: India and China

	India		China	
	1978-1994	1994-2010	1978-1994	1994-2010
<b>Labour Reallocation across sectors (numbers in millions)</b>				
Agriculture	-27.4	-59.7	-94.6	-115.8
Manufacturing	1.9	4.2	12.3	25.7
Construction	5.3	28.3	18.1	17.1
Other industries	1.5	0.9	0.6	-2.6
Services	18.8	26.3	63.6	75.6
Reallocation from Agriculture (in millions)	27.4	59.7	94.6	115.8
Reallocation from Agriculture: Scale (in per cent)	10.2	19.8	23.0	48.0

<b>Absorption of Reallocated Labour by sectors (in per cent)</b>				
Manufacturing	6.8	7.0	13.0	22.2
Construction	19.2	47.4	19.1	14.7
Mining and Utilities	5.5	1.5	0.6	-2.2
Services	68.5	44.1	67.3	65.3

Source: Ghose (2020)

#### **1.4. Labour Productivity across sectors in India and China**

The levels of labour productivity in China are higher than those in India for all sectors except services. The output per worker in China was higher than in India by 72per cent, 50per cent, 41per cent, 132per cent and 77.2per cent for the economy, agriculture, non-agriculture, manufacturing and construction respectively in 2010 (Table 4). The growth rates of labour productivity are also higher for China as compared to those of India. One of the reasons is the much higher within-sector productivity growth in China. The contribution of structural change to the overall growth of labour productivity in the economy was positive and significant in both countries. However, the structural change in India was from agriculture to construction and services while in China it was from agriculture to manufacturing and services.

Table 4. Output per worker in 2011 International (in US\$): India and China

	India			China		
	1978	1994	2010	1978	1994	2010
Agriculture	1720	2083	3192	2036	2728	4795
Non-agriculture	6828	9336	19676	6374	10615	27770
Manufacturing	4384	6467	15807	4922	12255	36763
Construction	14173	9843	9514	8239	8148	16862
Mining and Utilities	17579	22788	38007	9982	15309	86245
Services	7081	10042	24027	7011	9635	22202
Economy	3185	4698	11228	3315	6332	19342

Source: Ghose (2020)

## **2. Structural Transformation: Looking ahead to 2047**

This section examines challenges and opportunities for structural transformation in India by 2047.

### **2.1. Agriculture**

There is a need for the transformation of agriculture in the next 25 years by focusing on three goals of agricultural development. These are: (a) achieving high growth by raising productivity; (b) inclusiveness by focusing on lagging regions, small farmers and women; and (c) sustainability of agriculture. The following policies and reforms are needed for attaining these goals.

(1) *Need for change in the narrative in the new context:* We have to change the narrative on agriculture towards more diversified high-value production, better remunerative prices and farm incomes, marketing and trade reforms, high productivity with fewer inputs, cost-effective, less chemical and pesticide-based, inclusive in terms of women and youth farmers, small farmers and rain-fed areas, nutrition-sensitive, environmental friendly and sustainable agriculture. By 2027, the share of cereals in agriculture value of output should decline in favour of pulses, oilseeds, horticulture, livestock, poultry and fisheries. There are two types of agriculture in India – one is cereal based and the other one is non-cereal based<sup>5</sup>. Government policies have been biased towards cereals, particularly rice and wheat.

(2) *We have to Walk on two legs (agriculture and non-agriculture) in the changing context:* Rural areas are changing. We have to invest in agriculture for raising livelihoods but simultaneously shift the population from agriculture to non-agriculture over time. Thus, both agriculture and non-agriculture are important for raising the income of farm households.

(3) *Remunerative price is the most important factor for farmers:* Even after 75 years of independence, we are not able to provide remunerative prices for farmers. Farmers have been getting low prices in normal, drought and good years because of distortions in price and marketing policies. Many reforms in marketing are needed.

(4) *Beyond harvest and Freedom for farmers:* Agriculture GDP+ indicates that we have to go beyond farming and develop a value chain comprising farming, wholesaling, warehousing, logistics, processing, and retailing. Farmers want freedom from restrictions on markets and exports. There have been new generation start-ups coming up in agriculture.

(7) *Do not forget basics like water and technology:* Basics like seeds, fertilizers, credit, land and water management and technology are important and they should not be forgotten. Similarly, investment in infrastructure and Research and Development (R andD) is needed.

