



A Study on Talent Gaps in the Marketing of Solar Energy Devices in Chennai City

KEYWORDS

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ABSTRACT *One among the goals of India is to become the world leader in SP industry. For achieving this goal India established JNNSM, which is an important step taken by government of India. JNNSM is largely supported the solar sector in the country. The solar industry faces many problems like infrastructural problem, lack of public awareness and labour shortage. Skilled labour shortage is one of the major problems. Hence this paper emphasized to study the pressing problem of labour, reasons for shortage, limited sources for skilled labours and SES suppliers' opinion on the supply and performance of labours in Chennai city.*

Introduction

The antecedent problems associated with the present energy supply in India, especially the coal glut and its rising cost, environmental problems and disasters from thermal and nuclear power stations, geometrical increase in demand due to industrialization and population growth. This has led India to look for alternative power supply such as solar power and others. Among the various renewable sources, solar energy potential is considered to be the highest in the country. India is one of the best recipients' of solar energy due to its favourable location in the solar belt. Solar power offers clean, climate friendly abundant and inexhaustible energy resources to mankind.

It is found that India would need 34,000 MW of solar capacity to achieve the target of 3% contribution from solar power till 2022. For this purpose JNNSM was launched on 11th January, 2010 with an objective to maximize the installation of solar power devices in India. The Solar Energy Device (SED) market in India, supported in large part by the JNNSM, is still taking shape but is growing rapidly; installed solar capacity in the country has risen exponentially from just 20 MW in 2009 to 2023 MW by 2013.

Review of Related Literature

According to **CII report** the installation, operation and maintenance of solar energy systems need specific skills and knowledge. To impart this skill and knowledge to those entering the sector as well as continuously upgrading them, there is a need for training and capacity building. Currently there is a shortage of SE trainers, who can offer this service to the industry. Also, there is a need to setup institutional mechanisms to offer intensive and comprehensive training in all aspects of solar power. **Shrimali (2012)** stated labour constraints and limited infrastructural development in India during 11th five year plan, only 1/9th of the planned power capacity expansion of 90GW was realized. This outcome was partly attributable to a shortage of skilled labour, which India seeks to ease through a national policy on skill development.

Objectives of the Study

1. To analyse the labour problems for SED suppliers in Chennai City.

Scope for the Study

The present study analyses the problems of SED suppliers

in Chennai city. This study was attempted to know the availability of labours in different categories and reasons for shortage of labours.

Sources of Data

This study is based on both primary and secondary data. The primary data were collected from the SED suppliers in Chennai city. The secondary data were collected from the news papers, magazines and various government & private websites.

Sampling Design

The study is related to the opinion of SED suppliers who constitute the top level executives. As per the Tamil Nadu Energy Development Agency, there were 34 SED suppliers in Chennai city. The questionnaires were employed to all the suppliers in the study area of which 27 responses were collected after repeated reminders and personal contact.

Supply of Labour

The worldwide jobs in RE is predictable to boost nine-fold to reach a figure of 20 million jobs by 2030, with biomass leading the development at 59 per cent of total capacity followed by SPV at 31 per cent and remaining by wind.

The SP industry has challenges in sourcing skilled human resources in various activities like manufacturing, production, installation, operation & maintenance, marketing and R&D. As the industry is quite latest and rapidly growing, there is a deficiency of qualified / trained labours. It is also vital to note that the RE industry is skilled human resource-intensive than the non renewable power sector.

Now it is appropriate to study the position of labour supply in Chennai city SES marketing segment. Hence the researcher collected the information from the SES suppliers in Chennai city. The collected informations are given in the Table 1.

TABLE – 1
Opinion of Adequate of Labour Supply

Sl.No	Opinion	No of Suppliers	Percentage
1	Yes	11	40.74
2	No	16	59.26
	Total	27	100.00

Source: Primary Data

The Table 1 shows that, 40.74 per cent of the SES suppliers were stated that they have a regular and adequate labour supply and 59.26 per cent of the respondents were stated they did not have satisfied level of labour supply.

It is clear from the observation on SE suppliers that they faced difficulties in getting adequate skilled labour force for their services.

