

In Conversation with Professor Rosa Abraham

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Editor: How do social identities, as a factor, play into the degree of vulnerability of the labour force? Are there any demographic patterns observed in the Indian context that provide evidence for a disproportionately exposed labour force, keeping in mind the nuances and increasing complexity in the identity of the average Indian worker?

Prof. Rosa Abraham: Many groups are disproportionately exposed. Much of my work also focuses on this question. Let's take a life-cycle perspective. When we look at the labour market, we often focus on the outcomes themselves, but a lot of these impacts actually emerge even in the pre-labour market. By pre-labour market, I mean the decisions about how long one chooses to study and what subjects to pursue.

In terms of the pre-labour market question, specifically how long one studies and what subjects one chooses, the good news in the Indian context, particularly regarding gender and to some extent caste, is encouraging. We have reached a point where tertiary enrollment rates are fairly similar between men and women. There is still a small gap, but it has been steadily narrowing over time. This represents significant progress as a society,

where both men and women now have almost equal access to higher education, speaking in general terms.

When it comes to moving into higher education, we have also been seeing a gradual convergence in terms of caste. Scheduled Castes and Scheduled Tribes, who are traditionally marginalised groups, have been gaining increasingly better access to higher education. In terms of the duration of education, how long one studies, the gap appears to be narrowing.

However, the choice of what to study is where we continue to see some persistent gaps. For example, there is considerable evidence showing that women are less likely to pursue STEM education. STEM fields often provide access to the highest-paying jobs, and in that sense, they remain largely male-dominated. Moreover, within STEM, particularly in engineering and medicine, we find that these courses are often prohibitively expensive.

The average cost of education in these fields is nearly three to five times higher compared to an arts or humanities education. This means that for many caste groups, such courses remain largely inaccessible. As a result, who gets to do what in the labour market is often

predetermined by the choices made before entering it.

Another aspect that is less examined is the entry into the labour market. This is a very interesting area, and some of my recent work has focused on it. What we've found is that the Indian labour market is, in many ways, quite segmented.

In my work with co-authors, we found that there is essentially no job ladder in the Indian labour market. Especially in the case of the formal segment of the labour force, including, for instance, public sector or IT sector jobs, which are relatively regular, well-paid, and come with social security benefits. This means that once individuals enter a particular type of employment, they tend to remain within that segment, especially in formal salaried work.

Also, you cannot typically move into formal salaried employment through the informal labour market. For instance, if you begin as a gig worker, it is almost impossible to work your way up to a regular, full-time job. So, what you enter really matters. In terms of accessing good jobs, some researchers refer to this as a "broken ladder", where what you begin with really matters.

It also depends on how long you can afford to wait for a suitable job. For instance, if you have completed your graduate education and the position you aspire to isn't immediately available, you might choose to wait or make multiple attempts at an examination until you secure that job. This ability to wait becomes crucial in shaping one's long-term career path.

However, waiting is a luxury that not everyone can afford. Most people cannot wait for the ideal job and therefore often end up in

entry-level positions that are highly precarious and informal. The option to wait is often mediated by social identities of caste and gender. As a result, the ability to enter into full-time, secure employment tends to be limited to a relatively elite and privileged group, whether by caste, class, or gender.

Once you're in the labour market, you again see these differences manifest in various forms. One is, of course, the more obvious kind of direct discrimination where there is an explicit preference for certain groups. It is difficult to capture such discrimination in large-scale empirical data, but what we do know is that access to desirable occupations remains quite segregated. The good news is that occupational segregation has gradually declined over time.

Many studies, including some of our own, examine this by looking at father-son pairs, comparing what occupations fathers held and what their sons now do. Historically, sons of fathers from traditional caste-based occupations often continued in the same line of work, but this pattern has eased over time.

Agriculture is becoming less and less an occupation for marginalised communities. However, where agriculture once served as a base from which sons might have moved into the modern services sector, that kind of upward mobility is seen primarily among upper-caste or general category groups. Among Scheduled Castes and Scheduled Tribes, the shift away from agriculture has largely been into construction or other low-paying service jobs. So, we still see occupational segregation persisting, though to a lesser extent than before.

For women, an interesting trend we have observed is that the wage gap has narrowed. Earlier, women earned about 40–50% of what men earned, whereas now they earn roughly three-fourths, particularly in salaried employment. However, when we look at self-employment, which remains the predominant form of work for women, they continue to earn only about half of what men earn. This gap persists regardless of occupation or education level. These fixed social identities don't seem to moderate outcomes in the labour market as much as one might expect. In that sense, the impacts of social identities on various labour market outcomes persist.

