

In Conversation with Professor Jayan Jose Thomas

Jayan Jose Thomas is a Professor of Economics at the Indian Institute of Technology (IIT) Delhi, where he has been employed since 2010. Jayan had also served as a Member of the State Planning Board, Government of Kerala, from 2016 to 2021. Through his research, Jayan has tried to address development problems, particularly those related to labour and industrialisation, from a macroeconomic perspective. Jayan's research papers have appeared in reputed journals, including the *World Development*, *Development and Change*, and *Economic and Political Weekly*. Jayan regularly contributes to media outlets, notably *The Hindu*, and his research has been widely cited, including in international media. He has worked on research projects for the International Labour Organisation (ILO) and the United Nations Population Fund (UNFPA). His current research spans four interrelated areas: India's youth, focusing on education, aspirations, and jobs; industrial policies and development in Asia and the world; inter-state migration of workers in India; and macroeconomic policies for wage-led growth.

Editor: Your research points to two key issues: data gaps that likely obscure the true scale of informality, and a failure to create secure non-agricultural jobs. Based on this, what would you identify as the single biggest structural barrier beyond measurement issues that prevents the generation of secure employment for India's vast informal and young workforce?

Prof. Thomas: As we talk about structural change, there was a lot of discussion about this topic starting from the early 1950s. India was colonised, and immediately after gaining independence in 1947, we began industrialisation. Many other Third World countries also followed suit, and all of them were state-led industrialisations.

There was one common feature to many of these countries and the industrialisation paths they pursued. These poor countries had very large agricultural sectors, with significant – in some cases, as much as 90% – proportions of their workforce in agriculture. One of the big

structural constraints at that time was the need to raise the savings rate, to find the resources for new investment. To build new industries, you need capital, so where would the funds come from?

A famous economist you probably have heard of, is Ragnar Nurkse. He argued that agriculture could generate savings from within the resources available to the domestic economy. Even now, India has a very large number of its workers attached to agriculture. How can agriculture provide these savings? Let's say there is significant underemployment in agriculture. For example, if you have a one-acre plot and six adult children in the household, and you probably need only two of them to take care of cultivation. The remaining four can shift out of agriculture. Nurkse argued that some of these family members, who were not really contributing to cultivation, could join the industry and still be fed by the 'productive' family members, as they had been earlier. This means all the

output in the industry becomes a surplus or savings.

The difference with industry is that it is a sector with increasing returns to scale. When you increase your inputs, the output increases more than proportionally. So, the idea was to bring workers out of agriculture and into high-productivity economic activities, such as industry. This would increase overall output and, therefore, raise savings in the economy, since savings are effectively output minus consumption.

But in India, as you correctly said, much of this transfer has been uneven. India's state-led industrialisation was among the most ambitious in the Third World and achieved significant successes. The country invested in science and technology, in space and research, and in modern technologies; it built institutions such as the IITs and strengthened higher education.

At the same time, one of the major structural constraints was high inequality, especially in rural areas. There was a high degree of landlessness, and land was concentrated in the hands of a few. For this transition from agriculture to industry to succeed, agricultural output needed to grow quickly enough, and simultaneously with industrial growth. But agrarian inequalities acted as a major hindrance. The inequalities hindered agricultural productivity growth. The landowners were often not interested in technological innovations. A large part of the country required irrigation, but there was insufficient public investment to expand it.

A similar issue existed in the industry. While India had large, technologically modern industries on one side, and very traditional industries on the other, it lacked a strong middle layer of industries. Development was not balanced. There were also severe problems on the demand side. Industries need demand, so if rural incomes are not rising, where will demand come from?

These were the major challenges.

Today, agriculture still accounts for around 42% of the workforce. India has a large modern sector, the IT sector, and other industries. However, in terms of labour absorption, these sectors have limited capacity. Much of the labour absorption occurs in the informal sector, particularly in construction. The informal sector is characterized by low incomes, low-value addition, and is not carried out in a very modern way. The same applies to services, informal trade, and so on. But these are the very sectors that have generated most employment.

This is the big challenge that we are facing today.

Editor: You have written about agrarian distress and seasonal out-migration. Could seasonal migration be reframed as a livelihood strategy rather than only as distress? And how should policy differentiate between both of these cases?

