



**Evaluation Report**  
**on**  
**Skills and Knowledge for Improved Livelihoods and Living Standards**  
**(SKILLS) Project for the Resource Poor**  
**Through Application of Science and Technology**

*[IND/97/180: Promotion of Non-Farm Employment and Livelihood for Resource Poor Communities]*

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**&**

**Executed by**

**National Science & Technology Entrepreneurship Development Board,  
Department of Science and Technology, Government of India**

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## INTRODUCTION

To capture the experience and lessons learnt from the “Skills and Knowledge for Improved Livelihoods and Living Standards” (SKILLS) Project so as to strengthen implementation and replication in future, the United Nations Development Program (UNDP) and the Department of Science and Technology (DST), Government of India (GoI), constituted a three-member Evaluation Team in June 2007 to evaluate the Project before concluding the Project in December 2007. The members of the Mission were Prof. Dinesh Awasthi, Professor of Entrepreneurship & Director, Entrepreneurship Development Institute of India, Gandhinagar, Gujarat, Prof. P Radhakrishnan, former Vice Chancellor, VIT University, Vellore and Ms. Deepanwita Chattopadhyay, CEO, ICICI Knowledge Park, Hyderabad. The Terms of Reference of the Mission is given as Annex-I.

The Mission had several meetings with UNDP, DST, other government institutions and the four Implementing Agencies, their trainees and partners during the course of the evaluation from June to October 2007. These included the introductory meeting with all the partners at the Vivekananda Institute of Technology (VIB), Nimpith on 2 June 2007, interaction with senior officials of DST and UNDP, participation in a Technical Workshop on Improving Quality of Evaluation at New Delhi during 25-26 July 2007 and briefing by UNDP and DST. It also included meetings with DST officials on 17 August 2007 and participation in the SKILLS review meeting at Goa organized by one of the Implementing Agencies, the Agnel Institute of Food Craft and Culinary Sciences (AIFCCS) during 17-19 August 2007. Here the Mission was given an opportunity to gain understanding of the progress of the project through presentation by all the four implementing agencies and presentation by the AIFCCS PPP partners.

The Mission visited one of the PPP ventures supported by the Agnel Institute on 18 August. On the next day the Team visited four Self Help Groups (SHGs) formed and supported by AIFCCS where face-to-face consultation was held with about 50 trainees and views were sought on the training and support extended to them by the Institute in setting up their businesses. The VIB, Nimpith and three of their four PPPs at Pathar Pratima (South 24-Parganas), Aamdanga (North 24-Parganas) and Jiaganj (Murshidabad) were visited during 1-4 September 2007. Similarly the Mission visited TREC-STEP, Trichy, and the PPPs established at Chennai and Bangalore during 10-12 September 2007 and JSSATE-STEP on 21 September 2007. Detailed discussions were held at each location with the private partners as well as with several trainees.

The SKILLS project included diverse areas of skill development from modern appliance maintenance and bakery and ready-to-eat products to biotechnology. To maintain uniformity in gathering information, a comprehensive questionnaire was prepared by the Mission to collect required information as given in Annex-II.

The Mission was given access to the project documents, periodic progress reports, minutes of the quarterly meetings, minutes of the meetings of Project Standing Committee, etc. These documents assisted the Mission immensely in understanding the rationale behind undertaking the SKILLS Project subsequent to the VoTEG Project.

This report has been compiled based on the above discussions with partners of the project, available reports and literature and visits undertaken during the course of the study. The Report is organized into the following chapters:

- I. Conclusions and Recommendations
- II. Project Concept and Design
- III. Project Implementation and Accomplishments
- IV. Overall Assessment of Project Results
- V. Possible Directions for Future Activities

There are five Annexes to the Report. While Annex I gives the TOR of the Evaluation Study & Annex II details the questionnaire used for data collection as mentioned above, Annex III lists the trades available in the skills portal and Annexes IV-a,b,c&d give the list of people met during visits to the implementing institutions. Annex V provides a comparison of the income and expenditure incurred by the four PP partners of VIB.

The Mission is grateful to UNDP and DST for offering this great learning opportunity. At the outset, the Mission would like to thank Mr. Suraj Kumar and Mr. Ashok Malhotra of UNDP and Mr. HK Mittal and Dr. BK Shukla for reposing their confidence in the team members and assigning the task. They have been very helpful through out the evaluation by providing access to all the relevant documents and the implementing agencies. They were kind enough to permit the Mission to attend their internal Review Meetings which were a great source of understanding the progress of the project.

The Mission is also grateful to all the coordinators of the implementing agencies viz. Prof. RMP Jawahar of TREC-STEP, Trichy, Prof. BK Dutta, VIB, Nimpith, Mr. JM Noronha and Mr. Alphonso Periera of AIFCCS, Goa and Prof. R Raghunandan, CEO, JSSATE-STEP, Noida, for their support and facilitating visits to their training centers and PP Partners. Interactions with them were extremely useful and educating.

The Mission will be failing in its duty if it does not acknowledge the support of all the trainees, PPPs, and all those women and men trainees and entrepreneurs who spent time with the team even at the cost of their work/ business.

While the members of the Mission have accumulated intellectual debt from different persons, the Mission is solely responsible for any limitation that the study suffers from.

Prof. Dinesh Awasthi  
Prof. R Radhakrishnan  
Ms. Deepanwita Chattopadhyay

### List of Acronyms and Abbreviations

AIFCCS	Agnel Institute of Food Crafts and Culinary Sciences
BFT	Bio-fertilizer Technology
CAMT	Centre for Advanced Manufacturing Technologies
CCF	Country Cooperation Framework
CD	Compact Disc
CEO	Chief Executive Officer
DACuM	Design a Curriculum
DGE&T	Director General Employment & Training
DST	Department of Science & Technology
EDC	Entrepreneurship Development & Training Cell
FDA	Food and Drug Administration
Gol	Government of India
HBT	Horticultural Biotechnology
ICT	Information and Communication Technology
ISP's	Internet Service Providers
ITBI	Information Technology Business Incubator
ITCs	Industrial Training Centers
ITIs	Industrial Training Institutes
JSSATE-STEP	Jagadguru Sri Shivarathreeswara Academy of Technical Education - Science & Technology Entrepreneurs Park
J-STEP	JSSATE-STEP (as above)
KVIC	Khadi & Village Industries Commission
MLA	Member of Legislative Assembly
MAM	Modern Appliances Maintenance
MoU	Memorandum of Understanding
MSMEs	Micro, Small and Medium Enterprises
NEX	National Execution
NGO	Non Governmental Organization
NIA	National Implementation Agency
NPC	National Project Coordinator
NPD	National Project Director
NSTDEB	National Science & Technology Entrepreneurship Development Board
OEMs	Original Equipment Manufacturers
PLMCC	Product Lifecycle Management Competency Centre
PP	Plant Protection
PPP	Public Private Partnership
SC/ST/BPL	Scheduled Caste/Scheduled Tribe/Below Poverty Line
SHG	Self Help Group
SKILLS	Skills & Knowledge for Improved Livelihoods and Living Standards
SSC	Senior Secondary Certificate