(8) *Inclusiveness for broad-based growth and equity:* Inequalities in agriculture are high. There is a need to focus on small and marginal farmers, women, youth, rainfed areas, Eastern and other lagging regions, and social groups like Schedule Caste (SC) and Schedule Tribe (ST) farmers. The role of women in agriculture has been increasing. Women collectives and group farming can be encouraged to benefit female farmers.

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<sup>5</sup> See Subrahmanian, 2018

(9) *Measures to take care of impacts of climate change and improving resilience in agriculture and sustainability:* Resilience in agriculture has to be improved. Climate-smart agriculture is being discussed throughout the world to reduce Green House Gases (GHG) emissions and increase resilience. Conservation agriculture and zero-budget natural farming are some of the methods that have to be used as part of adaptation and mitigation measures for climate change.

To conclude, agriculture is a state subject according to the Indian constitution. States have to play an active role along with the Central Government in achieving the three goals of growth, inclusiveness and sustainability. Agriculture transformation has to be viewed more holistically in terms of rural transformation and urban linkages.

## **2.2. Manufacturing and Services**

India does not have the luxury of following China's development experience in manufacturing. In this context, the 'Make in India' campaign is in the right direction. As shown by Ghose, (2016) labour-intensive manufacturing is important for quality job creation particularly increase in the organised sector. It is important to examine the prospects of manufacturing, particularly in job creation in light of the East Asian experience and in the present context of global protection. A study by Ramaswamy and Agarwal (2013) strongly suggests that the services sector would be an unlikely destination for the millions of low-skilled job seekers. The study argues that India needs to focus on the manufacturing sector to provide large-scale employment. Manufacturing has the capability because it has stronger backward linkages, unlike the services sector. We cannot afford to neglect manufacturing at this stage of development. The policy signals have to clearly say that we stand to support manufacturing activity in a big way. The labour intensity of the organised manufacturing sector has to be improved apart from increasing the productivity of MSME (Micro, small and medium-sized enterprises) and unorganised manufacturing. Inequalities are high in services which is a heterogeneous sector. Trade, hotels, transport and communications are labour-intensive with lower wages while financial and professional services are capital-intensive with higher wages. Most of the employment is created in informal services with lower wages. However, it is also argued that one has to include services in the 'Make in India' program for the creation of employment. Both manufacturing and services have to be developed together.

A study by Chanda (2017) deals with the interdependence between services and manufacturing and argues that a vibrant service sector should be seen as an enabler



for the manufacturing sector and not as a competitor to manufacturing. The contribution of the service sector to manufacturing exports is dominated by traditional services. Modern services such as Information Technology (IT), R and D and business services are not significantly contributing to manufacturing exports. The three-year action plan (NITI Ayog, 2017) also indicates that India has an advantage of walking on two legs: manufacturing and services. It offers specific proposals for jumpstarting some of the key manufacturing and services sectors, including apparel, electronics, gems and jewellery, financial services, tourism and cultural industries and real estate<sup>6</sup>. Among other things, it recommends the creation of a handful of Coastal Employment Zones (CEZ), which may attract multinational firms in labour-intensive sectors from China to India. There are a lot of opportunities for India in the service sector. Can you think of the top 10 global service brands? These are the names that come to our minds: Facebook, Google, Airbnb, Amazon, LinkedIn, Mckinsey, Master Card, Visa, Fedex covering hospitality, consulting firms or even food and beverages like Starbucks. What is common about all of them? Most of the names come from the United States of America (USA). What is that Americans are focusing on which Europeans, Asians, Indians, and Japanese do not focus? It essentially consists of products and scaling, customer centricity and marketing. Brand and customer centricity is important. India can also think of more business in the service sector.

India has undertaken several structural reforms such as the announcement of privatisation and asset monetisation; tax reforms (Goods and Service Tax (GST) and corporate tax rationalisation); the Production-Linked Incentive (PLI) scheme; Insolvency And Bankruptcy Code (IBC) to improve the credit culture and resource allocation mechanism; labour reforms (four codes); and a fiscal policy focus on Capital expenditures (CapEx) and infrastructure (RBI, 2022).

As the Reserve Bank of India (RBI 2022) noted, along with these reforms, other measures are needed to reverse the sustained decline in private investment and low productivity in the economy. These measures given in RBI (2022) are: (a) access to litigation free low-cost land; (b) raising the quality of labour through large-scale expansion of public expenditure on education and health and the skill India mission; (c) reducing the cost of capital for industry and improve resource allocation in the economy by promoting competition; (d) encouraging industries and corporates to scale up R&D activities with an emphasis on innovation and technology; (e) creating an enabling environment for startups and unicorns; (f) encouraging corporate investment in agriculture; (g) addressing the challenges faced by the debt-ridden telecom industry and Distribution Companies (DISCOMs); (h) rationalisation of

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<sup>6</sup> On services also see Nayyar (2012), Eichengreen and Gupta (2011)

subsidies that promote inefficiencies; (i) encouraging urban agglomerations by improving the housing and physical infrastructure. “The next wave of global structural transformation is likely to be powered by both technology and environmentally sustainable production processes” (p.75, RBI, 2022).