Editor: I had a follow-up question about how you mentioned that there's been a convergence in SC and ST in terms of employment. Would you say that this convergence is sustainable in the long term, and do reservations (assuming that they contributed to the convergence) continue to benefit the way they were envisioned to?

Prof. Rosa Abraham: Reservations actually were one of the big things that sort of equalised occupational segregation. So, if you make this funnel diagram by segregating the labour market into a pre-labour market, where, over time, there are other kinds of challenges that people face, what they choose to study, how long they choose to study, and what kind of job they get.

What we find is that the share of SCs and STs who are graduates is actually very similar to their share in the total population; not very similar, but not hugely different. The share of ST, SC graduates to come into salaried jobs is again fewer, so the funnel gets narrower. It

gets narrower if you think of the private sector. That's where we are finding that there is very little entryway inclusion in this case.

We've also looked, and then this was in the context of the Agni Veer scheme, specifically on how important the public sector requirement is in providing access to marginalised groups, and we found that the public sector is the only kind of large industry group where you can find equal representation of scheduled castes and scheduled tribes as they are in the population.

So, reservation is hugely important in the country and has been hugely important in this kind of transformative process. What we are now confronted with is the question of sustainability; we have these very different and fragmented kinds of social groups who are now lobbying for their specific reservation. It is not going to be sustainable for governments to be providing that level of reservation. Not to say that it's not an important affirmative action. I think it's hugely important, but I think it's important for it to have a social focus; to understand marginalisation from a social perspective rather than an economic perspective.

Some communities have been socially discriminated against. There may be economic layers of discrimination as well, but I think if we start going down that path, we may start watering down the very mandate of the reservation, and it's also going to become unsustainable.

Public sector employment is a very, very small share now of India's workforce, so reservation then just becomes a very small strand of people who have access to salaried employment. In that sense, there's again the

sustainability issue. If the public sector is no longer a big employer, then reservation becomes a moot point.

Editor: I would like to ask about this very interesting survey you conducted across 12 states during 2020, at the peak of the COVID-19 pandemic. You documented the severe impact it had on the informal sector and even on certain segments of urban employment.

What lessons do you believe India could have drawn from the pandemic to better prepare for global crises such as those triggered by climate change or other disruptions, so that their effects on employment and labour wages are not as severe as those seen during COVID?

Prof. Rosa Abraham: During the COVID period, especially around the lockdown, there was a lot of discussion about how the pandemic could serve as a learning opportunity. And indeed, there were several. But now, three or four years later, many of those lessons have not really been implemented.

One major takeaway, and this is perhaps the most obvious, is the absence of a robust social security system in India. We have a situation where the majority of our workforce is engaged in informal employment. By definition, such work does not come with any form of social protection or job-related security. But in the Indian context, we need to move away from treating informality as a single, uniform category.

If we define informality primarily as the absence of social security, we can broadly think of two types of workers in India. The

first group includes those employed by formal enterprises, large, registered corporations that are legally obligated to follow labour laws, but who themselves are hired informally. These workers are often employed on short-term or part-time contracts without the protections available to regular employees.

The second group represents what the International Labour Organisation originally described as informal workers within informal enterprises. These include small or petty enterprises, often single-person operations or family-run units that operate entirely outside formal registration and regulation.

It could be a person who occasionally hires others but not on a regular basis, or it could be what we call an “own-account worker”. This forms a large segment of the workforce. When we think about building a social security architecture, it has to be designed very differently for these two groups of workers.

Now, in the first group, where you have formal employers, it is possible to clearly identify who the employer is. In that sense, there is a certain degree of responsibility that can be attributed to the employer for their employees.

There is a distinct kind of social security system for this group, which we already have to some extent, in the form of a provident fund (PF), paid leave, maternity benefits, and similar provisions. The real challenge, however, lies in effectively implementing these laws and ensuring that employers comply with the basic social security regulations. In this case, there is an identifiable employer who can be held accountable; therefore, the key issue becomes

the effective implementation of social security laws.

It was interesting to observe, during the pandemic, how this played out in practice. If you recall, there was significant uproar when construction workers began returning to their home states because they simply did not have the means to survive in the cities. Up until that point, these workers had no clearly identifiable employer to hold responsible for their welfare.

However, when discussions began around arranging trains for their return, several employers suddenly came forward, particularly large real estate organisations lobbying local governments to stop these trains, arguing that they would be left without a workforce if the workers left.

