

**Jobful Growth – How to Achieve It in 2019-2024?**

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November 2018

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New Delhi, 110 001

## **Jobful Growth – How to Achieve It in 2019-2024?**

India has experienced a moderate to high GDP growth rate during the decade starting 2011 but the growth of employment has not been commensurate. This problem has got aggravated in the four years 2014 to 2018, although the Government has been trying to counter this charge with various types of partial data. The headline is that in 2018, India had a little over 40.67 crore employed workers (work force) and the unemployment rate was 6.75% of the labour force (workforce plus unemployed), making it another 2.94 crore workers needing employment. This labour force of 43.61 crore will grow at about 1.80 percent per annum, adding another 4.07 crore persons seeking employment in the five years from 2019 to 2024.

If we are aiming at a policy breakthrough in employment of all the new entrants to the labour force plus the backlog of the unemployed, a total of 7 crore jobs need to be created in the 2019-2024 period. This represents a compounded annual growth rate of 3.2 percent per annum for employment, as against an estimated 0.8 to 1.2 percent in the past eight years. In the past few years, we have had high GDP growth, but no commensurate increase in employment. This has created an unsustainable and dangerous situation. The challenge is to create high growth while also generating near full-employment with reasonable quality jobs.

The question is can such a large number of jobs be created, given the dismal history of previous decade? It is not enough to merely say a resolute yes. We need to answer in what sectors of the economy can these jobs be created? And with what level of investment? And where will all that capital come from? And recognizing that capital is not enough, policies and institutions will also have to be reshaped to ensure that the investments yield the desired number of jobs and with decent wages. Generating near full employment in any economy with a high annual increment to the labour force, is a proposition that will require a massive political will to redirect public and private investments towards sectors that generate employment. All this requires deep thinking and this paper merely makes a beginning.

All sectors are not the same as far as employment creation is concerned. Some sectors create much more employment, with a given level of investment, than others. These sectors should be prioritized for overall investment – both public and private. Private investment will follow the logic of maximizing expected returns, and can only nudged by incentives to sectors that generate high employment.

Public investment can, however, be prioritized in those sectors that generate high employment and also create public goods or positive externalities. The greatest of these opportunities is in regeneration of degraded natural resources. This needs to be supplemented by private investment, which can be channelized into these areas by suitable incentives.

## **Rural Jobs in Regeneration of Degraded Natural Resources (RDNR)**

Let us look at the various economic sectors first. Agriculture is the biggest employer but millions of workers and farmers are getting out of it due to low and uncertain earnings. They are instead seeking non-farm work, locally as well as through migration to big cities. Yet it is possible to stem this tide if investments are made in regenerating the degraded natural resource base for agriculture – water, forests and land – or Jal, Jangal, Jameen. Degraded natural resources include streams, rivers, water bodies, and groundwater aquifers, cultivated lands whose soils have deteriorated due to excessive chemical fertilisers, over-irrigation or soil erosion. With over 40 million hectares of wasteland requiring regeneration, another 60 million hectares needing extensive soil and water conservation, and 7.5 million hectares of lakes, ponds and reservoirs/tanks needing repairs, there are millions of jobs possible in regeneration of degraded natural resources (RDNR).

## **Jobs in the Construction Sector**

In the construction sector, there are large number of jobs possible in the housing as well infrastructure. With a significant shortage of over 20 million dwelling units and the need to upgrade existing housing stock, coupled with availability of housing finance from banks and housing finance companies, this sector needs a policy and not a fiscal boost. Further, with a need to create and improve the infrastructure in the next 1000 cities, there will be heavy demand for labour for the creation of infrastructure such as roads, bridges, and public buildings such as schools, health care centres, police thanas, and hospitals.

## **Jobs in the Micro, Small and Medium Enterprises (MSME) Sector in Small Towns**

In the non-agricultural sectors, employment has not grown anywhere in proportion to the demand for jobs. Employment growth in the manufacturing sector has remained low, and indeed there are prospects of further slowdown as automation takes off even more broadly. Thus in manufacturing, new jobs will get created in agro-processing around agriculturally productive regions (such as the Doaba region of Punjab, Malwa region of Madhya Pradesh and the coastal belt of Andhra Pradesh; and in niche micro-enterprises in rural areas (such as handloom and handicrafts).