### **Exports**

It is well known that exports are one of the main engines of growth and employment creation. When India had high growth, during 2000-2011, exports grew at an annual rate of 21 per cent and 24 per cent, respectively, for goods and services. However, exports of goods completely stagnated with an annual growth rate of nearly 0 per cent during 2012-19. More recently, the COVID-19 pandemic has impacted world trade negatively. Similarly, the Russia-Ukraine war may have some impact on trade. A study done at Indira Gandhi Institute of Development Research (IGIDR) argues that two groups of industries hold the greatest potential for export growth and employment generation (Veeramani and Garima, 2017). First, there is a huge unexploited potential in traditional unskilled labour-intensive products, such as textiles, clothing, footwear, toys, and the like. Second, the study also identifies several specific product categories for which India can emerge as a major hub for final assembly-related activities within Global Value Chains (GVCs). The government has announced a performance-linked incentive scheme for 10 sectors. These are more capital-intensive. But private investment depends on many other factors such as ease of doing business, honouring contracts, availability of land and other infrastructure. However, one problem is that in recent years India’s trade policy has become more protectionist. Import tariffs have increased significantly during the last few years. India’s import tariff rates (Most Favoured nation (MFN) based average) increased from the lowest ever level of about 12 per cent in 2008 to 15 per cent in 2019. For the year 2018, China’s import tariff rate was 9.6 per cent compared to India’s 13.5 per cent. India may miss the emerging opportunity if protectionist policies are followed at this juncture. There are several opportunities for India to occupy the space vacated by China to boost exports.

A study by RBI examines empirical constraints to exports (RBI, 2022). The findings are : (a) Past Free Trade Agreements (FTAs) have not been trade creating; (b) Without higher import and technology –intensity of exports, raising India’s participation in the global value chain may be difficult; (c) Exchange rate stability helps promote exports; (d) Green export opportunities for exports; (e) Greater opportunities to imports at lower tariff and non-tariff restrictions; (f) Foreign direct investment (FDI) can boost exports and enhance the capacity to absorb foreign capital.

### 2.3. MSMEs:

micro, Small And Medium Enterprises (MSMEs) play an important role in the Indian economy providing large-scale employment. This sector contributes around 30per cent of India's Gross Domestic Product (GDP), and based on conservative estimates, employs around 50per cent of industrial workers and contributes half of the overall exports. India has 63 million enterprises and 107.6 million employess under MSMEs. More than 90per cent of the enterprises and employment of the MSMEs are in the micro sector. The three critical barriers faced by MSMEs are market access, overall productivity and getting access to more finances. Access to institutional credit is the most important constraint. Technology can be used to empower and transform MSMEs. This can be used from providing credit to the entire value chain of production, distribution, and consumer service. The problem with SMEs is their small size. 98.6per cent of the enterprises employs less than 10 workers, of which 95per cent employ less than 5 workers. Only 20 thousand firms have paid up capital of Rs.10 crore. Preventing the collapse of these enterprises is important. Large firms have a big role to play in the success of MSMEs. Linkages between small and large firms have to be strengthened instead of looking at them as separate silos. There are a lot of opportunities for MSMEs in the next 25 years to improve productivity and contribute to structural transformation.

### 2.4. Digital transformation

The digital economy will continue to expand in all sectors of the economy. Digitalisation could potentially exert powerful positive externalities in the economic and social spheres to improve agriculture, industry, services, the financial sector, education, the environment, and health services.

### 2.5. India's Employment Challenge

A study by Ghose (2019) estimates the employment challenge up to 2035. Some of the findings are the following: (a) If the Lewis turning point is to be reached by 2035, around 13 million (between 12 and 14 million) productive jobs particularly low-skilled, will have to be generated annually; (b) Even if the absolute number of workers in agriculture is to remain the same as in 2018 and if unemployment and surplus labour are to fall to zero by 2035, employment in non-agriculture need to be increased from 265 million in 2018 to 486 million by 2035 (c) Construction is estimated to generate 67 million by 2035 (d) Excluding construction, non-agriculture has to generate 419 million by 2035 (e) If the pace and pattern of growth of non-agriculture excluding construction observed during 2000-12 is the same during 2018-35, the employment challenge will not be met. This could be true for the period 2035-2047. In other

words, the rate of output growth has to be faster and the structural pattern of growth needs to change to have significantly larger employment elasticity.