STEP	Science & Technology Entrepreneurs Park
STST	Skill Training through Science & Technology
TOR	Terms of Reference
TREC-STEP	Tiruchirapalli Regional Engineering College-Science & Technology Entrepreneurs Park
UNDP	United Nations Development Programme
VCS	Vivekananda Center for SKILLS
VIB	Vivekananda Institute of Biotechnology
VoTEG	Vocational Training for Employment Generation

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**EVALUATION STUDY**  
on  
**Skills and Knowledge for Improved Livelihoods and Living Standards (SKILLS)**  
**Project for the Resource Poor through**  
**Application of Science and Technology**

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## I. CONCLUSIONS AND RECOMMENDATIONS

Overall the project has achieved its set goals and objectives satisfactorily. The outcomes have been impressive. However, since the Project is still in the implementation phase (going to be completed in December 2007), some of the activities, as expected, are still going-on and are likely to be completed by that time. Nevertheless, the overall achievements are impressive.

Providing access to skills to make a large cross section of the young unemployable is the only strategy to create more avenues for poor to access jobs and get out of the poverty trap. There are not enough avenues in the formal sector. The VoTEG Project created an alternate approach to skill formation, the SKILLS project has successfully evolved a model to upscale that approach at a mass scale. The concept of giving training in market dictated skills, on commercial terms (through PPP), is a laudable innovation.

The Project has successfully developed the real and virtual (through PPP and through the e-Portal) modes of skill formation under the SKILLS Project.

### 1.1 Observations and Conclusions on Outcomes of the Project

#### **Establishment of a network of institutions for location-specific skill building activities**

A major objective of the programme was to establish a network of institutions to disseminate standardized modules for skill building with suitable local adaptations. For this purpose four regions were identified across the country and skills in demand pertaining to those regions were identified. Four implementing agencies in these four areas, TREC-STEP, Trichy, VIB, Nimpith, JSSATE-STEP, NOIDA and AIFCCS, Goa were strategically selected by the NEX Agency (DST), in consultation with the UNDP. The Implementing Agencies have accomplished their task meticulously.

#### **Development of suitable training material**

The curriculum and training modules developed by the four institutions were found to be of high quality and suitable for the target groups. They were prepared

through a consultative process involving experts. Use of flip charts, pictorial and graphic presentations, interactive CDs, easy to understand booklets as well as hands-on training made the training very effective.

While the training modules in modern appliances maintenance, maintenance of cell phone towers and communication networks and cookery were of three months duration, the agri-based training modules for use by grass root partners were broken into 1-3 day modules so that farmers could avail of the training. This was found to be very useful.

It was observed that except for AIFCCS, Goa, there was limited participation of women as trainees or trainers since the choice of skills imparted was not found suitable for women. More thought could be given in designing courses that are more inclusive and relevant in rural areas like skills related to handicrafts, forest based products, salt farming, carpentry, maintenance of farm equipment etc..

### **Establishment of an e-Portal for dissemination of skills**

An e-Portal for dissemination of courseware for skill training was developed and hosted by JSSATE-STEP. All the four Institutions had developed curriculum and competency based training modules in their respective areas of expertise. These were uploaded on the e-Portal, [www.skillindia.com](http://www.skillindia.com).

The reach of the portal was found to be limited due to non-availability of internet connection in many areas and use of English as the medium of instruction. The portal was expected to be used more by grass root training organizations. The network at the grass-roots level for training was however yet to be established, as the portal itself was launched only recently. It was envisaged to increase the basket of trade from the present 49 to about 200, in due course of time, with the help of network institutions. This would greatly enhance the usefulness of the portal.

### **Impact of training**

The programme was successful in attracting semi-educated youth in both rural and urban settings with large number of school drop outs, farmers and also marginalized women (in Goa). The experience in Goa is in particular worth noting. The tremendous self-confidence and pride inculcated in the rural womenfolk through this programme itself could be regarded as a unique success. Out of the 322 trainees in Goa, about 3 per cent were rehabilitated from their

earlier engagement as commercial sex workers. A few trainees were physically challenged. The evaluation team noted a true empowerment of women, though in a limited scale.

In all four cases trainees expressed satisfaction in the quality and usefulness of the training imparted. The evaluation team could feel improvements in terms of skill, knowledge and confidence in the trainees. Trainees were willing to pay for the training, whether in repair of home appliances or agriculture, in spite of various free training courses provided by government agencies. This should be treated as an indicator of success for the programme.

### **Establishment of Public-Private Partnerships**

A franchise model in PPP mode for the delivery of skills training was developed and implemented. 10 PPPs, four each by TREC-STEP and VIB and two by AIFCCS, had already been promoted for spreading the process of skill formation. The selection of the PP Partners was done in a transparent and competitive manner.

The PP partners were found highly committed. They were satisfied with the support received from the nodal agency and DST. There was clear evidence of good mentoring by the nodal agencies. The nodal agency took care of the training material as well as promotion and publicity of the PPPs. It was observed that TREC-STEP was providing course certification as well assistance for placement of trainees.

### **PPP Business Model**

Commercially viable business plans for PPP were developed by TREC-STEP and VIB. While AIFCCS had a rudimentary business plan, JSSATE-STEP was yet to develop one.

In the case of TREC-STEP and AIFCCS around 70% to 75% of the initial capital cost was borne by the private entrepreneur and 25% to 30% was paid by the nodal institution from the project. In case of VIB, the entire initial capital expenditure (around Rs. 600,000) of a PPP Centre was borne by the project.

The profitability of the model was essentially based on the number of registrations that could be achieved by a PPP Centre since a large part of the operational costs were fixed costs. It was seen that a Centre could breakeven in the 2<sup>nd</sup> year of operation with around 250 registrations per year. The agri-based PPP model with training alone was found to have low profit margins and broke

even in the 3<sup>rd</sup> year of operation. Addition of escort service (sale of agri inputs) to training increased the project viability substantially and profit could be booked from the 2<sup>nd</sup> year of operation.

The model provided for revenue sharing with the nodal institution. The revenue earned by the nodal institution was expected to cover the recurring costs of promotion and monitoring of the PPP Centres.

The crucial factor in this business was getting adequate number of trainees. To achieve this, the PPPs would need to maintain high standards of training and adopt innovative means of marketing and develop partnerships to sustain the interest of people in fee-based training.

It could be concluded from the above observations that the concept of providing training in market dictated skills on commercial terms (through Public Private Partnership) is a sustainable innovation with long term economic and social impact. The development and set up costs of the PPP Centre as well as the deficit in the first few years however have to be provided through a grant from the government or a development agency.

