



Potential Demand for Aajeevika Skills Training

Executive Summary

How should Aajeevika Skills focus their skilling facilities and programs? We use National Sample Survey (NSS) data to examine participation in skilling based on demographics of the target populations and draw the following conclusions:

- Many rural areas have large populations of youth whose highest education level is 8th or 10th pass;
- Young rural women’s labor force participation is drastically lower than rural males’;
- 10th pass youth have the lowest labor force participation rates of all education levels; and
- Skilling is associated with higher labor force participation and greater likelihood of participating in semi-skilled occupations.

The results suggest there is scope to increase participation in skilling by lowering the prerequisite education level for skilling and improving targeting of training through applying insights from secondary data.

Demand for Skills: Education and Labor Force Participation

Success of skilling programs is based in part on demand for training. For this reason, it is important to account for target trainee characteristics when selecting proposals and designing courses and programs. We provide a general description of the demand for skills across districts and states in India using round 68 of the 2011-2012 National Sample Survey (NSS) data by examining three key factors: education, labor force participation, and participation in vocational training programs, of rural youth.

Education

In rural India, only 6% of males and 4% of females aged 18-35 have completed 12th pass as their highest level of education (see Figure 1)¹. A much larger group – 32% and 21% for rural males and females, respectively - has achieved 8th or 10th pass only, but these individuals often remain ineligible to participate in vocational training, which typically requires 12th pass.

Figure 2 shows there is substantial variation in educational attainment across states. In some states, such as Daman and Diu and Chandigarh, over 15% of rural youth have achieved 12th pass. In Jharkhand and Tripura, however, less than 3% have achieved 12th pass. As of early September 2014, Aajeevika had accepted 110 proposals (out of 129) for training programs in states where fewer than 5% of rural youth have achieved 12th pass, including 20 programs in Jharkhand, a state where only 2.2% of rural youth have completed 12th pass². Training programs that require 12th pass as a

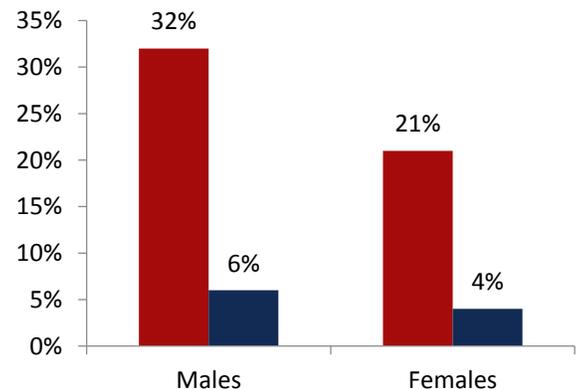


Figure 1: Rural 18-35 Year Olds’ Highest Education Level

¹ This figure increases 17% and 16% for urban males and females in the same age group.

² Information regarding proposals was provided by MoRD on September 5, 2014.



prerequisite for program entrance may face a limited target population and less demand for skills programs in these areas.

However, over 20% of the rural youth population in every state has achieved either 8th or 10th pass as their highest level of education. In several states, including Himachal Pradesh, over 50% of rural youth have achieved 8th or 10th pass, but not 12th pass. In these regions, there is likely to be high demand for skills training that requires only 8th or 10th pass for participation.