Prof. Thomas: Well, part of this I have studied using secondary data, national sample surveys on employment and the periodic labour force surveys. But I have also done

research with my colleagues on migrant workers. We visited some cities with large concentrations of migrant workers and major industries. Between 2020 and 2024, we conducted a number of surveys in Ludhiana, Coimbatore, and two places in Kerala: Kochi and Kozhikode.

In each of these cities, you see migrant workers who have travelled long distances from their villages. These include workers from Bihar, Uttar Pradesh, West Bengal, and Assam who migrate to Tamil Nadu or Kerala. Earlier, workers from Bihar and Uttar Pradesh used to go to Punjab and Delhi, but now many migrate over longer distances.

Now, is migration a strategy for livelihoods or is it distress-driven? I would say it is clearly a livelihood-seeking strategy. But if you look at the profile of these workers, who are they? A large proportion belongs to socially disadvantaged groups. They have very little education. Even though many of them are young, their schooling is often not more than the fifth class. They also belong to households that do not own land. Most importantly, they come from villages without a real social security system. In fact, we do not have a functioning social security system in most parts of India. These factors push workers out of their places of origin.

But we should also see that demographic changes in India are happening in such a way that some regions, especially the northern and eastern states, have younger populations. These regions are more labour surplus. Part of the reason is the slower decline in fertility in these regions, along with other social factors. But in some other parts of the country,

demographic change is happening much faster, and we have an ageing population, for example, in Kerala and Tamil Nadu. In some southern States, there are labour shortages, especially for physically demanding jobs. This is also a reason for migration.

So, part of migration is driven by the disadvantages workers face because of their social backgrounds, low levels of education, lack of land ownership, and the absence of an adequate social security system. The other part is the mismatch between labour supply and demand across different regions in India.

I would also add that the trends in migration we just discussed have implications for industrial policy. One of the workers we interviewed in Ludhiana was from eastern Uttar Pradesh. This was in 2022, and he had recently returned to Ludhiana after spending several months with his family in the village, following the COVID-19 pandemic. He remarked that there is a lot of land in Uttar Pradesh, so why cannot some of these industries move there? Migration is not easy. Workers typically leave their families, or at least some family members, behind. Sometimes one or two members travel with the worker, but a large part of the family stays back. So, relocation of industries would reduce the burden that migration imposes on workers and their families.

I guess that is clearly the way forward. The garment industry, for instance, became concentrated in a few pockets, such as Ludhiana and Tirupur, because of the advantages these locations enjoyed when those industries began. But now it is time to rethink this regional pattern of industrial

growth. It is important that industries, especially labour-intensive industries, move to regions with greater labour availability.

Clearly, social policies are crucial. What the workers lack in terms of social security should be addressed, and workers should not be exploited simply because they are migrant workers coming from a different region or state. One way to avoid that is to institute social security measures at both the source and destination regions. Workers should continue to receive their ration and their PDS, regardless of whether they are in Uttar Pradesh or in Punjab. They should continue to have access to all their social security programs. In that way, the worker will have greater negotiating power, and there will be no room for exploitation. If there are differences in labour supply and demand, it is time to consider a new industrial geography for the country.

Editor: Kerala is a top performer in revenue mobilization efforts and also the biggest spender of the government money on a per capita basis. Half of its government employees are women, compared to one-sixth of women government employees at the national level. How has this focus on building human capital and public sector employment shaped the nature of “labour on the move” from Kerala?

Prof. Thomas: You have probably learned about Amartya Sen and his idea of development as freedom. He started writing about the social sector achievements of China, Sri Lanka, Jamaica, and Kerala in the 1980s. One common feature of all these regions at that time was their relatively low incomes. But despite their low incomes, these regions managed to build important capabilities for

their residents, such as education, health, lower inequality, higher life expectancy, and, in Kerala’s case, greater political participation, wider newspaper reach, and better gender ratios compared to the rest of the world.

The fact that all of this was achieved by a low-income region gives us hope. Amartya Sen’s argument is that we do not have to be very rich to achieve many of the freedoms that we value in our lives. We value getting three meals a day. We value education. We value health care and fresh air. Many of these capabilities can be achieved with relatively low income. High income growth is neither necessary nor sufficient to achieve many of these freedoms. In many ways, it is a revolutionary idea in the field of Economics.

