

# 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.

In Andhra Pradesh between 2017-2022 about 21 lakh individuals are expected to join the state's workforce, with more than 97 percent of them being either totally or partially unskilled (National Skills Development Corporation). The demand of individuals on the other hand would increase in a way where Andhra Pradesh would need to skill about 50 percent of its workforce entering the labour market by 2022.

With the objective of providing job specific skills among unemployed people AP has undertaken an integrated skilling initiative and for the implementation of the same AP State Skill Development Corporation (APSSDC) has been established on PPP mode. APSSDC aims to skill 20 million people in a span of 15 years.

## Solutions

Interventions	BCR	Total benefit per individual (INR)	Total cost per individual (INR)
Vocational training	16.3	716,403	43,818
Apprenticeship	7.2	1,337,491	186,218
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.appriorities.com/skill-development-and-employment](http://www.appriorities.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 0.43 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, the average individual in AP with vocational education will earn INR 7.2 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

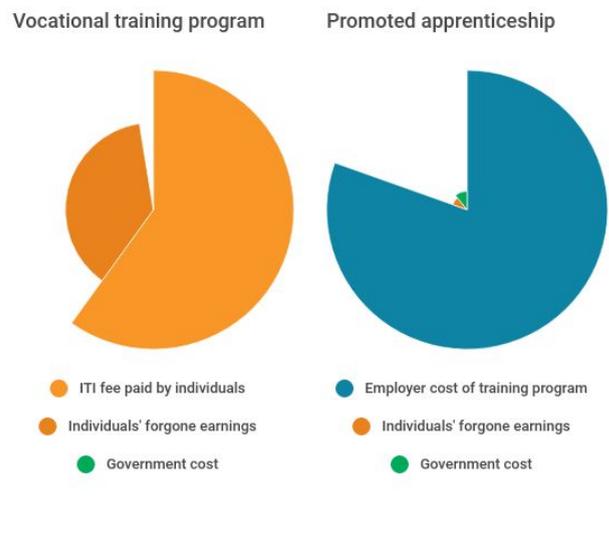
### The Solution

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 0.16 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 approximately 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 11.2 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 13.4 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. is 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