Manufacturing jobs can grow in SME cluster towns of which there are about 400 established ones (like Moradabad for brass work and Tirupur for hosiery) if the SMEs here are made more productive and export-oriented. New jobs can also be created by establishing new medium and even large industry clusters based on localization of imported products (such as has already happened for mobile phone manufacturing around Chennai and NOIDA).

## **Jobs in the Services Sectors**

In services, much of the high end employment growth was driven in the previous decade by the Information Technology (IT) and IT-enabled services sector, which is again experiencing a slowdown due to enhanced use of software automation, and also a reversion to insourcing in the United States. Thus once again, in services, we will have to look for job growth in other service sectors such as retail and wholesale trade, storage and warehousing, transport and communication.

There are many jobs possible in tourism which is a composite services sector. New jobs can be created by developing newer destinations for rural and small town tourism to religious places such as Baijnath Deoghar in Jharkhand, Ganga Sagar Island in West Bengal, historical places like Mandu in Madhya Pradesh and wild-life tourism in remote places like the Simlipal Tiger Reserve in Odisha.

Social services like health and education, public administration and financial services, can be major employers in both private and public sectors. We have put together data from various government websites, which shows that nearly 20 lakh vacancies exist in public jobs, all the way from teachers to police officers.

Business and personal services are also major employment growth sectors in services such as real estate sales and management, call centres, data centres, and personal grooming, entertainment and recreation. Most of these services are offered in the private sector and the state only has to make facilitative policies under the rubric of “ease of doing one’s own small business”, but ensure that these benefit the large number of micro-enterprises too.

Legislation such as the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 need to be enforced in spirit. The application of GST, including the requirement of filing returns on-line, is onerous to millions of micro-enterprises and should be rationalized so that only large GST payers need to be computerized while smaller ones can manage by summary registration and annual returns and micro-enterprises are left alone altogether.

While directing investments in potential job creating sectors, we also have to recognize that employment is not homogenous and workers are at the level of unskilled, semi-skilled and skilled, apart from professionals. It is important for wage rates at higher skill levels to be significantly higher, for workers to make an investment in skill acquisition. These higher wages cannot be just legislated – they are a combination of higher productivity as well as adequate

bargaining power among workers (through labour laws and trade unions)<sup>1</sup> so that they can get their fair share of the higher productivity. In addition, a tax structure is needed which is equitable to both labour and capital in design as well as in operation. While wages get taxed at source, capital gains in stock markets have been tax-exempt for over a decade till 2018.

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<sup>1</sup> In case some readers find that arguing in favour of ease of doing business in the earlier paragraph and arguing in favour stricter enforcement of labour laws and revitalising of trade unions appears contradictory, data indicates how in the absence of bargaining power and protection, all the incremental wealth generated by labour has been egregiously appropriated by capital owners in India in the first decade of this millennium.

## Methodology

This paper is based on a straight-forward methodology using publicly available official economic data. To be rigorous, we have used a simple economic model which we describe below, starting with a description of main variables. The sub-script S indicates sectoral and R indicates regional or spatial component of the variable:

Sectoral-Spatial Growth Model Optimizing for both GDP Growth Rate and Employment Growth Rate:

S indicates Sector of economy (agriculture, natural resource regeneration, construction, manufacturing, services and all other sectors).

R indicates Region (rural villages, district towns - Samarth Zillas and Smart Cities)

Current GDP for sector S and region R (Rs crore) =  $G_{S,R}$

Share of sector S, region R, in GDP (%) =  $g_{S,R}$

Total current employment = n

Share of sector S, region R in employment (%) =  $e_{S,R}$

Current employment in sector R, region R =  $n_{S,R}$

New jobs in sector S, region R by 2024 =  $\Delta n_{S,R}$

Sectoral wage share of total value added in that sector =  $w_S$

New investment (private + public) in five years (Rs crore) in sector S, region R =  $I_{S,R}$

Jobs generated per crore of investment in sector S =  $J_S$

ICOR for sector S =  $R_S$

First, we ensure that there is adequate employment generated by modifying the share of investment across sectors till we reach the target level of employment, while staying with the assumptions about jobs generated per crore of investment in each sector  $S = J_S$ . Next we compute the GDP in year 2024 by using the ICOR for each sector  $S = R_S$ , and thus compute the GDP growth rate for 2019-24. If this turns out to be too low, the overall level of investment has to be increased, which is subject to the overall savings rate in the economy.