Reasons for Inadequate Labour Supply

This study analysed important reasons for Inadequate labour supply

TABLE – 2
Reason for Inadequate labour Supply

Sl.No	Reasons for Inadequate Labour Supply	No of Suppliers	Percentage
1	Limited no of educational institutions providing SE skills	10	37.04
2	Present curriculum may not meet the requirement	18	66.67
3	Institutions lack to provide technical skills to graduates	23	85.19

Source: Primary Data

As per the Table 2, 37.04 per cent of the respondents were felt that the limited no of educational institutions is one of the reasons for the irregular and inadequate labour supply, 66.67 per cent of them were stated that present curriculum may not meet the requirement of the industry and 85.19 per cent of the respondents were stated that the educational institutions were not impart the proper technical skills to their graduates.

As per the above discussion it is clear that the majority of respondents were stated that, the level of technical skill imparted to the graduates was not adequate level. So the education institutions must provide the proper and latest technical skills for the graduates in order to reduce shortage of skilled workers.

Labour Shortages in Various Categories

The solar energy suppliers in Chennai city were facing the labour shortages in various categories of jobs. Informations were collected from the respondents regarding the labour shortage. There are two categories of workers who contributed shortage of labour as stated given in the Table 3

TABLE – 3
Shortages of Labour in Various Categories

Sl.No	Labour Shortages	No of Suppliers	Percentage
	General Categories		
1	Administrative workers	08	29.63
2	Accountants	05	18.52
3	Sales Executives	20	74.07
	Technical Categories		
1	Site Assessors	15	55.56
2	Technicians	19	70.37
3	Electrical Workers	16	59.26
4	Welding, Soldering and Brazing Workers	12	44.44

Source: primary Data

From the Table 3, under the general category 29.63 per cent of the suppliers were stated that they faced the labour shortage in office administration, 18.52 per cent of the respondents were stated that accounts department had a labour shortage and 74.07 per cent of the suppliers experienced shortage of sales executives.

Under the technical categories 55.56 per cent of the respondents had shortage in site assessors, 70.37 per cent of the suppliers were stated that they were having inadequate supply of technicians, 59.26 per cent of them were opined that there was a shortage of workers in electrical department and welding, soldering and brazing workers sections were faced shortage of workers to be extent of 44.44 per cent as opined by the suppliers.

It is observed from the above discussion that majority of the respondents had a shortage of workers in sales department in general category and in technical categories majority of the suppliers had shortage of technicians. So there is an urgent need to take steps to improve adequate supply of labours in the departments which have shortage of labours.

Sources of Employees

The sources of labour for SES suppliers in Chennai city were given in the Table 4

TABLE – 4
Sources of Employees

Sl.No	Sources of Employees	No of Suppliers	percentage
1	Educational Institutions	06	22.22
2	Through Friends	11	40.74
3	Through Advertisement	17	62.96
4	Through Existing Employees	13	48.15

Source: Primary Data

From the Table 4, it is clear that 22.22 per cent of the respondents were having the practices of selecting the employees from the educational institutions, 40.74 per cent of the respondents selected their employees through friends, 62.96 per cent of suppliers were inducting the employees through advertisement and 48.15 per cent of the suppliers were stated that they recruited the employees through the existing employees.

As per the above discussion it is clear that majority of the employers were selecting the employees through advertisement.

Satisfaction level for labour supply

To endorse decentralized SES in India and the involvement of non conventional electricity in the countrywide power grid to develop significantly, it is evident that there will be a vast requirement of qualified/skilled human resource in RE science and RE technologies.

The opinion about satisfaction labour supply was collected from the suppliers of SES by the researcher and it was given the Table 5.

TABLE 5
Satisfaction for Supply of Labour

Sl.No	Supply of Labour	HS	S	NSND	D	HD	Total
1	Technical field	03	08	Nil	12	04	27
		11.11	29.63		44.44	14.81	100.00
2	Administration	07	13	02	03	02	27
		25.93	48.15	7.41	11.11	7.41	100.00
3	Sales	Nil	06	4	10	07	27
			22.22	14.81	37.04	25.93	100.00

Source: Primary Data

Supply of Technical workers

Table 5 shows that 11.11 per cent of the suppliers of solar energy systems were highly satisfied with the supply of technical labour, 29.63 per cent of the respondents were satisfied, none of them were stated no opinion, 44.44 per cent of the suppliers were stated dissatisfied over the supply of technical workers and 23.52 per of the suppliers were highly dissatisfied.

It is clear from the discussion that most (44.44 %) of the respondents were dissatisfied over the supply position of the Technical workers.