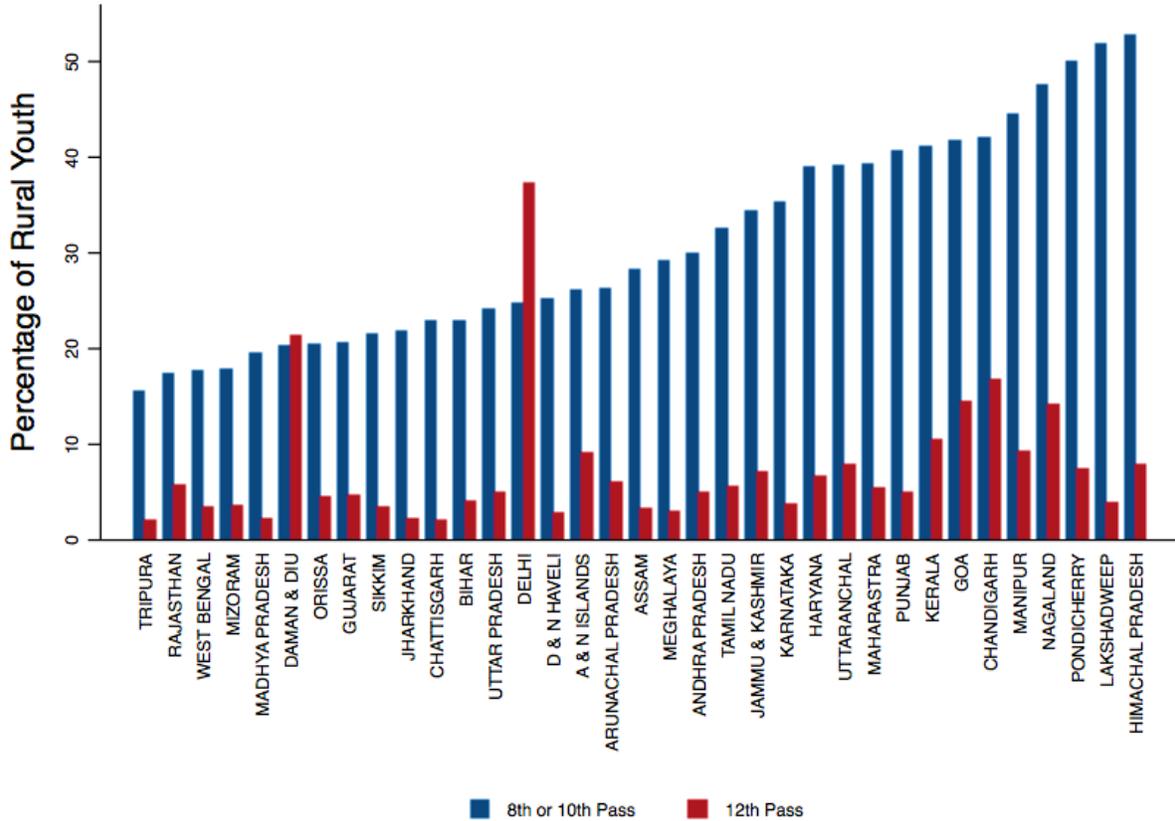


Figure 2: Highest education level of rural youth (18-35 years)

Labor Force Participation

Low labor force participation and high unemployment increase the proportion of the youth population eligible for, and potentially interested in, skilling programs. Rural labor force participation, defined as the ratio of the number of individuals in the labor force compared to those in the same total population, is 54% nationally for youth age 18-35. Female labor force participation is much lower, however: only 25% of rural women age 18-35 are active members of the labor force, as compared to 85% of their male counterparts.

The level at which rural youth participate in the labor force also varies greatly by region. Figure 3 maps labor force participation rates of rural youth across districts. It should be noted that the NSS is not representative at the district level and the resulting small sample sizes in some districts mean the representation here should be taken as a general



estimate, which in some cases could deviate significantly from actual population parameters. The Dibang Valley in Arunachal Pradesh had the lowest labor force participation rate at only 13% whereas Serchhip in Mizoram had the highest participation rate of 99%. This wide range in labor force participation across districts is mirrored in unemployment rates. Several districts had unemployment rates for rural youth of virtually 0%, whereas the Nagaland district of Mokokchung had a rural youth unemployment rate of over 50%.

Rural Youth Labor Force Participation Rate by District

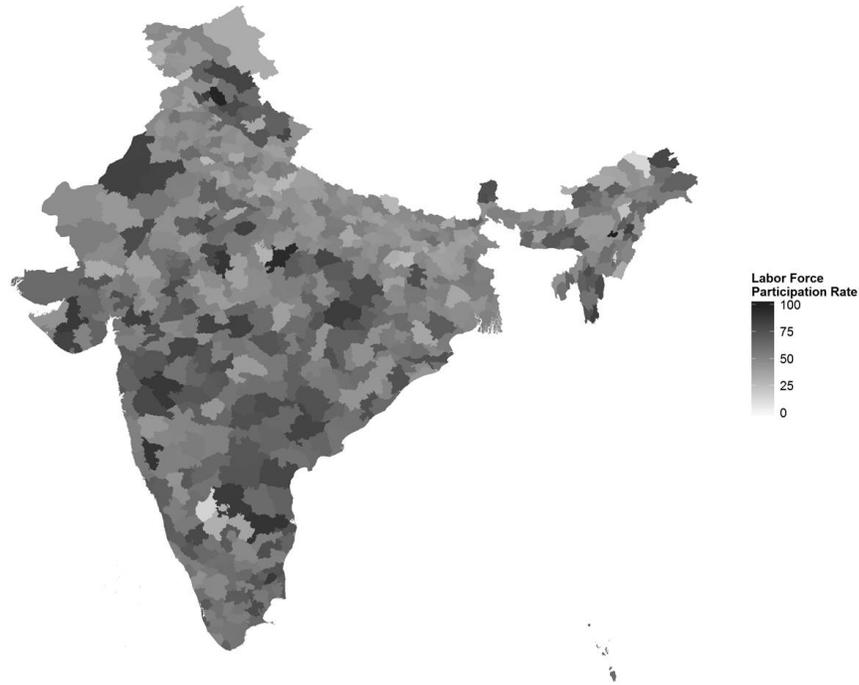


Figure 3: Labor force participation rate for rural youth aged 18-35 by district

Additionally, labor force participation varies greatly by location, gender, and education. Figure 4 highlights two major insights:

- 1.) There is a strikingly consistent U-shaped education/labor force participation relationship that holds across gender and geographic sector: **the lowest labor force participation rates are consistently found in students whose highest education is 10th pass.** Youth completing 8th pass and 12th pass follow with a relatively higher labor force participation rate, although they still lag behind those completing the lowest and highest education levels. For instance, only 56% of rural youth who have completed upper secondary education are active members of the labor force, compared to 60% of those with a primary education and 69% with a diploma or certificate. Amongst rural women, only 14% of those who have achieved 10th pass are actively in the labor force, with illiterate and primary educated women participating in the labor force participation at almost twice that rate. Figure 4 highlights the possible scope for incorporating 10th pass completers into the labor force through skilling programs.
- 2.) As is well known, rural female labor force participation is extremely low across all education levels. These young women are not unoccupied: 68% of rural 18-35 year old women were required to spend most of their time on

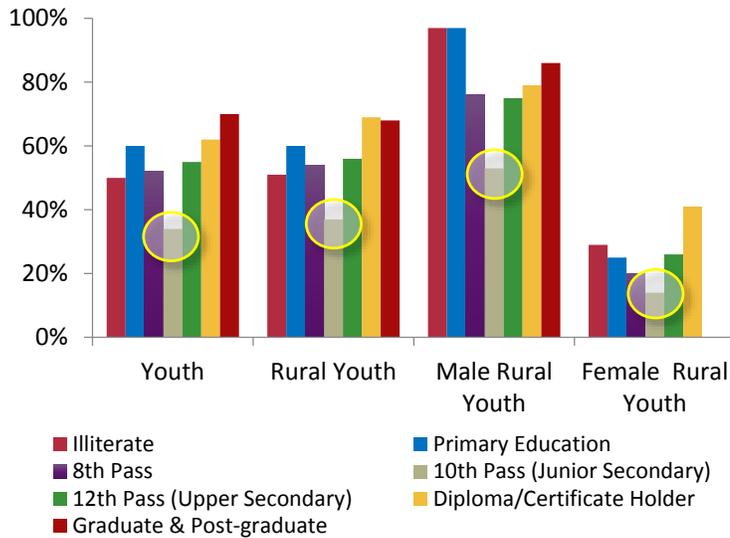


Figure 4: Labor force participation by highest education level, ages 18-35

21% of urban men report having participated in vocational training as compared to 7% and 9% of women, respectively. Marital status differentiates female participation in vocational training: Roughly 14% of women between the ages of 18 and 35 who are widowed and 10% of women who are divorced report having received vocational training as compared to only 7% of married women and 8% of unmarried women.

The prevalence of vocational training programs across India varies substantially. In most districts the percentage of the population reporting having received vocational training is very small. It is important to understand the constraints on lower educated youths' participation in vocational training and to diagnose latent demand for training. Understanding the drivers of participation in vocational training at an individual and local level is an important piece of follow-up analysis.

How does Vocational Training Relate to Occupational Outcomes?

How does vocational training relate to workforce and occupational outcomes? Importantly for Aajeevika, regardless of their education level, individuals who have completed vocational training are much more likely to participate in the labor force (see Table 1).

	No Skilling	Completed Skilling	Difference: Trained - Untrained
Illiterate	51%	81%	30%*
Primary Education	53%	86%	33%*
8 th Pass	42%	80%	38%*
10 th Pass (Junior Secondary)	38%	69%	31%*
12 th Pass (Upper Secondary)	60%	80%	20%*
Diploma/Certificate Holder	63%	79%	16%*
Graduate & Post-graduate	74%	84%	10%*

* denotes statistical significance at .01 level

Table 1: Labor Force Participation

domestic duties throughout the last year. Out of this group occupied with domestic duties, 45% reported being willing to accept work if it were made available at the household. Compared to the 28% of women in the 36 to 50 age range who were occupied with domestic duties and willing to accept work at the household, this suggests the younger subset has a relatively higher interest in potential earning opportunities.

Who are Vocational Trainees?