## 1.2 Recommendations

- The programme needs replication and augmentation at a wider and larger scale. While the PPP model has been tested mainly in big cities, there is a need to expand it to more rural and semi-urban areas. This can be done by developing hub and spoke models of training organizations. The nodal institutions of this Project may be entrusted to play the role of monitoring and accreditation.
- The funding support involved in the PPP mode is limited. A long-term plan should be drawn up involving the state governments with adequate budgetary allocations for setting up skill training infrastructure at grass root level in PPP mode. There is also a need to identify many more skills so as to serve the needs of people from different locations and also backgrounds.
- The scaling up endeavour should network and partner with other agencies/ministries of the Central Government such as DGE&T, Ministry of Labour and Employment, Ministry of Housing and Urban Poverty Alleviation, Ministry of Rural Development, Khadi and Village Industries (Ministry of MSME); Development Commissioner (Handicrafts) and Development Commissioner (Handlooms) of the Ministry of Textiles, Directorates of

Technical Education of the state governments, Employment Exchanges being run by the state governments, NGOs engaged in skill formation, etc. so as to evolve a comprehensive scaling up strategy without duplicating efforts and resources.

- The corporate sector should be encouraged to take advantage of the process of skill formation evolved under the project and set up its own academies, as a part of its Corporate Social Responsibilities. While this is already happening at pilot scales, district wise strategies could be evolved along with Corporates. In this respect, attempts should be made to encourage electronic media (Television) to participate in the programme, particularly marketing such efforts.
- The E-Portal [skillindia.com](http://skillindia.com) should be made universally accessible by the PP partners and franchisees to encourage wider dissemination of training methodology in various skills.
- MSME Industry Associations should be made aware about the 'Virtual Employment Exchange' through a series of awareness workshops and encouraged to participate in it actively.
- Government and UNDP should study and develop models for linkage of these skills training organizations with prospective employers so that demand-supply issues are addressed adequately.
- Since it is expected that a large proportion of people would be self-employed after obtaining skill training, there is a need to focus on access to capacity building in entrepreneurship, credit and markets for the products and services of those who set up their own enterprises after the training. Several organizations involved in entrepreneurship development could be roped in to participate in this process.

## II. PROJECT CONCEPT AND DESIGN

### 2.1 Context

The Government of India (GoI) and United Nations Development Programme (UNDP) under their Country Cooperation Framework (CCF-I) (1997-2002) launched a four-year sub-programme entitled “Vocational Training for Employment Generation” (VoTEG) under the CCF-I Outcome Area: “Enhanced Rural Non-Farm Employment and Productivity and Income Potential of the Poor (especially Artisans and Women). The sub-programme was executed by the Department of Science and Technology during the period 2000-2004 with UNDP inputs of US\$ 620,000. The sub-programme aimed at (i) demonstrating the effectiveness of short-term market-oriented technical training and the importance of training in ‘soft skills’ in empowering ‘economically-challenged’ young men and women to earn a sustainable livelihood; and, (ii) with a view to broader replication, establishing the usefulness of the ‘competency-based’ approach as also creating a model to diffuse a whole range of new technical skills at an accelerated pace. The broad areas identified under VoTEG were: Modern Appliances Maintenance; Multi-skilling for Rural & Semi-urban areas for maintenance of Computer Hardware and Office equipment maintenance; and Bio-fertilizer and Horticultural Biotechnology.

At the end of CCF-I, an outcome evaluation of the CCF-I outcome area “Enhanced Rural Non-Farm Employment and Productivity and Income Potential of the Poor (especially Artisans and Women)” was carried out, and a three-member Mission team recommended advocacy to a new set of champions in the framework of resilient programme structures and well focused goals as a step forward. The UNDP approved an extended phase of the VoTEG project in March 2005 for a period of two years with redesigned outcomes, outputs and activities under the “Skills and Knowledge for Improved Livelihoods and Living Standards (SKILLS) for the Resource Poor through Application of Science and Technology” Project with additional inputs of US\$ 1 million. In order to further leverage the outputs and essence of the SKILLS Project for a wider reach and newer skill domains, the duration of the project was extended to 31 December 2007 with increased funding totalling to US\$ 1,505,000.

The SKILLS project was undertaken at a time when in spite of the growing economy there was large scale unemployment. Even where jobs were created, they created large exclusions and often bypassed whole groups of society like

women and the physically challenged. The project in that sense was a very large and ambitious set of interrelated interventions to support the Gol's efforts to carry forward economic growth and job-creation hand in hand where the challenge was to design technical training programmes for the large number of young men and women who are economically challenged.

National employment guarantee is an important component of the common minimum program of the Government of India. There are large numbers of young persons who have failed to complete school education or who could not study further. As per the estimate of the 10<sup>th</sup> plan there are 18.7 million such young persons who are outside the reach of the formal skill development programmes. Assuming that the rate of change in the educational status of labour force during the period 1999-2000 to 2004-05 will continue during the XI Plan period also, those who have studied up to primary level in the labour force is estimated to increase from 125.92 million in 2006-07 to 148.83 million by 2011-12; a net addition of 22.91 million. Added to this will be 17.31 million people who would have education up to middle level. Thus, the total addition is likely to be to the tune of 40 million young, barely educated and largely untrained persons in the labour force over the XI Plan period. It works out to an annual increase of about 8 million unskilled young persons who will enter the labour market. These numbers are daunting for any Government or organisation that is interested in inclusive development for the country.

At present, the existing skill and vocational programmes have a capacity to train about 2.5 million to 3 million persons. Of this, 5,114 public and private Industrial Training Institutes (ITIs) and Industrial Training Centers (ITCs) have a capacity to train about 742,330 persons per year. Other organisations imparting skills include NGOs, vocational training schools, industry (under Apprenticeship Scheme), etc. This calls for some innovative mechanism to reach out and train the large number of resource poor unemployable youth so that they are able to earn their livelihood.

On the other hand, there is an acute shortage of masons, plumbers, carpenters, mechanics of various electrical and electronic consumer durables, automobile repair mechanics and so on. Food processing sector, one of the largest of the sectors in the country, itself offers a vast scope for creating new employment opportunities for poor. There is likely to be a shortage of about 18 lakh skilled and semi skilled workers in this sector alone during the XI Five Year Plan period. However, there is a serious mismatch between the skills sets in demand and the skills available (or mostly lack of such skills) with the teeming unemployed poor. Most poor do not possess marketable skills as they have hardly any access to formal skill formation systems like ITIs and vocational training centers as they, by and large, do not fulfil entry conditions to these centers.

Concerned with this phenomenon, the Prime Minister of India, in his address to the nation on this year's Independence Day (15 August 2007) announced that the government will endeavour to set up 50,000 skill training centers to meet the skill formation needs of the country. This would mean around a ten fold increase in the number of training centres and an unprecedented scope to bridge the gap between unemployment and shortage of skilled labour. This would of course require development of suitable training material as well as a very large number of trainers and here, the lessons learnt from the current SKILLS Project are expected to prove most insightful.