We enforce that, for GDP share,

$$\sum_S g_{SR} = g_R$$

$$\sum_R g_{SR} = g_S$$

$$\sum_R g_R = 1$$

$$\sum_S g_S = 1$$

Similarly, for employment share,

$$\sum_S e_{SR} = e_R$$

$$\sum_R e_{SR} = e_S$$

$$\sum_R e_R = 1$$

$$\sum_S e_S = 1$$

Calculations:

Increase in GDP by 2024, sector S, region R,  $\Delta G_{SR} = I_{SR}/R_S$

GDP in 2024, for sector S, region R =  $G_{SR} + \Delta G_{SR} = G_{SR} + I_{SR}/R_S$

Wage by 2024, sector S, region R =  $w_S * (G_{SR} + I_{SR}/R_S)$

New jobs created by 2024  $\Delta n_{SR} = I_{SR} * J_S$

Total jobs by 2024, sector S, region R =  $n_{SR} + \Delta n_{SR} = n_{SR} + I_{SR} * J_S$

Average wage per employee, sector S, region R, in 2024 =  $w_S * (G_{SR} + I_{SR}/R_S) / (n_{SR} + I_{SR} * J_S)$

Authoritative data used to come from the National Sample Survey on Employment and Unemployment but the last one for which data is available is for the 68th Round for the year 2011-12 by the NSSO under the Ministry of Statistics and Program Implementation (MoSPI). In the absence of authoritative economy wide data, we are using best estimates by triangulating from several sources.

Using sources such as the Centre for the Monitoring of the Indian Economy and a number of industry estimates, we have computed how many new jobs get created in a sector for every Rs

one crore of investment. As per the analysis, additional Rs one crore investment would be most fruitful in terms of employment for

Regeneration of Degraded Natural Resources - Jal, Jangal, Jameen. Land (including soil), water and forest regeneration which creates a large number of jobs in the short run. It then acts as a precursor to revival in the agriculture, livestock, fishery and forestry sector. There the employment will not go up due to severe disguised unemployment already, but as output and productivity goes up, so will wages. This will reduce flight from agriculture.

Construction – housing as well infrastructure: rural and district roads, bridges, schools and health centre buildings, in rural areas and a thousand selected small towns.

Manufacturing through micro, small and medium enterprises (handicrafts and handlooms, power loom textiles and apparel; wood and metal products; cement, ceramic, glass and plastic products; electrical and electronics, hand tools and machinery).

Services - Retail and wholesale trade, warehousing and transport, tourism, education, health, public administration, business, financial and personal services.

For projecting employment growth, we have made a simple economy wide model in Excel, named Job Yantra, focusing on the high employment generating sectors, which account for about 30 percent of the GDP but generate 72 percent of the jobs. But to make the model internally consistent and comparable with other economic aggregates such as GDP, GDP growth, investment to GDP ratios and incremental capital output ratios, we have included all other sectors in the model as a single item comprising the “rest of the economy” sectors.

Investment Choices: We have made the assumption that the Indian economy will invest at least 30 percent of the GDP year on year. This number has swung between 24 to 40 percent so we have decided to keep it at the conservative 2017 level of 30 percent. Half of this, that is, 15 percent of the GDP will be invested every year in the job growth generating sectors, consistently over the next five years. The GDP in 2018 is around Rs 190 lakh crore (trillion). This yields an investment level of Rs 28.5 trillion per annum, which would have to be from both the public and private investment sources, indeed largely the latter. The main exception where the major share of investment will have to be public is in the regeneration of degraded natural resources sector, where a lot of the investments will have to be made in common property resources. The main policy decision is how to direct investment across sectors so that the target number of jobs get created, while ensuring good wage rates and adequate growth in output.