These organisations argued that the state should not be providing such trains and that the workers should be taken care of locally. This created a strange situation; no one was officially responsible for the workers, yet these employers still wanted to influence decisions about whether the workers could return home and what the state's role should be.

I think this points to a fundamental problem of accountability when it comes to this segment of workers. There is a clear legal and moral need to make employers responsible. Now, the second kind, in the same group, is a slightly more amorphous category, which is, you know, I can use the word gig because that's the most recognisable word. But I think it extends beyond platform workers, where you have been a worker whose employer keeps changing.

In the case of gig and platform workers, you often don't have a single identifiable employer. That's where it becomes important for all employers or platforms to contribute to a common welfare fund. I think the recent gig worker laws, which propose the creation of centralised funds to which employers contribute and which are then used for worker welfare, are a step in the right direction.

However, implementation remains a major challenge. From the experience with construction workers, we know that while such welfare funds have been established, the actual utilisation of these resources has been very limited. That is another major barrier we need to think about. But I believe making employers responsible and holding them accountable to their workers is a crucial step forward. Unfortunately, trade unions in India have been greatly weakened over time, which makes this even more challenging. Strengthening collective worker representation is therefore equally important.

Now, when it comes to the other large group, informal workers in informal enterprises, the situation is quite different. In this case, we don't have a clearly identifiable employer. Even when there is one, these are often very small, single-person enterprises. It's difficult and almost unfair to hold them fully accountable for providing social protection, because they are often just about breaking even. Imposing such obligations on them could make it impossible for them to survive.

That's where I believe the state has a much larger role to play in creating alternative forms of scaffolding and support for workers. We already have some basic structures in place; for instance, the "Unorganised Workers'

Social Security Act” attempts to bring together many of these protections under a single framework.

Under this umbrella, several schemes — such as Janani Suraksha Yojana, Atal Pension Yojana, and others have been brought together. These are not employer-specific, but rather worker-oriented initiatives designed to provide social and financial support directly to workers.

Again, that existing architecture also needs to be strengthened and streamlined. The good thing is that e-Shram, to some extent, is attempting to consolidate these efforts into a single platform where all informal workers can register. However, moving from registration to the next crucial step, actually making these schemes accessible to workers, is still a challenge.

At present, merely registering on e-Shram does not automatically ensure access to benefits. What we really need is a unified framework through which workers can not only register but also directly apply for and receive support under these various schemes.

The other big lesson is the issue of portability. For instance, when we look at construction workers, one of the major challenges during the pandemic was that they could not access their entitlements in the states where they were working. This issue has been addressed to some extent through the greater portability of benefits.

However, many other welfare schemes are still not portable. And migration is not something that is going to disappear. The reality is that we have several young states with large and growing workforces, and other

states that are relatively older and ageing, with much smaller labour pools. In that sense, migration is both inevitable and, in many ways, the most efficient way to utilise our human resources. Given that, I think portability remains a key issue, and it’s something that was strongly reiterated during the pandemic.

Finally, I believe that an urban employment guarantee could serve as another important form of scaffolding, similar to what MGNREGA provides in rural areas. Such a program could help cushion workers in times of distress and provide a measure of stability in urban labour markets.

To me, the big takeaways are clear: first, holding employers accountable to their workers; second, creating dedicated funds for worker welfare, whether through corporate taxes or other worker-specific contributions; and finally, establishing a unified and comprehensive social security architecture that ensures no worker is left behind.

Editor: Pivoting to your recent work on the changing structure of women’s employment in addition to men moving into the formal sector and the increasing presence of multiple own-account workers within a single household, what structural factors, such as access to credit, land rights, and social norms, do you think are driving this shift toward greater self-employment among women?

Prof. Rosa Abraham: Yes, so the rise in women’s self-employment is actually a fairly recent trend. To add some context, self-employment among women in India has always been quite high, but what we’re observing now is that it’s beginning to increase even further.

The unfortunate reality is that we're at a stage where women's overall employment rate is the highest it has ever been, at least since we've had reliable data. Yet, at the same time, the share of women in salaried employment is the lowest it has ever been. So, it's not necessarily a positive sign.

One possible explanation for this increase in self-employment is the expansion of credit availability. Over the past few years, there's been greater credit disbursal targeted at women's self-help groups, cooperatives, and small entrepreneurial ventures. This has made access to finance somewhat easier for women, encouraging self-employment activities. As a result, we're seeing a rise in the number of own-account workers, women who are essentially self-employed without any hired labour.