Some examples of innovative efforts to provide skills training in large numbers taken up by public-private partnerships are the EGMM (Employment Generation and Marketing Mission) in Andhra Pradesh with Rural Retail Academy and Rural English and Soft Skills Academy, and by the private sector like Sehgal Foundation, Dr Reddy's Foundation, COMAT, GramIT (Byrraju Foundation), StriveIndia and ruralnaukri.com among others. These efforts are still in pilot stages and are capable of making substantial impact if scaled up with appropriate business models.

## **2.2 Project Document and Key Elements of the Project Strategy**

The encouraging results of the VoTEG led to think of its wider replication at a mass scale through use of ICT. Therefore, key elements in the Project strategy as articulated by the Project Document were:

- Harness the power of ICT for mass outreach of capacity building efforts at a low cost.
- Draw on public-private partnership (including NGOs) modality so that an extensive network of institutions is established to provide on-the-ground support for the skill-building initiatives.
- Converge with similar initiatives being undertaken by agencies such as Khadi & Village Industries Commission (KVIC), Development Commissioner (Handicrafts) and others so that a well rounded approach is implemented.

At the heart of the SKILLS initiatives is the e-portal [www.skillindia.com](http://www.skillindia.com). This portal was envisaged to be a repository for a large number of skill training modules of simple and easily understood technologies, identified in consultation with institutions, including NGOs, involved in livelihood promotion activities for the target population. This portal was also envisaged to contain a large number of

competency based course curriculum and instruction material developed through a rigorous iterative process.

### **2.2.1 UNDP's Results and Resource Framework and the Deliverables**

The outcomes expected from the SKILLS Project as per the results and resources framework were:

Outcome 1: Establishment of an ICT based framework for mass outreach of capacity building efforts through skill development directed at resource poor communities.

*Output 1.1 An e-Portal for dissemination of skills established*

*Output 1.2 Network at the grass-root level for skill building training established*

Outcome 2: Piloting a franchise model for capacity building through skill development in PPP mode.

*Output 2.1 A franchise model in PPP mode for delivery of skills developed and implemented*

Outcome 3: Improving content and delivery mechanisms of programmes of various partners through convergence.

*Output 3.1 Areas of expertise of partner agencies pooled for greater impact*

*Output 3.2 Integrated pilots involving the three key project partners launched*

### **2.2.2 Implementation Modalities**

The GoI-UNDP initiative on promotion of non-farm employment and livelihoods for resource poor communities sought to respond to the challenge of providing training in vocational skills by building on the significant work that was done in CCF-I in partnership with the Department of Science and Technology, Ministry of Agro and Rural Industries through the Khadi and Village Industries Commission (KVIC) and the Development Commissioner (Handicrafts). However, while the proposed interventions with the KVIC and DC (Handicrafts) did not take off the ground, the Department of Science and Technology was assigned to take a lead in the SKILLS Project. The experience gained under the VoTEG Project in CCF-I and the vast institutional network created set the base for the SKILLS initiative by DST.

It was decided to execute the Project by the Department of Science & Technology, under the National Execution (NEX) modality. The Adviser & Head, National Science & Technology Entrepreneurship Board (NSTEDB) would be the National Project Director (NPD) and Director (STST); NSTEDB would be the National Project Coordinator (NPC). Keeping in view the successful involvement of the Tiruchirapalli Regional Engineering College-Science & Technology Entrepreneurship Park, (TREC-STEP), the TREC-STEP was selected to be the National Implementation Agency (NIA). In order to integrate with other projects of the partner institutions, it was decided to constitute a Programme Coordination Committee with all the three NPDs from DST, KVIC and DC Handicrafts as members.

Under the lead of the NIA, three key institutions viz. Vivekananda Institute of Biotechnology (VIB), Nimpith , Jagadguru Sri Shivarathreeswara Academy of Technical Education - Science & Technology Entrepreneurs Park (JSSATE-STEP), and Agnel Institute of Food Crafts and Culinary Sciences (AIFCCS), Goa, were selected as the partner implementing agencies. TREC-STEP and VIB were to implement the SKILLS Project in the PPP mode. The task of developing and hosting the e-portal *skillindia.com* was assigned to J-STEP, besides developing web based course and curriculum in multi-skilling for ICT industries. Agnel Institute was to develop and disseminate web based skill curriculum in Food and Beverage Technologies, and address a large number of marginalized sections of women and organize them into 12 -15 Self Help Groups.

The two-year Project, which was to be completed in June 2007, was extended till December 31, 2007 in order to consolidate the gains of the project outcomes. With extension, an additional responsibility was added to all the implementing agencies to promote or upscale the PPP models.

### III. PROJECT IMPLEMENTATION AND ACCOMPLISHMENTS

#### 3.1 Observations on Outcome based on the Result and Resource Framework

Based on the observations on the Project outcomes and outputs, as envisaged in the Result and Resource Framework, it could be concluded that:

**Outcome 1: Establishment of an ICT based framework for mass outreach of capacity building efforts through skill development directed at resource poor communities.**

***Output 1.1 An e-Portal for dissemination of skills established***

An e-Portal for dissemination of courseware for skill training was developed and hosted by J-STEP. The Portal was inaugurated on 18 October 2007. All the four Institutions developed curriculum and competency based training modules in their respective areas of expertise. The curriculum and the training material were uploaded on the e-Portal [www.skillindia.com](http://www.skillindia.com). It is envisaged to increase the basket of trade from the present 49 (for list of trades see, Annexure III) to about 200, in due course of time, with the help of network institutions.

***Output 1.2 Network at the grass-root level for skill building training established***

The envisaged network at the grass-roots level for skill building through training was yet to be established, as the Portal itself was launched only recently. So far, a strong network had been established between the PPPs at the grass-roots level and the mother institutions. However, the network of about 100 technical institutions with about 200 trained trainers that was developed during implementation of VoTEG already exists. This resource could easily be harnessed to take skill formation through use of ICT to the masses. J-STEP had already started the process of enrolling the institutions not only for expanding the skill training base through the e-Portal but also for strengthening the Portal by adding about 150 trades to the existing 49.

**Outcome 2: Piloting a franchise model for capacity building through skill development in PPP mode.**

***Output 2.1 A franchise model in PPP mode for delivery of skills developed and implemented***

A franchise model in PPP mode for the delivery of skills training was developed and implemented. The three institutions viz. AIFCCS, TREC-STEP and VIB, taken together, had promoted 10 PPPs for spreading the process of skill formation. The selection of the PP Partners was done in a transparent and competitive manner, as was evident from the high quality of the Partners. Agnel Institute, TREC-STEP and VIB had evolved commercially viable business plans for the PPP while J-STEP is in the process of developing the business plan.