Optimized Employment Distribution by Sectors: The custom made Job Yantra enables us to see the effect of different sectoral allocations on employment as well as well growth, thus enabling

manual optimization. This is shown below and the last column indicates the sector wise new jobs created, totaling up to 7 crore jobs in five years, meeting the policy goal of near full-employment by 2024. The model is internally consistent in the sense that with assumptions of incremental capital output ratios, the same investments also lead to GDP growth rate of 8.4 % pa average over five years.

<b>Sector</b>	<b>Jobs generated per Rs crore investment</b>	<b>Public + Private Investment in Rs Crore in 5 years</b>	<b>Public share as percent of investment</b>	<b>Public Investment in Rs Cr over 5 years</b>
<b>Agriculture, Livestock, Fishery, Forestry</b>	1.00	14,25,000	10.0%	1,42,500
<b>Jal, Jangal, Jameen – Regeneration</b>	8.00	14,25,000	90.0%	12,82,500
<b>Construction - housing and smaller infrastructure</b>	5.00	42,75,000	30.0%	12,82,500
<b>Manufacturing - micro, small and medium enterprises (MSME)</b>	4.00	28,50,000	10.0%	2,85,000
<b>Trade, transport, tourism, health, education, public, financial and personal Services</b>	3.00	42,75,000	60.0%	25,65,000
<b>All other sectors in the economy</b>	0.85	142,50,000	10.0%	14,25,000
<b>Total</b>	<b>3.64</b>	<b>285,00,000</b>	<b>24.5%</b>	<b>69,82,500</b>

Sector	Employment in Crore		Employment as % of total	
	2018	2024	2018	2024
<b>Agriculture, Livestock, Fishery, Forestry</b>	19.40	19.54	47.7%	40.9%
<b>Jal, Jangal, Jameen - Natural Resources Regeneration</b>	1.42	2.56	3.5%	5.4%
<b>Construction - housing and smaller infrastructure</b>	3.15	5.28	7.7%	11.1%
<b>Manufacturing - micro, small and medium enterprises (MSME)</b>	1.30	2.44	3.2%	5.1%
<b>Trade, transport, tourism, health, education, public, financial and personal Services - MSME scale</b>	3.88	5.16	9.5%	10.8%
<b>All other sectors in the economy</b>	11.52	12.73	28.3%	26.7%
<b>Total</b>	<b>40.67</b>	<b>47.72</b>	<b>100.0%</b>	<b>100.0%</b>

**Optimised Employment Distribution by Skill Levels:** Having projected sectoral enhancement in employment in the next five years 2019-2024, we looked at the skill composition under each sector. The Regeneration of Degraded Natural Resources will require unskilled and semi-skilled labour, primarily. The proportion of demand for skilled and semi-skilled workers increases in the construction and manufacturing sectors, and reaches the highest in the public service jobs that we have proposed.

For investments in sectoral growth to fructify into a large number of jobs with decent wages and working conditions, however, policies will have to be made more favourable to labour while ensuring institutions work effectively – whether for providing skills to worker under the National Skill Qualification Framework, infrastructure support to micro and small enterprises.

As can be seen, the largest number of jobs are for the unskilled but the growth of semi-skilled and skilled jobs has been significantly enhanced, which will also improve wages for workers. . As we stated earlier, higher wages cannot be just legislated – they are a combination of higher productivity as well as adequate bargaining power among workers (through labour laws and trade unions)<sup>2</sup> so that they can get their fair share of the higher productivity.

**Optimized Spatial Spread of Employment:** The choice of sectors is by itself not adequate as we also need to ensure adequate employment where the population lives. Thus instead of merely the traditional rural-urban distribution, we are proposing a new way of looking at spatial distribution of employment.

Rural villages with less than 5000 population, nearly 6 lakhs, where the Natural Resource Regeneration work will be focused

Samarth Zillas (capable districts, comprising the district headquarter and the smaller towns). There are expected to be about 5000 of these by 2018, and we would recommend focus on the top 1000. (See example of Alwar district below):

Smart Cities – these are the metropolitan and million plus population cities and some others, adding up to nearly 100.