Kerala is important because until the late 1980s, its per capita income was below the Indian average. Now, of course, it is much above the Indian average and is a relatively rich Indian state. But when it made impressive gains across many social-sector indicators during the 1960s, 1970s, and early 1980s, Kerala was one of the relatively poor states in India.

How did Kerala achieve this? These achievements were part of what Amartya Sen describes as public action. Public action includes initiatives from the government. For example, in the early 1960s, around 50 percent of Kerala’s state budget was spent directly on health and education. This was much higher than other Indian states. But public action also includes healthy interventions by the media, opposition parties, and the judiciary.

Sen often refers to Maharashtra's experience during the 1973 food shortage. Maharashtra did not have enough food, and there was a real crisis, but famine was avoided. Famines, according to Amartya Sen, are not caused by food shortages. Famines occur when people lose the ability to purchase food. And the ability to purchase food can be restored by providing jobs or with income transfers. Maharashtra avoided famine because the state launched a public works program that later became a model for the National Rural Employment Scheme. All these measures that helped avoid famine happened in Maharashtra not only because the government acted, but also because the media reported the food shortage, and the opposition parties raised the issue. A similar pattern of public action has happened in Kerala.

The way forward for any region begins with ensuring the basic freedoms for its residents. But once that happens, a second challenge emerges. Kerala moved ahead of other Indian states in education and health. This created a highly skilled workforce in the state. The challenge, then, has become finding jobs for them. When skills and aspirations rise, young people will seek jobs that match their abilities and aspirations. In Kerala, there is scope for the growth of knowledge- or skill-intensive jobs. But if we want to hugely expand jobs in biotechnology or the advanced IT sector, the government must plan for it. That is why industrial policy becomes important.

Editor: You have documented a shift in labour from agriculture to construction, beginning in the 2004-2005 period. This shift now seems to have slowed, with data suggesting a return to farm work, especially after the pandemic.

Does this regression signal a failure of the structural transformation process itself, or are our needs different?

Prof. Thomas: We need to look at our investment data. You would have learnt this in your macroeconomics course that aggregate demand consists of consumption, investment, government expenditure, and exports. Among these, investment, whether from the public or private sector, is a very important component. It has strong multiplier effects and plays a central role in driving growth.

If we examine the numbers, we see that India's investment-to-GDP ratio increased sharply during the 2000s, from the early years of the decade to around 2008, when it reached nearly 40 per cent of GDP. That was comparable to China's investment rate at the time. But after the global financial crisis, from about 2008 to 2011, investment growth stagnated. After 2011, we see a clear and more persistent decline. Today, investment in India is roughly thirty-one or thirty-two per cent of GDP, far below the peak we saw in the mid-2000s.

If we look at China, we see a very different pattern. After the financial crisis, China increased its investment, largely through its public sector or state-owned enterprises. China realised that export demand would weaken after the crisis. When external demand slows, you need to create domestic demand, and one of the most effective ways to do that is through investment. This includes investment in infrastructure, in new manufacturing capacity, and in new technologies such as renewable energy, artificial intelligence, and electric mobility.

China did this on a large scale, and that created growth not only in construction but also in manufacturing and services.

In India, the construction slowdown we see is really a symptom of a larger issue: the slowdown in investment. And we should also remember that construction is not the sector that will absorb India's labour reserves in a sustained and long-term manner. Ideally, manufacturing and high-end services should be the main drivers of labour absorption.

Construction work in India is carried out in ways that are still very traditional and pays low wages to workers. If you visit a construction site in India, you may see workers working without proper safety equipment or formal workplace standards. Most construction workers are migrant workers, and this creates conditions of precarity. Thus, this shift of workers from agriculture to construction is essentially workers moving from one form of precarious employment to another, rather than a genuine structural improvement in terms of security or welfare.

Editor: Sir, in your 2020 EPW article [Labour Market Changes in India, 2005-18: Missing the Demographic Window of Opportunity?], you argued that well-directed industrial policies are crucial for creating decent manufacturing jobs. How should industrial policy take form to take advantage of this Demographic Window of Opportunity?