### **Outcome 3: Improving content and delivery mechanisms of programmes of various partners through convergence.**

The Project had initially envisaged the involvement of all the VoTEG Partners viz. Khadi & Village Industries Commission (KVIC), Development Commissioner (Handicrafts) and the Department of Science & Technology (DST), Government of India. However, while the proposed interventions with the KVIC and Development Commissioner (Handicrafts) did not take off the ground, the Department of Science and Technology was assigned to take a lead in the project. The experiences gained under the VoTEG Project in CCF-I and the vast institutional network created set the base for the SKILLS initiative by DST. Since the proposals for collaboration with DC (Handicrafts) and KVIC were not approved, it was decided to transfer the funds (US\$ 100,000) earmarked for joint initiatives with these institutions to the PPP initiative being undertaken by TREC-STEP in view of the excellent response received from entrepreneurs in Chennai and Bangalore. Therefore, the envisaged convergence had not been achieved due to non participation of KVIC and DC (Handicrafts).

## **3.2 Monitoring and Evaluation**

One of the impressive components of the Project implementation was its system of monitoring. In order to effectively implement the project it was felt necessary that periodic reviews and experience sharing takes place. During the first phase of the project, it was decided to hold quarterly review at the project site by rotation that would also help in exchange of good practices and mutual learning. This also provided an opportunity to the Monitoring Committee to physically verify the progress made at each location.

The Evaluation Team was supplied Minutes of all the Quarterly Review Meetings, which were meticulously recorded. The Minutes provided a good insight into the implementation process. Even the Evaluation Committee had the opportunity to attend two of such meetings, one at Nimpith and the other at Verna (Goa). The Team observed that the discussions during the Meetings were carried out in a frank and open but learning environment. The other aspect that impressed the

Team was the turn out and attendance in the Meetings. It was always a full house.

### **3.3 Documentation and Dissemination of the Project**

Documentation of Project outcomes in both Print and Video mode have been entrusted to M/s Macroscopic Images who had satisfactorily carried out project documentation works during the VoTEG phase. The documentation work was likely to be completed by November 2007. The Project outcomes were slated to be disseminated at the National Workshop in December 2007.

### **3.4 Evaluation of Project implemented by Agnel Institute, Verna (Goa)**

#### **3.4.1 Introduction**

The Agnel Institute of Food Crafts and Culinary Sciences (AIFCCS) was a part of Agnel Technical Education Complex, which comprised 13 educational institutions ranging from a Kindergarten to an engineering college, a polytechnic, an Industrial Training Institute, an Entrepreneurship Development Institute, etc., at Verna (Goa). The Technical Education Complex catered to the needs of over 4500 full time students, besides a large number of part time students. AIFCCS was recognized by the Government of Goa and affiliated to Board of Technical Education, Government of Goa and approved by the All India Council of Technical Education, New Delhi. The Institute provided career-focused education and training in hospitality operations & management and prepared its trainees for a career in the hospitality industry.

AIFCCS had been working with DST in the field of skill development for the past 15 years. It was due to their result oriented approach that they were selected as one of the four agencies to implement the SKILLS Project. AIFCCS was responsible for implementing the project in the Food and Beverage sector.

#### **3.4.2 Activities Undertaken by AIFCCS as per the Result Resource Framework**

AIFCCS was mandated to undertake the following activities:

- i. Develop web based course curriculum in Food and Beverage Technologies;  
and,

- ii. Act as a mother resource center in the above trades including training of trainers.
- iii. Subsequently, developing a sustainable new model for PPP was also included to the charter and AIFCCS was mandated to promote two agencies in PPP Mode to replicate the skill formation process evolved by the AIFCCS. The target set for the Institute was to train 200 women from communities below poverty line. Besides, the Institute was also entrusted to promote and strengthen Self Help Groups (SHGs) of poor women and help them in setting up their own micro businesses in new skill trades in the food processing sector and also assist them in marketing their products.

AIFCCS undertook the following activities to accomplish the assignment:

#### *3.4.2.1 Identification of high potential trades in the food and beverage sector for skills formation and promotion of SHGs*

An extensive survey was conducted with the help of Goa Institute of Management Studies to identify the activities and trades in food and beverages sector that have high market potential. The survey design also included the survey of potential trainees. Based on the survey results, a number of trades were identified. Subsequently, after fine tuning, the Institute identified four trades for skill development and micro business promotion, in the following order of priority:

- i. Fruit & Vegetable Preservation
- ii. Ready to Eat Items
- iii. Cuisine
- iv. Bakery

#### *3.4.2.2 Identification and Training of Trainers*

- The Institute identified 5 well qualified trainers in the four sub trades and provided five days of intensive in-house orientation programme. Study visits were organized to expose the trainers to the real world of industry and SHGs. AIFCCS conducted several other training programmes and events.

#### *3.4.2.3 Development of Courseware and Curriculum for the Identified Trades and Benchmarking of Critical Standards*

The innovative feature adopted in developing the curriculum was using the 'Design a Curriculum' (DACuM) process to design the Courseware. The main highlights are as follows:

- i. Four Competency Based Curricula were formulated using DACuM Process. The professionals involved in the process were a DACuM facilitator; SKILLS project Trainers, Faculty from AIFCCS and the Project team.
- ii. The Curriculum was tested and standardized by professionals and Industry experts in their area of specialization.
- iii. A list of Tool kits and Training systems were prepared, procured and installed at the outreach kitchens at the various locations identified for training. Tool Kits comprising of the basic kitchen equipment required to start business activity, were also been distributed to all Self Help Groups.
- iv. The curriculum was periodically reviewed during the training programme.
- v. One member of the Institute was facilitated to undertake a study visit to seven institutions in USA to observe the skill development methodology in developed countries, so that appropriate benchmarking could be done for Indian skill development systems.

#### *3.4.2.4 Developing Micro Enterprise and Entrepreneurship Promotion Module*

Since one of the mandate for the Institute was to promote self employment and entrepreneurship through SHGs, a need based training module was developed with the help of Agnel Entrepreneurship Development Institute, a sister organization of AIFCCS. The model included: Formation of Self Help Groups; Entrepreneurship and the present scenario; Achievement Motivation Training; Business Opportunities Guidance; Schemes of financial assistance; Leadership skills and communication; and interaction with successful entrepreneurs.

#### *3.4.2.5 Programme Promotion and Selection of the Trainees*

To begin with, Rural Development Agency, Government of Goa was approached to collect information on Below Poverty Line stressed areas in Goa, as one of the objectives of the SKILLS Programme was to improve the livelihoods of poor women. Having identified the areas an Awareness Workshop organized was organized on 29 September 2007 at Agnel Technical Education Complex for the potential target trainee women. Around two thousand women from all over Goa attended the workshop. Subsequently, awareness was created in the villages identified by conducting camps, with support of the Gram Panchayats. A Questionnaire for selection of trainees was designed by Goa Institute of Management, to assess the suitability of the applicants for the programme.

