

Skills

The Problem

India presently has only 2.3 percent of its workforce with some kind of formal skills training. According to Government's Skill Gap Analysis Report, approximately 119 million skilled workers will be needed in the 24 key sectors of the economy by 2022. For the next two decades, over 12 million youth are expected to enter India's labor force.

As per National Skill Development Corporation (NSDC) by 2022 Rajasthan will have a workforce of around 480 lakh with around 98 percent of that to be either fully or partially un-skilled. By 2022 Rajasthan will need about 11 percent of the total labour demanded to be fully skilled.

Rajasthan was one of the pioneer states to setup a skills mission by the name of Rajasthan Mission on Livelihoods, in 2004. The Rajasthan Skills and Livelihoods Corporation is executing various schemes and programmes. In 2015-16 Rajasthan Skill and Livelihoods Development Corporation (RSLDC) set up 300 new skill development centres in private public partnership (PPP) model, with a capacity to train 22,000. Between 2014-17, Department of Skills, Employment and Entrepreneurship of Rajasthan skilled more than 6 lakh youth.

Solutions

Interventions	BCR	Total benefit per individual (INR)	Total cost per individual (INR)
Vocational training	4.0	183,396	45,616
Apprenticeship	4.5	872,633	191,906
Credit support to MSME	5.6	89% of credit	16% of credit

Total costs and benefits are discounted at 5%

The full paper by **Mansi Arora**, **Rajesh Chakrabarti**, and **Kushal Sagar Prakash** from Sunay Policy Advisory is available on www.rajasthanpriorities.com/skill-development-and-employment.

Intervention 1: Vocational Training

The Solution

Vocational training is training that emphasizes the skills and knowledge required for a particular trade, craft or job function. These courses provide job-specific technical training, with hands-on instructions.

Costs

Cost components for this intervention include costs to all parties of delivering vocational training which is a sum of the cost to the individual (Training fees, charges for school materials, opportunity cost of education) as well as the cost to the government (Funding of educational institutions, curriculum development, administration costs, stipend, certification and assessment) of providing vocational training. Assuming a 40% drop out rate, the costs to the government per skilled person are INR 1118, while for students the cost is INR 0.45 lakh, ~40% of which represents foregone earnings. The calculations are based on assumption that average duration of vocational training is one year and person starts working at the age of 18 and retires at the age of 59. Calculations are done considering average duration of a vocational training course to be one year.

Benefits

The benefits are measured in terms of difference in earnings of an individual who has undertaken vocational training compared to one who has not taken the same. Analysis yields that if working life is considered from 18 to 59 years, an average individual in Rajasthan with vocational education will earn INR 1.8 lakh more than an equivalent individual without vocational education (at 5% discount rate). This accounts for expected income growth as well as changing labour force participation and unemployment over the life cycle.

Intervention 2: Apprenticeship

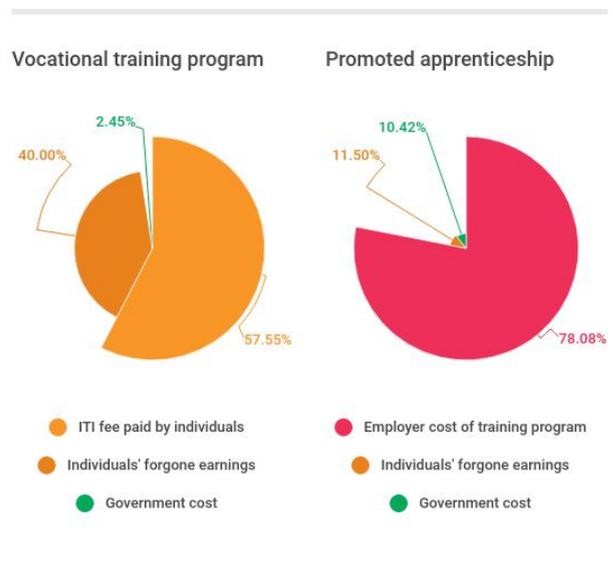
The Solution

Apprenticeship are training programmes that combine vocational education with work-based learning for an intermediate occupational skill and the same are subject to training standards.

Costs

Costs of providing 1 year apprenticeship is a sum of (a) Cost to the individual of INR 0.22 lakh representing foregone earnings as an unskilled worker for one year less the stipend paid during the apprenticeship (b) Cost to the employer of INR 1.5 lakh representing apprentice salaries, supervision and training costs, administrative costs, and (c) Cost to the government of INR 0.2 lakh rupees representing costs associated with reimbursing the employers, marketing & promotion costs. Total cost of each apprenticeship is INR 1.9 Lakh for a 1 year programme.

Cost breakdown of analyzed solutions



Benefits

Benefits include (a) Benefit to the individual after the apprenticeship of 6.5 lakhs: Incremental mean earnings of a full-time worker who undergoes apprenticeship from ages 18-59 (adjusting for expected income growth as well as changing labour force participation and unemployment over the life cycle) (b) Benefit to the employer during the apprenticeship of INR 2.2 lakh which is a sum of productive workforce, contribution to revenue, cost saved for recruitment through retention, and recruitment of people with demonstrated capabilities in carrying out efficient and productive work. Total benefits sum up to INR 8.7 Lakh.

Intervention 3: Support to MSMEs

The Solution

Micro, Small and Medium Enterprises (MSMEs) in India employ nearly 40% of the work force and constitute 37% of GDP. In 2016, there were a reported 36 million micro, small and medium enterprises, employing over 80 million persons. It has been witnessed globally and nationally that need exists to aid the creation and growth of small and medium enterprises. This will promote the growth and development of the MSME sector by providing support to enhance competitiveness of the MSMEs.

Costs and Benefits

Literature review (Banerjee and Duflo, 2008) suggests that one rupee of loan increases profit before interest payment by 0.89 rupees and this is used as a proxy for benefit to the MSME. The cost of credit which is the summation of cost of borrowing, default rate and admin cost. The cost of borrowing for the lender, the bank is the repo rate, which is 6%. Assuming default rate to be 9% and admin cost to be 1%, the cost of credit equals 16 rupees for every 100 rupees lent to the MSME. The Benefit Cost Ratio (BCR) for this intervention comes out to 5.6.

Costs and benefits of providing bank credit to MSMEs