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<sup>2</sup> In case some readers find that arguing in favour of ease of doing business in the earlier paragraph and arguing in favour stricter enforcement of labour laws and revitalising of trade unions appears contradictory, please refer to the graph in Annexure 1, which indicates how in the absence of bargaining power and protection, all the incremental wealth generated by labour has been egregiously appropriated by capital owners in India in the first decade of this millennium.



We have attempted to stem rural to large (smart) city migration in two ways –

By making rural jobs more numerous and more attractive; the more numerous ones are in regeneration of degraded natural resources and these in turn will result in enhancing productivity and incomes in agriculture, livestock, fishery and forestry. As no significant increase in employment in agriculture and allied activities is projected, a major part of the productivity gains should accrue to labour in terms of higher wages.

By creating large number of job opportunities in the construction, MSME manufacturing and services sectors in district headquarters and other small district towns. This is what we call Samarth Zillas (capable districts), a counter point to Smart Cities.

The table below shows the optimal projected increase in employment by sub-sector in each of three spatial categories. These numbers stem from the same Job Yantra so they are consistent with sectoral investment choices and the resultant growth.

Sector	Increase in Employment by Location in crore, 2019-24			
	Rural Villages	Samarth Zillas	Smart Cities	Total
Agriculture	0.128	0.011	0.004	0.14
Jal, Jangal, Jameen –	0.68	0.30	0.15	1.14
Construction - housing & infra	0.16	1.32	0.66	2.14
Manufacturing - (MSME)	0.11	0.68	0.34	1.14
Services - MSME scale	0.06	0.81	0.41	1.28
All other sectors in the economy	0.06	0.58	0.58	1.21
<b>Total</b>	<b>1.21</b>	<b>3.70</b>	<b>2.14</b>	<b>7.05</b>

## Conclusion

In summary, to generate 7 crore new jobs for India in the 2019-24, we are proposing significant (half of annual total) investment in four major employment generating sectors:

Regeneration of degraded natural resources - like silted up water bodies, dying streams, polluted rivers, spent soil, degraded grazing lands and denuded forests, all of which will create a large number of jobs in the short run. This regeneration then acts as a precursor to revival in the agriculture, livestock, fishery and forestry sector.

**Construction** – housing as well lower end infrastructure (rural and district roads, bridges, schools and health centre buildings, not expressways, fast railways, metro rails, big airports)

Manufacturing through niche micro-enterprise such as handlooms and handicrafts, more productive and clustered, export-oriented small and medium enterprises, and even some import localization based medium and large enterprises.

**Services** – Retail trade at the informal sector will remain a major employer while more jobs arise in organized retail, e-commerce and wholesale trade, warehousing and transport, delivery logistics, off-beat tourism, business, financial and personal services. Public sector job vacancies in education, health and public administration need to be filled.

Overall, about 70 percent of the investment will be from the private sector, and 30 percent from public funds. Thus the overall fiscal burden is manageable and in any case the result in terms of higher growth and tax buoyancy will enhance the government's fiscal capacity and reduce the demand for subsidies. The public funding will largely be needed in for regenerating common property resources. The second major part of public funding will be for higher employment in services for public service provision, including health, sanitation, education, vocational training, law and order, and speedier administration of justice.

Through private investment, there are many jobs possible in manufacturing - handicrafts and handlooms, power loom textiles and apparel; wood and metal products; cement, ceramic, glass and plastic products; electrical and electronics, hand tools and machinery).

Likewise in the composite services sector, new jobs can be created by developing newer destinations for rural and small town tourism to religious places, historical places, wild-life sanctuaries" and developing experience-tourism destinations such as farming tourism, health tourism, eco-tourism, ethno-tourism, art and craft tourism, cultural tourism etc.

In terms of policy breakthrough we are suggesting a significant investment in building the infrastructure and economic attractiveness of about 1000 district headquarter and smaller towns, as the next rung of growth magnets, since Smart Cities seem to sputtering out due to

many problems. Adopting a Samarth Zilla framework will also promote decentralized development. In terms of policy continuity, further steps for ease of doing business, including labour law reforms, GST filing and coverage simplification, are recommended.