Advertisements in four newspapers were released on 29 and 30 January 2006, inviting application from trainees.

Based on the applications, interviews were conducted at village level by a team of four experts.

#### *3.4.2.6 Training of Trainees and Formation of Self Help Groups*

The 1<sup>st</sup> Programme on skill development started in March 2006 with 134 trainees covering all the four trades. The training on Ready to Eat Items had 27 trainees, Fruits & Vegetables Preservation (67 trainees), Bakery (12 trainees) and Cuisine (28 trainees). The 134 below poverty line women were trained in five centers of South Goa, between March and July 2006. During the 2<sup>nd</sup> phase, 118 women were trained at another five centers in North Goa, between October 2006 and February 2007. The 3<sup>rd</sup> phase covered another group of 100 poor women. So far, in all 352 trainees have been trained under the SKILLS Project by the Institute. Highlight of the programmes was that a few selected trainees were taken for a study tour to AMUL, Anand and LIJJAT, Mumbai to study the cooperative movement. Study tours were also organized to Swayam Siddha, Kolhapur, for the core members of the trained SHGs.

The trainees were subsequently organized into 18 SHGs of 12-15 members each, to assist them to start with their business activities. The SHGs were registered under Bombay Societies Act 1860. To accomplish this, a one-day workshop was conducted for all Self Help Groups at AIFCCS on 12 February 2007. The objective of this workshop was to build, promote and entrust conceptual background of SHG management.

Realizing that market would be a major constraint without any brand name; the Institute facilitated these SHGs in forming a state level federation, *Sugran<sup>1</sup> Mahila Grih Udyog*, on 31 July 2007 at AIFCCS.

Workshops were also organized on Entrepreneurship Development, FDA licensing, Finance schemes and Marketing by Managing Director of Goa State Cooperative Bank, Govt of Goa, Licensing authority of Food and Drug Administration, Govt of Goa, President from All India Women Alliance, Goa Chapter and Speakers from Agnel Entrepreneurship Development Institute etc., for Self Help Groups at Agnel Technical Education Complex.

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<sup>1</sup> SUGRAN means a woman who has a natural talent of being a good cook.

The Institute provided marketing support to the Self Help Groups by organizing Food Fairs at Agnel Technical Education Complex every Friday. The objective was to expose and display the skills imparted to the trainees through the project, to generate income for the Self Help Group and to expose the members to market realities and build up their marketing skills and confidence.

Periodic visit of the trainees were also organized to super markets, potential entrepreneurs, catering institutes, to assist and expose them to marketing and business environment.

#### *3.4.2.7 Development of the PPP Model*

One of the objectives of the SKILLS was to create a replicable and sustainable model of PPP. The Institute promoted two Public Private Partnership Centers at Karwar (Karnataka) and Duler (Mapusa) on 15 August 2007 and 18 August 2007 respectively. The first batches of trainees were being recruited in both the Centers at the time of evaluation.

#### The process of selecting PP Partners

Three advertisements, inviting application for Public Private Partnership, were released in June 2007 in the local dailies Herald, The Navhind Times and Sunaprant (Konkani). The criteria of selection were that the PP Partner should be:

- Qualified in Hotel Management and Catering Technology or should possess experience in Hospitality Industry
- Should be able to invest between Rs. 5,00,000/- (Rupees five lakhs) to Rs. 8,00,000/- (Rupees eight lakhs)
- Should be able to provide a minimum 100 - 150 sq meters area at a prominent location for conducting these training programs.

The Institute received in all 21 enquiries. The applicants were invited for a presentation by the Institute in June 2007. After preliminary interactions, 13 candidates were called for interview before a selection committee of experts consisting of a Government official, a retired banker, the principal coordinator of the SKILLS Project at the Institute and Principal, Agnel Institute. Of the 13 candidates, three candidates viz. Mr. Satish and Ms. Marcelina Mhalsekar, Mrs. Anjali A. P. Valavalkar and Mr. K.T. Kadam were short listed for further negotiations. Site visits were made to the places of the three candidates. After holding wide discussions, the Committee selected Mrs. Fernandes and Mrs. Anjali Valavalkar as the first PP Partners. An agreement was signed between the

Institute and Mrs. Marcelina Fernandes on 23 July 2007 and with Mrs. Anjali A. P. Valavalkar on 26 July 2007.

Salient features of the agreements were that they will remain in force for a period of three years, the Agnel Charities will charge 10% of the fees collected in the first year and 20 per cent from the 2<sup>nd</sup> year onwards, as franchise fees. The PPP will offer 10 per cent fee concession to SC/ST/BPL Women/Physically Challenged and charge from the 10 per cent share of the Agnel Charities. The Agnel Institute committed to provide academic support, conduct assessment of the trainees, conduct quality audit, and provide equipment support worth Rs. 100,000 and contribution of Rs. 50,000 towards advertising and promotion of the programme to its PPPs. The Institute also placed its well trained former trainers at the disposal of the PPPs, in case they needed them.

### **3.4.3 The Evaluation Process**

To assess the impact, effectiveness and efficacy of the SKILLS Project implemented by AIFCCS, the evaluation coincided with the Project Review Meeting of the SKILLS Project, held on 17 August 2007. The fieldwork for the evaluation was carried out on 18 and 19 August 2007 (for list of the persons interviewed, refer Annexure IV-a). The evaluation was carried out in terms of activities undertaken, output targets achieved (in terms of number of persons trained and their profile), and impact of the Project on the target beneficiaries (in terms of their access to skills and increase in their incomes after training) and gender participation, etc.

### **3.4.4 Major Findings on Training Interventions**

#### *3.4.4.1 Profile of Project Team*

The Project was led by the Principal of AIFCCS, a respected professional in his field. The project team was well qualified, trained and motivated. All the trainers had basic qualifications in Food Processing and were provided advanced training and grooming to act as a trainer. The project coordinators, who were required to organize women groups and deal with external support system e.g. government officials, banks and elected members and heads of the Gram Panchayats, village leaders and family members of the trainees, were well equipped in social mobilization and human resource development. The Project administration was found to be gender sensitive as 5 of the 10 professionals were women (3 of the

five trainers, one of the two coordinators and one person in administration were women).

#### *3.4.4.2 Curriculum and Training Material*

The curriculum and training modules prepared by AIFCCS were found to be of very high quality and suitable for the target group. Use of flip charts, pictorial and graphic presentation, use of interactive CDs, easy to understand booklets, leaflets has made the delivery of the inputs very effective. Since it is more of a hands-on skill formation process, the theoretical inputs had been kept to the minimum. The course did not include only recipes but also focused on personal hygiene, kitchen sanitation, first aid, menu planning, storage and packaging, nutritional value, etc. Such subjects added substantial value to the skills that were technical in nature. These inputs would not only enhance employability but would also help trainees in their day to day operations.