Now, there are a couple of aspects of this trend that are slightly worrying. One is that we don't observe any real improvement in average self-employment earnings. If this shift were driven by women identifying new opportunities, choosing self-employment over salaried work because it offered better prospects, we would expect to see rising earnings. But that's not what the data show.

What seems to be happening instead is that more women are engaging in self-employment within households, yet without any significant increase in the average income from such work. To me, that's an important red flag.

So again, these aren't necessarily new small businesses being set up; much of this increase in self-employment is happening within agriculture. And that, to me, is not always a good sign. There's nothing to suggest that

agriculture has suddenly become a more lucrative or promising sector for women.

Both of these trends, stagnant earnings and the shift back into agriculture, point to deeper issues. And I think there's a more fundamental point here, though some might disagree with me; I don't believe that self-employment, at least in its current form in India, has the same transformative potential that salaried employment does.

That's not to say self-employment isn't important; it absolutely is. But the way self-employment is structured in India, and the kinds of occupations that dominate it, often serve to reinforce existing structural inequalities. For example, self-employment often allows women to stay at home and balance domestic responsibilities, but in doing so, it can also limit their access to better-paying, higher-quality work.

In that sense, self-employment is often quite amenable to women; it allows them to work from home and balance domestic responsibilities. But that also means, in many ways, that women remain confined to the home. There's a certain kind of transformative power that comes from stepping out, from going to a workplace, meeting other women, and building a sense of community and independence outside the household. Self-employment, especially in its more traditional forms, often doesn't offer that.

Of course, this isn't to take away from exceptional examples like SEWA, which has been a remarkable success story in organising and empowering self-employed women. But that's not the reality for most forms of self-employment as we understand them in India.

Self-employment also rarely provides women with meaningful bargaining power. Many of these occupations, even those linked to newer, digitally mediated forms of gig or platform work, require access to resources that women often lack, whether that's digital literacy, devices, or independent access to mobile phones and technology. In many cases, women still rely on male family members to use these tools.

So I would say, there are real reasons to be cautious about celebrating the rise in women's self-employment. The structural barriers remain significant: limited mobility, lack of safe and affordable transportation, low bargaining power within households, and, of course, the broader absence of secure, well-paying jobs, especially as manufacturing, which historically absorbed many young women workers, continues to contract due to global and domestic pressures.

Finally, there's the question of norms. Gender norms influence both salaried and self-employment opportunities, but because self-employment is typically home-based, it tends to align more easily with traditional expectations of women's roles, and that, in turn, reinforces rather than challenges existing inequalities. All of these are structural factors that continue to keep women's participation in salaried employment quite low, while pushing more of them toward self-employment. I haven't yet spoken about social norms, but I think they play a significant role as well.

Norms influence both salaried and self-employed work, but because self-employment often happens within the home, it tends to fit more comfortably within traditional gender expectations. That's

precisely why it can appear more "acceptable" for women, even though it may not necessarily be empowering. In that sense, self-employment can end up reinforcing existing gender norms rather than challenging them.

Editor: Your work shows that economic necessity often forces women back into agricultural labour soon after childbirth. How does this reality impact their health and long-term empowerment, especially in the context of the policy focus on moving labour out of agriculture? What policy measures could realistically make agricultural work itself more supportive, particularly for women?

Prof. Rosa Abraham: Just to give some context to the work we did, it was based in Karnataka and Rajasthan, and we were trying to explore the idea of 'motherhood penalty'. Which is when women have children, and then they end up leaving the labour market or earning less.

We found that after childbirth, there was no discernible impact on women's employment. We then hypothesised that what was probably happening was that, especially in rural areas, in low-income households, women *have* to work. So they continue working after becoming mothers, mostly working in agriculture; that was the finding.

Now, what is the impact on health and long-term empowerment? We established that there is no penalty, but there's been a lot of work by Gautam Bhan and Divya Ravindranath at the Indian Institute of Human Settlements. What they found is that when women are continuing in agricultural and formal work, they also tend to stop

breastfeeding earlier, which has an impact on them as much as it does on the child.

There have also been studies to look at the impact of MGNREGA as well, which found that post-natal health-seeking behaviour was affected much more in regions with MGNREGA, as after giving birth, women had to go back into work since the wage employment option existed to provide needed extra income.

You can show that, to some extent, some kinds of post-child health seeking behavior has been negatively impacted as a result of people often having to continue working.