Table 5: India's Employment Challenge

	2018	2018-35 (a)	2018-35 (b)
Employed but surplus workers	50	--	--
Unemployed	29	--	--
Backlog	79	--	--
New Entrants into Labour Force	--	116	155
Job Creation required	--	195	234
Job creation required, per annum	--	12	14

Source: Ghose (2019)

Notes: The underlying assumptions are (a) that employment conditions in 2018 were no different from those in 2016, and (b) that there will be no surplus workers or unemployed persons in 2035.

## 2.6. Participation of Women in the Labour Market

As mentioned above, the participation rates of women are low and declined in India (Table 27). Work participation rate (WPR) for women declined from 41.6per cent in 2004-05 to 22per cent in 2017-18 before rising to 28.7per cent in 2019-20 and to 31.4per cent in the pandemic year. The difference in the WPR between men and women increased from 41 percentage points in 2004-05 to 49 percentage points in 2017-18 before declining to 44 percentage points in 2019-20. In fact in urban areas, only 18per cent of women participated in work compared to 69per cent of men in 2017-18 – a difference of 51 percentage points. The former International Monetary Fund (IMF) Chief Christine Lagarde said an increase in women's participation rates would increase by 40per cent of GDP in India.

Table 6: Work participation rates (15 years and above), Usual Status (ps+ss): Female and male.

Years	Male			Female		
	Rural	Urban	Total	Rural	Urban	Total
2004-05	84.6	76.3	82.2	48.5	22.7	41.6
2009-10	81.2	74.0	79.1	37.2	18.3	31.8
2011-12	80.0	74.1	78.1	35.2	19.5	30.5
2017-18	72.0	69.3	71.2	23.7	18.2	22.0
2018-19	72.2	68.6	71.0	25.5	18.4	23.3
2019-20	74.4	69.9	73.0	32.2	21.3	28.7
2020-21	75.1	70.0	73.5	35.8	21.2	31.4

Source: Periodic Labour Force Surveys, National Statistical Office, Delhi.

ps: principal status; ss: subsidiary status

The gender balance in India in labour force participation, entrepreneurship, and growth remains among the lowest in the world (Ghani et al, 2016). This study says that improving this balance is an important first step for India's development and its achievement of greater economic growth and gender equality.

## 3. Concluding Observations

India 'leap frogged' from agriculture to services bypassing the manufacturing sector in both output and employment. The share of agriculture in both output and employment declined significantly over time. However, the employment share in agriculture is still high. The manufacturing sector has shown very little improvement in the shares of both output and employment. In the case of construction, the share of output has not increased while that of employment rose rapidly. There was a rapid rise in the share of services for both output and employment. But, the share of employment in services is much lower than that of output. Regarding trade, hotels, and restaurants, the share of both output and employment increased. On the other hand, in the case of high-value financing, real estate and business services, the output share increases significantly while that of employment showed only a marginal rise. In other words, structural change in terms of output is from agriculture to all the sub-sectors of services except community, social and personal services. In the case of employment, the structural transformation is from agriculture to construction and informal sector services.

The country has to focus both on improving productivity within a sector and transforming employment from low-productivity to high-productivity sectors. Productivity increase and structural transformation in the economy are important if India wants to be a developed country by 2047. Agriculture has to move from cereals to pulses, oilseeds and horticulture while the share of allied sectors like livestock, poultry and fisheries will rise over time. The food systems approach can strengthen agriculture value chains and agro-processing. The share of agriculture in GDP and employment will reduce significantly. Its share in employment should come down from the present level of 45per cent to 25per cent by 2047. The share of manufacturing in the output should increase to 30per cent while the share of services could be around 60per cent. Simultaneously, the share of manufacturing in employment could rise from the present level of 12per cent to 22per cent while the share of services could improve from 31per cent to 40per cent by 2047. India should make use of several opportunities in the space vacated by China to boost manufacturing, services and exports.

The formal sector's share in output and employment could rise significantly in the next 25 years. Productivity increase in all the sectors is needed for structural transformation and the country can not afford to ignore any sector of the economy. Finally, women's empowerment and an increase in the work participation rates of women will contribute immensely to the structural transformation and make India a developed country.

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