The Institute also developed web-based training material on the four sub-trades and passed them on to J-STEP for inclusion in the e-Portal.

Another set of useful inputs provided during training related to setting up and operating a micro business. The basic concept of managing money, marketing, quality control, business planning, production scheduling, etc. would go a long way in developing business skills among the participants.

#### *3.4.4.3 Profile of Trainees*

- i. Socio-Economic Background: All the trainees belonged to poor schedule caste and schedule tribe families. A couple of groups belonged to minority communities also. About 63 per cent women came from families with annual incomes less than Rs 8,000 and only 21 per cent had an annual family income above Rs. 24,000. This fitted well with the overall objective of the Project of providing a training platform for resource poor women. Most of the women had drunkard husbands and physically assaulted them. A majority of the trainees were landless agricultural labour or could manage some seasonal *ad hoc* employment. About 17 per cent of them were house wives.
- ii. Age and Qualification: All the participants were between the age of 21 and 50 years. A majority was in the age group of 30 to 40 years. The skill development programmes organized by the Institute are directed towards poor women groups. Obviously, one would not expect high level of education among them. Nevertheless, most of the trainees were literate (could read and write). About 26 per cent of them had passed SSC, about

- 46 per cent had education up to primary school level and another about 16 per cent were school drop outs. Remaining 12 per cent, who were also somewhat elderly, were illiterates.
- iii. Inclusion: Out of these 322 trainees, about 3 per cent were rehabilitated from their earlier engagement as commercial sex workers. A few trainees were divorcee and physically challenged.
  - iv. Purpose of Undertaking Training: A vast majority (83%) of the trainees enrolled in the programme to get rid of their grinding poverty and supplement their meager family income. Very few of them thought of setting their own enterprise to earn additional income and give vent to their creativity and make better use of time. Some of them thought that they had cooking skills any way and wanted to make good use of these skills to earn a decent living without compromising with the family responsibilities, as they could operate from their own homes or from the homes of their neighbours.

#### *3.4.4.4 Impact of Training: Major Achievements*

The Evaluation Team visited four SHGs and interacted with the trainees. It was heartening to note that all the groups were doing fairly well and had expanded their markets. They had acquired technical skills and also understood intricacies involved in the food business in their sub trades. *"I did not know that food could become a business. We had no idea of hygiene, cleanliness, systematic making of snacks, and the variety and product range. Every thing has changed for us..."* said Alka Sakhelkar, President of the Annapurna SHG, at Barcem village. Some of the groups had tapped the Sarva Shiksha Abhiyan Scheme of the Government to supply mid-day meal in schools. Some of the groups ventured far beyond their localities and were participating even in national food fairs and other places outside Goa (see Box 1).

## Box 1

### Touching New Horizons

*The Evaluation Team reached Shiroda SHG, Ponda to talk to the SHG Members. We were told by Sheryl, a dynamic coordinator of the SKILLS at AIFCCS that the group was one of their successful stories. We were welcomed by 12 members of the Shiroda SHG, led by their President Ms. Rupali Shirodkar, a dynamic young woman with a disarming smile. She was also the President of the Sugran Mahila Grih Udyog Sangh. It was their work place - tidy, neat and clean, professional. All of them had schooling up to class 12 except one who had dropped out after class IX. They were quite articulate and seemed to have good business sense. The SHG was formed on 21 November 2006. They received Rs. 12,000 towards purchase of utensils, heaters, mixers, sealing machine, weighing scale etc. from AIFCCS and invested Rs. 10,000 on their own. The going was good. They supplied snacks to 4 primary schools in Shiroda, daily; got regular catering orders for parties (made a 100 kgs. cake and 300 patties on the birthday of a Minister, who was also the local MLA and supplied dinner in a meeting of Sarva Shiksha Abhiyan). They also participated in an exhibition organized by a local Homeopathy College. They put up a food stall in the market on every Tuesday. They work on all days of the week with a half day off on Sundays. They were a very united and motivated team, "we are not an SHG but a family", said Neha, the Treasurer of the Group. Their net income ranged between Rs. 500 to Rs. 600 per day. All the group members participated in the tasks wherein work was allocated by rotation. They had rented a workplace for Rs.400 per month. When orders were heavy, they outsourced work to another group viz. Shiv Ganesh SHG (also promoted under the SKILLS Project). The Group was preparing to visit Delhi to participate in a food fair at Dilli Haat and to Jaipur for participating in Jaipur Fair to showcase Goan Ready to Eat Food. Their dream was to create a brand name for their SHG not only in Goa but even outside.*

Most of the groups had regular savings and accounts in Cooperative Bank. They looked quite empowered and were able to spend their income on welfare of the household, like sending children to school; spending on health and medication, clothes and other necessities without being dependent on their husbands (see Box 2).

## Box 2

### I Am Free

“Only a few months back, I used to ask my drunkard husband for money to keep the fire of my Chulha (Indian oven) burning. Most of the times I used to get abuses from him. I also got beatings from him once in a while, because I demanded money to run the house, as I was able to earn only about Rs. 300 - Rs. 400 per month as agriculture labour, not enough for meeting my household expenses. My children had to be taken out of school as we could not pay their fees. My husband is a driver who gets work for about 8-10 days in a month @ Rs. 150 per day. It was not enough to run the family of six. Now, after attending the training organized by the Agnel Institute and becoming member of my SHG, things have changed and life has brightened. I am able to earn about Rs. 1500 a month. That helps me to meet my household expenses. I don't have to spread my hand before my husband. After I started earning, my daughters have started going to school once again. Some times, even my husband asks for money from me. He is much more polite with me, unlike the earlier days. I have gained my self respect. My neighbours have started looking at me with respect and want to do some thing like I am doing. Life has changed. I am a free person, an independent person. I am grateful to the Agnel Institute. *They are Gods for me.*”

These are the words of SANTANA, a Member of the Shiroda SHG. The team came across several such stories from various women covered under the SKILLS Project. One major achievement of the Agnel Institute in this Project is empowerment of very poor women.

#### 3.4.4.5 *Impact of Training: The Flip Side of the Story*

On the flip side, however, marketing remained their major concern; the incomes generated through these micro businesses were paltry, barely around Rs. 600 to Rs. 800 per person per month. Members in some of the groups did not even work regularly as a group and attended to group work in a very ad hoc manner, to the extent that the group has decided that only those members who contribute to SHG will have any claim on the earnings. Most of the groups had very weak management and had little idea of business, did not have any business plan, lacked marketing skills and carried out activities more as a pass time than as a hard core business. The Team asked all the four groups about their business plan. However, none could respond satisfactorily. Another important observation of the Team was that most of the SHG members appeared self exploited - working almost 14-16 hours a day (see Box 3).