Prof. Thomas: We are now, in India, at a stage of demographic transition. India accounts for around 20% of the worldwide population of young people aged 15-29 years. One positive

change that has occurred post-2000 is the increase in enrollment rates. We now have more than 90% of the school-age population enrolled, and the enrolment gap between girls and boys has decreased significantly. Even in the higher age group, 15-29 years, we now have around 30% of the entire population in that age group attending a school or a college, with very little difference between girls and boys. This is a very big positive achievement. And if we look at the actual numbers, there are around 120 million young Indians aged 15-29 years in high schools or colleges. That is as large as Japan's population. When we discuss industrial policy, I would say we shouldn't be thinking about industries from the 1980s or even the 1990s, which helped China grow and absorb labour in very large numbers. These were, at least initially, labour-intensive industries, and China's big advantage then was its low wages.

India has a very large population of young educated workers. What they will be seeking are jobs that use their skills and talents. This means we now must build industries that are very different from the previous generation industries of China. The industries of the 2020s must be very different from those of the 1980s and 1990s; we should be planning the growth of industries like semiconductors, biotech, and so on. Are we able to build those industries? That, I think, is the big challenge

The demographic 'window of opportunity' before our country is limited. By 2040, we will not be a country of the young but of the relatively old. In the next 15-20 years, we must create new jobs. We must also remember that India faces very high economic pressures, because on the one hand, China has already

built very large industrial capabilities. On the other hand, the US, which used to be a large and long-standing market for exporters from countries like India, is erecting new trade barriers. These challenges imply that we must plan an altogether new industrial structure. The growth also must be, to a greater extent, domestic-market oriented.

A growth that is domestic-market oriented means that low wages will no longer be sustainable, for if your domestic demand has to increase, your wages must rise too. So, we need rising, instead of stagnating wages, while making use of the capabilities, skills and knowledge that the labour force has. Our industrial policy shouldn't be based on the belief that because we have very large labour reserves, India's advantages are only in labour-intensive industries.

If a country's manufacturing is limited to assembly or low value-adding operations alone, its grip over the global production network will be rather weak. Today, in the case of many products – say, the computers we use -- manufacturing is spread out globally. The parts of a computer are produced from many corners of the world. Taiwan produces the semiconductors, the components are assembled in China or Vietnam, and so on. The advantage arising from cheap labour will not be a lasting one in any industry. This is because the industry can easily shift to a cheaper location, from India to Laos or some of the African countries, where wages may be cheaper.

A very good example is the case of the garment industry. Despite being a highly labour-intensive industry, India's share in the

global exports of garments has remained stagnant at less than 4%, whereas China has a share of approximately 35%. Even in labour-intensive industries we need innovation and modernisation, and it is insufficient to depend on low wages alone.

China's ascent in recent years is clearly linked to the fact that it has been building up its technological capabilities over the last few years.

Editor: What issues have you commonly seen while analysing and interpreting employment data?

Prof. Thomas: One good thing that has happened in recent years is that there is much more discussion in the media and in policy circles about the employment data. However, I believe that employment data is still not fully understood in many of these public discussions.

Let us consider unemployment, for instance. Amartya Sen had once remarked that India's low unemployment rates of around 2% could put developed countries to shame. The low unemployment rate mainly arises due to the way employment and unemployment are measured in India. What is the unemployment rate? It is the unemployed as a share of the labour force. Who all are part of the labour force? Those who are working and those who are seeking jobs. But there is a large part of the working-age population in India who report that they are outside the labour force, especially women.

Many women – who are in the working age years and a substantial proportion of them

educated – report their status as attending domestic duties in their own homes. The real reason could be that they are discouraged due to the absence of suitable job opportunities. In a way, they are ‘unemployed’, but the unemployment statistics do not reflect their lack of jobs. The unemployment rates in India doesn't give a true indication of the extent of unemployment in the country.

With respect to statistics, one good thing that has happened is that we now have annual data on employment. Earlier, the national sample surveys on employment used to be held every five years, but now we have the PLFS or the periodic labour force surveys held annually. But it is not just about data availability. Young people like you should be able to analyze this data and to interpret it well.