11% of Indians between the ages of 18 and 35 in rural regions, and 15% in urban areas, report having participated in vocational training. On average, more men in this age group have participated in vocational training programs than women – 14% of rural and



As expected, those who have completed vocational training are also more likely to participate in semi-skilled occupations (see Table 2). This relationship is the strongest for those with the lowest education levels (see Figure 5). This relationship suggests a possible diluting of the talent/initiative in the skilling pool at higher levels of education. Figure 5 also demonstrates that vocational training is generally associated with placement in relatively more highly skilled professions³. The difference in labor force participation between those with vocational training and those without is highlighted in Figure 6 for each level of education. For those having completed 10th pass, this difference of 5% is both substantively and statistically significant.

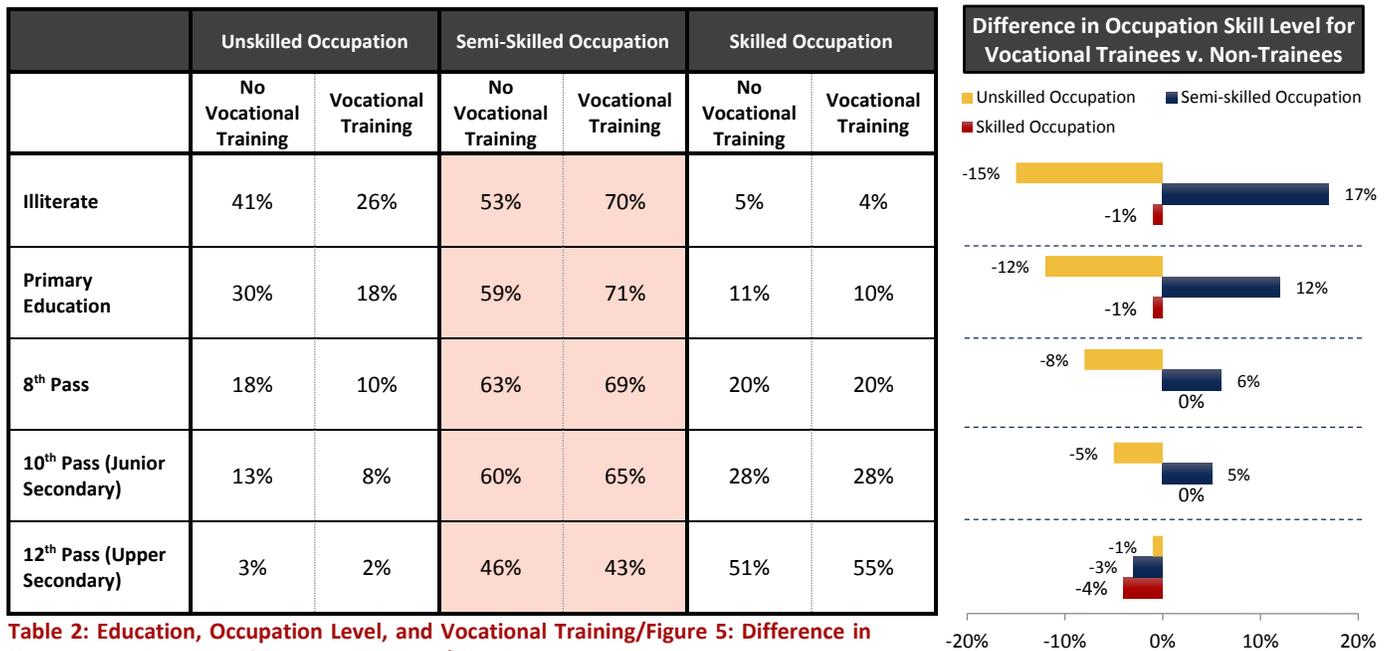


Table 2: Education, Occupation Level, and Vocational Training/Figure 5: Difference in Occupational Skill Level for Skilling Trainees/Non-Skilled

While this information is informative, no causation can be attributed. The statistics do not necessarily indicate that vocational training increases labor force participation or employment in skilled occupations. For instance, it is highly likely that youth with more interest in participating in the labor market self-select into vocational training programs. Nevertheless, these relationships highlight a need for further investigation to understand this relationship, and its associated policy implications, better.

Conclusion

Districts that present a high opportunity for skilling programs will likely have large rural youth populations with 10th or 12th pass qualification that are working in unskilled occupations or are outside the labor force, and relatively low numbers of this population would have completed vocational training. A future brief will utilize this information to create a tool to facilitate program selection and approval in order to target districts with the greatest potential.

³ Unskilled occupations include all elementary occupations. Semi-skilled occupations include clerks, service workers and shop and market sales workers, skilled agricultural and fishery workers, craft and related trades workers, and plant and machine operators and assemblies. Skilled occupations include legislators, senior officials, and managers, professionals, and technicians and associate professionals.