Alternative approaches to address skill deficit in textile cluster

Prerna Kapila and BS Dhillon

Abstract
Skilled labour requirements across all the manufacturing sectors is an area of concern for the manufacturers and policy makers. There has not only been an unprecedented shortage of skilled manpower across the clusters but also an increase in unemployment. The apprentice learning from the masters, in sort of on job training, used to be the trend till recent years, but of late, this system has not managed to bring the required manpower into the industries. This has forced the industries to look at alternate sources of labor, and the attention is drawn to local unskilled manpower pool like the rural females, school dropouts, jail inmates etc. This labor pool needs to be first motivated to come out to work and then comes the need to train them as per the requirements of the industry. As the government supported training centers are few and unable to fulfill the requirement of the industry, evolution of innovative skill development models is need of today especially for the MSME units. The bigger and composite units have managed to open their own training centers and have attracted mass pool of labor by their attractive offerings while the comparatively smaller units are constantly looking for different economical models of skill development so that they can manage their operations effectively and the production schedules could be matched successfully. The successful skill development model should be economical, replicable as well as sustainable. The present paper attempts to give an overview of the various modules and the appraisal by industry owners of the same so that it can be replicated at other industrial clusters.

Keywords: Skill development, knitwear, training, modules

1. Introduction
Ludhiana is a large industrial hub in the state of Punjab, initially famous for its woolen knitwear with its major market being USSR, but the reduced demand of woolen knitwear after the disintegration of USSR forced the manufacturers and exporters to diversify to cotton and fancy knitwear. The industry which amounts to almost 14000 registered and unregistered units have a huge employment potential for skilled and unskilled workforce. The deficit of skilled labour in this sector is almost 1.5 lac workers with various skill sets which need to be worked upon to ensure that the sector remains competitive in terms of cost and quality in a global market. National Skill Development Corporation (NSDC) has done a detailed study on mapping of human resource skills gaps in textile and clothing industry in India till 2022. The report says that the textile industry is fragmented in nature because of policy restrictions relating to labour laws and also the fiscal advantage enjoyed by the small-scale units. The functional distribution of the employees in the industry shows that 75 – 85 per cent of the employees belong to production department and 80-90 per cent employees are minimally educated. The report highlights the importance of technical skills required in the textile industry and also the skill gaps at different stages of the value chain. An apprentice learning from the masters, in sort of on job training, used to be the trend till recent years, but of late, this system has not managed to bring the required manpower into the industries. This has forced the industries to look at alternate sources of labour, and the attention is drawn to local unskilled manpower pool like the rural females, school dropouts, jail inmates etc. This labour pool need to be first motivated to come out to work and then comes the need to train them as per the requirements of the industry. As the government supported training centers are few and unable to fulfill the requirement of the industry, evolution of innovative skill development models is need of today especially for the micro and small units.
The bigger and composite units have managed to open their own training centers and have attracted mass pool of labour by their attractive offerings but the comparatively smaller units are constantly looking for different models of skill development so that they can manage their operations effectively and the production schedules can be matched successfully. These skill development trainings are arranged by industrial associations, keeping in view the manpower requirements of local industry. In order to identify a model which fulfills the required criteria, the present study was conducted with the following objectives:

2. Objectives
1. To conduct skill development program in knitwear industry.
2. To assess the effectiveness and sustainability of skill development initiative.

3. Materials and Method
A training schedule was prepared for various skills required in a knitwear industry. Four training modules were finalized for implementation in consultation with the industry stakeholders. The trainees were selected by Purposive Sampling Technique. Training was provided to fifteen participants in each module. A total of sixty participants were selected from areas near the periphery of Ludhiana city so that the training location stays close to probable area of subsequent placement. A training program of fifteen days duration was conducted for skill development of the respondents. The effectiveness and sustainability of these training programs was assessed with the help of a questionnaire administered to the industry stakeholders. The data was recorded and evaluated to assess the training programs on the basis its sustainability, effectiveness and cost incurred per candidate for skill enhancement.

4. Results and Discussion
A successful skill development program should be cost efficient, replicable as well as sustainable in the area of implementation. Various models need to be tried and tested for their efficiency through pilot projects before a sustainable model of training can be identified. In consultation with the industry stakeholders, training content was standardized and four different training methodologies were finalized for implementation and testing purpose.

4.1 Model 1: Machinery Supplier as Training Provider
As technological developments keep happening in each sector, advanced technology machines are making inroads in every arena. But the skilled personnel to handle these latest machineries need to be developed locally. A machinery supplier had the advantage of having expensive machineries already installed for demonstration purpose and hence expenses on investment in machinery can be considerably reduced if this supplier undertakes the task of providing training on the machineries he is selling. Under this model, the machinery supplier was assigned the task of training the candidates in his own premises. The supplier, after successful completion of training, also arranged the placement of the trainees as one of the deterrents that the he faced at the time of selling the machinery was unavailability of qualified personnel to run those machines. So the training module also enables him to increase the sale of machinery. Due to high cost of machinery, the firms where these machines are installed were not willing to let an untrained person work on the same without proper supervision, and the trained person are either not available, or the cost of hiring a trained professional is extremely high for a small or medium industry to afford. The machinery supplier, on the other hand, has qualified supervisors to provide training on running and maintenance of the latest machinery.

4.2 Model 2: Training center at firm premises
A firm or a factory is the place of employment for the trainees after imparting the necessary skills for any particular job. It is understood that no amount of classroom training prepares one for the actual work as much as an internship or actual shop floor experience can. Apart from the skill, a trainee gets a chance to absorb the work culture of an organization, and a practical experience also checks the suitability of the candidate for a particular skill. In the light of this understanding, a firm in the knitwear cluster was contacted to organize training programs for unskilled workers on various skills. The training was provided on the machinery lying vacant due to shortage of labour. The firm was willing to participate in the training program for the simple reason that retention of trainees will be more if they were trained within the factory. The firms were willing to provide a stipend during the training period which was beneficial for the trainees also. The firms were confident that they could train the fresh candidates according to the specific requirement of their factory.