The policy implication is that, well, we shouldn't be providing this employment. But like you said, how then do we make agriculture a viable means for livelihood? In India, we have a situation where we have too many people in agriculture. I believe the first strategy to make it more viable is to have fewer people in agriculture, which means that we need to have other industries.

The standard Lewis framework has been that over the course of development, people should move out of agriculture, which has not really happened as much as it should have in the Indian context. Some of the policy recommendations that stem from the Lewisian and the Dual Economy Framework are that, often in these kinds of segmented labour markets, there is no one strategy of improving the urban economy or providing non-agricultural jobs, because that ends up being counterproductive. It's more about how we make agriculture more sustainable.

One policy in the Indian context that could be very beneficial to implement is the idea of

providing allied agricultural activities. Essentially, how do you link farmers to markets? How do you make sure that there are roads, that there is infrastructure? And in the case of most agricultural goods, which are perishable, how do you make sure that they (the farmers) have good storage facilities?

Now, in India, most of these are non-existent. We don't have that kind of thinking around how to facilitate agriculture and thinking around how we can make agriculture a promising sector, because it's always seen as a sort of fallback.

So, I think far more focus on linking the agricultural sector with markets and identifying niche products is required, as there has largely been a focus, partially because of the PDS, on rice or wheat, but we need to diversify beyond that, not just for domestic markets, but for export markets, which is something that we have failed to do.

Diversification is one big policy that is required. However, there is also a need for a policy about building transportation infrastructure to link farmers to markets and storage and processing infrastructure, which has not seen enough investment.

Editor: I have a question that will sort of bring all of this together. As young researchers, could you guide us on how we should use the prevalent data and how we should account for these limitations in the persisting data?

Prof. Rosa Abraham: I think it's really important as young researchers to really understand the data. And by understanding, I mean not just knowing that this is data about

X number of workers, but rather, there are two kinds of understanding.

One is knowing what the sample is, how representative it is, and how they choose those parameters. So for PLFX, there's enough documentation that one should read. Which talks about how this is a sample which is designed to be representative at the state level. Then you need to be cautious as a researcher that you don't make statements about a district or about other kinds of substates.

So, I used to do data extraction. It was not given in your standard usable format. That whole act of cleaning it up, getting the summary statistics, etc were all essential part of understanding the data. That's when you really figure out that, for example, a certain variable has a weird coating structure and so on. That's just one very fundamental understanding of the data.

The other thing is, related to a lot of the data that I've been working on and things that I'm interested in, is this idea of knowing who is collecting the data, how it's being collected, who is being asked and what is being asked.

So, we find that a lot of the Labour Force Surveys, when you're asking men, they tend to under-report women's employment, and when you ask women themselves, often when you just ask the one simple question, they will say that they're not working. However, if you then ask two or three probing questions, then you realise, well, they actually are employed, they're doing things that are, in that sense, economic activities. So oftentimes, our labour force surveys are just not designed to conduct that level of detailed questioning.

There's a very interesting study by Sonalde Desai and others at NCAER Stanford, which finds that a lot of our labour force service will ask, "Did you work in the last week or last year?" And the women will say that they didn't.

What the NCAER study did differently was that they asked about the sources of income in this household, e.g. their income comes from source A, source B, or source C. And then they asked, well, who contributes to this income. That's when you find out, say, there's an income from the sale of milk. And then you ask, well, who contributes? Then the woman who takes the cow out for grazing or maintains that livestock gets recorded as being the person responsible for that source of income.

Whereas, if they had asked in a direct manner, 'Did you work last week or last year?' Her name would not have gotten recorded. So I find that this other way of asking survey questions also really brings up employment rates.

I think when you're working with the data, it's really important to know what these questions were and who you are likely to be missing out on as a result.

The other thing which I think we sometimes miss out on is that I get questions on how I only speak about men and women, why do I not talk about the third gender, transgenders? It's not to say that they are not an important demographic to study, but our PLFS (Periodic Labour Force Survey) is just not equipped to answer any questions about transgender individuals.

The average number of transgenders in a survey is about 40 to 50 people. One can't do a summary statistic of what transgenders do and what their demographic profile is using a PLFS.

It's not to say that the question is not important, but your data set is not the right one to answer that question. So I think you

also need to ask whether the question that I'm asking is suitable for this data set, or rather, is a data set suitable for the question that I'm asking. That comes back again to the sample question.

I will also suggest getting your hands dirty with the data, and really, you need to spend a lot of time just understanding the small nuances of the data, and it pays off.