Supply of Administrative Workers

The Table 5 gave the information that 25.93 per cent of the suppliers were highly satisfied for the supply of administrative labours, 48.15 per cent of the respondents were satisfied, 7.41 per cent of them were sated their opinion neither satisfied nor dissatisfied, 11.11 per cent of the suppliers were opined their dissatisfaction over the supply of administrative workers and 7.41 per of the suppliers were highly dissatisfied.

It is observed from the above discussion that the most of the SES suppliers were satisfied with the supply of administrative workers.

Supply of Sales Executives

It is understood from the Table 5 that none of the respondents were highly satisfied for the supply of Salesmen, 22.22 per cent of the respondents were satisfied, 14.81 per cent of the suppliers had no opinion, 37.04 per cent of the respondents were dissatisfied and 25.93 per cent of the suppliers were highly dissatisfied.

As per the above discussion that most of the SES suppliers in Chennai city were dissatisfied with the supply of salesman.

12. Performance of Labours

TABLE – 6
Opinion on Labours Performance

Sl.No	Performance of Labours	HS	S	NSND	D	HD	Total
1	Technical field	02	08	03	09	05	27
		7.41	29.63	11.11	33.33	18.52	100.00
2	Administration	06	13	01	04	03	27
		22.22	48.15	3.70	14.81	11.11	100.00
3	Sales	Nil	06	05	13	03	27
			22.22	18.52	48.15	11.11	100.00

Source: Primary Data

Performance of Technical Labours

From the Table 6, it is clear that 7.41 per cent of the SES suppliers in Chennai city were highly satisfied which their technical labours performance, 29.63 per cent of the respondents were satisfied, 11.11 per cent of the suppliers were stated neither satisfied nor dissatisfied, 33.33 per of the respondents were dissatisfied and 18.52 per cent of the suppliers were highly dissatisfied.

It is observed from the discussion that most of the suppliers in Chennai city were dissatisfied with their technical labours performance.

Performance of Administrative Labours

As per the Table 6, it is observed that out of 27 respondents, 22.22 per cent of respondents were highly satisfied with their administrative labours performance, 48.15 per cent of the suppliers were satisfied, 3.70 per cent of them were stated that no opinion, 14.81 per of the respondents were stated that they were dissatisfied and 11.11 per cent of the suppliers were highly dissatisfied.

It is observed from the above discussion that most of the SES suppliers in Chennai city were highly satisfied with the performance of administrative workforce.

Performance of Sales Representatives

It is observed from the Table 6, only none of the suppliers were highly satisfied with the performance of sales representatives, 22.22 per cent of the respondents were satisfied 18.52 per cent of the respondents were stated no opinion, 48.15 per cent of the suppliers were opined with dissatisfaction and 11.11 per cent of the respondents were highly dissatisfied.

It is clear from the above discussion that the most of the respondents were dissatisfied with performance of sales representatives' performance.

Findings of the Study

1. It is observed from the analysis that majority (59.26 %) of the solar energy systems suppliers had inadequate labour supply, especially in sales department in general category and in technical categories majority of the suppliers had shortage of technicians. So there is an urgent need to ensure the adequate supply of workers in the respective categories.
2. It is clear that majority of the employers were selecting the employees through advertisement.
3. It is clear from the discussion that most of the respondents were dissatisfied over the supply position of the Technical workers.
4. It is clear from the discussion that most of the respondents were satisfied over the supply position of the administrative workers.
5. It is observed from the study that most of the SES suppliers in Chennai city were dissatisfied with the supply of salesman.
6. It is clear from the study that most of the suppliers in Chennai city were dissatisfied with their technical labours performance.
7. It is observed from the discussion that most of the SES suppliers in Chennai city were highly satisfied with the performance of administrative workforce.
8. It is clear from the study that the most of the respondents were dissatisfied with performance of sales representatives' performance.

Conclusion

India's solar energy sector is now more than a decade old, primarily the growth of RE started with the idea of energy security and self-sufficiency after the power crisis of 1970's. Afterwards it combined with environmental concerns and concerns for rural electrification and access to electricity for this entire sector has momentum, India can achieve better results in solar energy sector in the years to come. The rapid growth of solar power sector would need an extensive pool of capable manpower (knowledgeable and skilled) to design, install and maintain the SE systems. Against this background the MNRE has proactively initiated the future Human Resource (HR) needs in the SP industry and evolve suitable HRD strategies for meeting them.

The country has to take serious concern to promote its HR for achieving its vision of development of SP industry with concerns for equity and environment.

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