4.3 Model 3: Mobile training centers at rural areas
To cater to the need of skilled personnel, one has to see all probabilities of potential workforce which can be turned into skilled manpower. It can be rural unemployed males or females, school dropouts, deaf & dumb or physically challenged etc. The ultimate aim is to break the cultural barrier, train the potential workforce & finally provide them placement in the industry. As it is difficult to break the traditional mindset and convince rural females to come out of their villages even for training purpose, a unique model of taking the training center to the villages was tried. The trained workforce is afterwards convinced to get employed in the industry so that they can earn a salary and raise the standard of living for their families. Providing training facility in the vicinity of their residences creates a comfort zone for the trainees to learn required skills. In the knitwear cluster, it was seen that female employment is less than twenty per cent of the workforce and females from rural areas can be a great pool of skilled operators.

4.4 Model 4: Training cum Job work centre
New modules of training keep on evolving depending on the requirement of skill set in every sector. At a center where there is constant set of labour available, an innovative model where the trainees are provided training as well as work, can act as a sustainable revenue model for the industry. Under this model there is need to identify the pool of manpower available who can be trained for particular skill & ready to work at job work centre. Most of the industries are in need of stable job work centre where they can find trained manpower as and when required. Central jail at Ludhiana was identified as a pool of manpower which can be trained for a specific skill and a job work centre can be created there. Once the training of first batch is over, these trained operators will help others to learn a particular skill. The best workers can work as supervisors and can help others in training and evaluating the level of skill required for a particular job. After the
completion of training, the job work centre will start working of its own and can start earning revenue.
The effectiveness and sustainability of these skill development initiatives was evaluated after consultation with industry stakeholders.

**Table 1:** Respondents’ perception about the improvement in work performance

<table>
<thead>
<tr>
<th>Factors</th>
<th>Weighted Mean Score</th>
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<tbody>
<tr>
<td>Increase in efficiency</td>
<td>Model 1: 118  Model 2: 128  Model 3: 60  Model 4: 80</td>
</tr>
<tr>
<td>Reduced errors</td>
<td>Model 1: 130  Model 2: 116  Model 3: 70  Model 4: 104</td>
</tr>
<tr>
<td>Higher involvement in work</td>
<td>Model 1: 114  Model 2: 126  Model 3: 104  Model 4: 62</td>
</tr>
</tbody>
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(Scale: 1= Poor, 2=Fair, 3= Satisfactory, 4= Good, 5= Excellent, X= No response) n=90

The weighted mean score of ranks in areas where an improvement was felt by the respondents as a result of skill development trainings is presented in Table 1 which shows that Model 2 was considered best by the respondents for two factors, increase in efficiency and higher involvement by work force while Model 1 was considered much better for reduction in errors. Model 3 was considered to be having least impact on efficiency of workers which could be due to the easy availability of training center in close premises and lack of motivation and exposure to the actual work atmosphere to the trainees. This model was also considered to be least effective in reduction of errors at production floor and actual working environment. Training involves the facilitation of learning by people who can benefit by attaining new knowledge, skills or attitude (Wentling, 1993) \(^9\). Asif (2003) \(^4\) narrated in this connection that training must focus on the real needs of people. Training which fails to meet learning needs is waste of time, effort, and resources. Model 4 was considered least effective in involving workers in the actual work as this was a varied group of trainees with different needs and skill sets.

**Table 2:** Cost effectiveness of Training Programs n=30

<table>
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<tr>
<th>Model No.</th>
<th>Cost Effectiveness</th>
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<tr>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>Model 1</td>
<td>15</td>
</tr>
<tr>
<td>Model 2</td>
<td>5</td>
</tr>
<tr>
<td>Model 3</td>
<td>3</td>
</tr>
<tr>
<td>Model 4</td>
<td>7</td>
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</table>

Model 1 was considered most cost effective by the respondents while Model 3 was considered to be most expensive by the industry owners as setting up training center at various villages involved a lot of cost on machinery, infrastructure, training provider and running cost. Skill development through Model 1 of training provider required the least investment by the industrialists as they got trained manpower without any initial investment. The machinery cost as well as training cost was borne by the machinery supplier. The major challenge however was recruitment of trainees as majority of the machinery suppliers were based out of the cluster and it was difficult for them to recruit trainees on a regular basis. So they were dependent on industry associations for arranging trainees for them.

Fig 1: Sustainability of Training Program

The above figure reveals that Model 1 was considered most replicable and was found to be sustainable by forty-seven per cent respondents while Model 2 was considered to be sustainable by almost thirty percent respondents. It was only twelve per cent respondents who were of the view that third model can be made sustainable as they were not in a position to spare machinery at their premises for training purpose. Ten per cent respondents also preferred the fourth model of providing training and were of the view that innovative models should be given a try and conscious efforts should be made to make them sustainable.

5. Conclusion

As per a study done by GTZ, Lack of skilled manpower is the biggest weakness of the cluster, while lack of innovation and use of traditional methods were the reason supported by almost equal number of respondents. The unorganized nature of the industrial units makes things more difficult which makes collaborative approach quite improbable. It can be concluded from the results that the Skill development training provided was considered useful by industrialists to handle the skill deficit in the knitwear industry. However, a model where machinery suppliers can act as training providers was considered much better in terms of cost effectiveness and sustainability of the training program for the overall benefit of the cluster.

6. References