In recent years, there's been much discussion about women's participation in the labour force in India, which had been declining for a long time and began increasing from around 2020-2021. But has there been a real turnaround in job opportunities for women? No, because a large part of the increase in women's employment comes from women reporting their status as self-employed, as unpaid helpers in agriculture. While recording data in the employment surveys, there is a category, activity status 93, which is for persons “attending domestic duties and also engaged in activities such as collection of vegetables or tailoring for household use”. If a person's activity status is reported as 93, she is categorized as being out of the labour force. But then there is another category, activity status 21, for people working as unpaid helpers in agriculture and household enterprises, who are categorised as workers. It

is likely that a large number of women whose activity status was categorized under 93 in the earlier surveys are now classified under 21. Earlier, they were out of the labour force; now they are considered workers, although nothing much has changed in terms of their employment status or agency within the household.

In any case, it is very clear that women's work in the economy is highly underappreciated and under-reported. For instance, in rural Haryana, women are active participants in household cattle rearing and milk production. Nevertheless, statistics show a low proportion of women in the workforce in Haryana. What could be the reason?

Remember that the PLFS is a household survey of employment. It may be the perception of the person in the household who answers the survey – the husband, male family members, or the woman herself – that female members are not contributing to livestock rearing or agriculture, even though they do most of the work. Thus, as economists, we must be mindful of data measurement and interpretation problems.

Editor: Given your focus on studying trends in manufacturing, do you find any inconsistencies in job estimates calculated from PLFS compared to those of the Annual Survey of Industries (ASI)?

Prof. Thomas: In the ASI, data is collected from firms that voluntarily provide the information. Whereas PLFS or NSS are household surveys where you go up to a household member and ask, “Are you employed in an industry?” The ASI only covers factories, and factories are those which

have employed 10 workers or more with electricity or 20 workers without. So, we find that at least 70% of our manufacturing workers are outside the factory sector. They work in small, unregistered manufacturing enterprises with less than 10 workers in each.

According to the PLFS data, there has been a stagnation in manufacturing employment, especially between 2011 and 2020, whereas the ASI shows an increase in factory employment during this period. So, one possibility is that the stagnation in employment growth is more marked in the unregistered sector.

Editor: In the East Asian development model, bureaucracies have played a very important role. Do you think that in India, the role played by the government and the bureaucracy in industrial development is insufficient, which leads to a trickle-down effect?

Prof. Thomas: One of the important scholars on East Asian development is Professor Alice Amsden, who was a professor at MIT. She studied the South Korean and Taiwanese industrialization experiences. She argued that these industrializations succeeded by getting ‘relative prices wrong’.

We study in economics that the way to succeed in industry is by getting ‘relative prices right’. That is, a labour surplus country should focus mainly only on growth in labour-intensive industries. And to be successful in labour-intensive industries, this country must get its relative prices right, which means that the relative price of labour is low, or wages remain stagnant. At the same time, the cost of capital or interest rate should

remain relatively high, reflecting the scarcity of capital in that country.

But the East Asian countries proceeded in the opposite direction. On one hand, they provided subsidies to industries and interest rates were made lower, or capital was made cheaper, even though these were labour surplus and capital-scarce countries at the time they started industrializations. At the same time, wages rose rapidly in these countries, from low initial levels, and living conditions of the working classes improved.

We must remember that in East Asia, much of the industrial growth was led by the private sector, but the government supported industrialization by acting as a planner and providing the private sector with subsidies and incentives. At the same time, the government could instill discipline in the private sector, making sure that they meet the growth targets. Thus, while on the one side, the state provided the carrot—the subsidies, there was also the stick—in the form of the government disciplining the market. This meant that the private sector firms, which received state support, acted on their promises and met the production and export targets. The industrial structures of these countries diversified, with South Korean firms excelling in steel, ships, electronics, and so on. But all of that was possible because there was a strong economic bureaucracy that pushed the industrialization efforts. There is, in fact, a study by Chalmers Johnson on how MITI, which is the Ministry of International Trade and Industry in Japan, aided that country’s economic growth.

India needs to have, clearly, a much bigger bureaucracy. When a country’s population is

growing, you need a bigger governmental machinery for planning and effective implementation of government programmes. The size of our government workforce, or the number of persons employed in public administration and defense, in India was around 10 million in 1993-94, and this number has not increased after that. We need many more civil servants in the country. We need many more doctors, teachers, and other

professionals. There are only 0.7 doctors per 1000 population in India compared to 8 doctors per 1000 population in Cuba. Even if India tries to achieve the Chinese level of around 2 doctors per 1000 population, the country will need a million doctors more. A huge expansion in the numbers of skilled professionals in various areas is urgently needed for India.