### Box 3

#### Story of the Self Exploited Women Group

*The 10 Member Annapurna SHG, Barcem, set up in July 2006, supplies food to 10 schools under the Mid-day Meal Scheme. While three of the schools are about 2 kms. from the village that remaining 7 are about 5 kms. away. Their turnover from this activity is Rs. 12,000 as the schools provide rice to them. They have to reach the schools at least 10 minutes before the interval that takes place at 10.30 a.m. Besides supplying to the schools, they also supply ready to eat items to shopkeepers in the market, about 12 kms from the village. They supply their products on every Monday, once adequate stock is ready. It helps them to achieve a turnover of about Rs. 8,000 per month. About 50 per cent is the Input cost (excluding their labour). That leaves them with a net surplus of about Rs. 10,000 a month, i.e. @ Rs. 1,000 per month per person. To earn this paltry amount per month they get up at 4 a.m. and reach the workplace by 4.30 a.m. They complete the cooking by 7.30 a.m. and walk to the schools with the entire load on their head. By 10.30 they serve the meals to the students and start back at 11.00 a.m., reaching home at about 12 noon. From 12 noon to 6 p.m. they discharge their household responsibilities of cleaning, cooking, and so on. In between, they have the luxury of taking a short nap of about one hour (if they have time!). By 6.15 p.m. they reach the SHG Workplace and prepare Ready to Eat Items from 6.15 to 10 p.m. (some times 12 mid night, if orders are heavy) almost every day. They are back home by 10.30 p.m. and some time by 12.30 a.m. to get up at 4 a.m. the next day. That makes the total working of about 16 to 18 hours to earn about Rs. 1000 a month, with no leave, social security, no provident fund, no medical allowance and no assured income. We checked up thrice with the group about these timings, but were surprised to find consistent answers from one and all. One was tempted to ask if it was worth their labour. Their answer was simple, "Anything to bring smiles on the face of our children is fine".*

Nevertheless, it could be taken as the first step towards prosperity and empowerment. The beginning has been, no doubt, made. Given their enthusiasm and commitment to better their lot, it should not take them much time in attaining self sufficiency and improving their socio-economic status. All of them expressed gratitude towards the Institute for providing them skills that have changed their lives. It will be worth writing about these groups to understand the impact as well as issues being faced by these groups.

#### *3.4.4.6 The Sugran Model*

As stated earlier, Sugran Mahila Grih Udyog, a state level federation comprising of eight members was formed on 31 July 2007 at AIFCCS, Goa.

- On completion of training all the successful trainees were formed into Self Help Groups.
- The Self Help Groups have ventured into their own enterprises and started selling their produce with a common brand name “**SUGRAN**”
- Some of the Self Help Groups have obtained or in process of obtaining FDA approval for large scale commercial activity.
- Revenue generated per group of ten to twelve members was around Rs. 12,000- 15,000 per month.

#### *3.4.4.7 Quality Control and Follow up*

An Evaluation Committee consisting of 3 faculty members from AIFCCS has been formed to conduct regular quality audits, every week. This also helped the Institute in organizing regular follow up and handholding of the trainees. Moreover, they also received regular feed back from dealers selling the items made by the SHGs. The dealers, in view of the Institute, were mostly happy with the quality of the products. Some groups needed to improve on the quality of certain items, they felt. They also monitored their products on a regular basis by organizing Food Fairs at Agnel Technical Education Complex.

### **3.4.5 Evaluation of PPP**

One of the objectives of the SKILLS was to create a replicable and sustainable model of PPP. AIFCCS had spent most of the time creating the curriculum and provide training. The franchise model of PPP was explored in the past few months. The Institute promoted two Public Private Partnership Centers, one at Karwar (Karnataka) and the other at Duler (Mapusa) on 15 August 2007 and 18 August 2007, respectively. While the Evaluation Team had the benefit of interacting with both the Partners, it could visit only one of them. The observations, therefore, are primarily based on our interactions with them.

- i. Both the PP Partners had developed their business plans and were quite confident of achieving success.
- ii. The quality of both the Partners was of very high standards. Both were well qualified, experienced and committed to the project.

- iii. Both had advertised in local dailies and received encouraging response. Mrs. Anjali Walavalkar, Professional Academy, Duler, had already recruited 14 trainees - 7 for food products (catering) and 7 for bakery products. She was to start her 1<sup>st</sup> batch of training on 20 August 2007. In fact, her Academy was inaugurated on 18 August 2007, during the Review Meeting of the SKILLS Project at Goa. The other PP partner was planning to start their 1<sup>st</sup> batch in the first week of September.
- iv. It may be noted that the PP partners were looking at training unemployed youth for the hospitality industry and not rural marginalized women as done by AIFCCS.

#### **3.4.6 Convergence with KVIC and other Agencies**

AIFCCS was actively working with the KVIC and had promoted SHGs with their support. They also networked with the Rural Development Agency of the Government of Goa to elicit their support for the Trainees. It had signed MoU with Goa State Co-operative Bank Ltd., a Government of Goa Undertaking to provide financial assistance to Self Help Groups and to provide guidelines and expertise to the trained women in setting up their business units through SHGs. At village level, they involved Gram Panchayats to spread the message of the programmes. In fact, the Gram Panchayats at most villages offered space and infrastructure to conduct the training programmes. They had also networked with academic institutions like Goa Institute of Management and created SUGRAN brand image in association with Goa College of Art, Government of Goa.

#### **3.4.7 Agnel Institute's Plans for Project Sustainability**

AIFCCS intends to make this project sustainable once the project funding is over by:

- Setting up a monitoring cell at AIFCCS to monitor the Public Private Partnership Centers, and business activities of the Sugran Federation.
- The administrative expenses of this cell will be defrayed by the revenue generated through 10% royalty from the PPP centers for the first year and 20% royalty from the second and third year.
- Setting up a few more PPPs on the lines of current PPP model so that the revenue stream continues to flow and the strategy becomes self sustaining.

### 3.4.8 Overall Observations on the Agnel Institute's Project Implementation

- A Competency based curriculum and training methodology designed using the DACuM Process had been developed by the Institute. The salient feature of this model was its capability to ensure effective transfer of learning to trainees during and after the training programme. It was a very valuable contribution of the Agnel Institute. The course material was available [www.skillindia.com](http://www.skillindia.com) portal.
- At the end of the training programme the trainees were formed into Self Help Groups so that they venture into their own business enterprises. The emphasis was not only on economic gain but also on the social parameters such as cooperative movement, team building, trust etc.
- A Sugran Mahila Grih Udyog, a state level federation comprising of eight members committee and representative members from all Self Help Groups is formed to promote "SUGRAN" brand all over Goa. It was quite an innovative step taken by the Institute towards sustainability of the SHGs.
- The Project had made significant contribution towards Empowerment of Groups of Poor Women.
- A replicable and sustainable model for PPP was evolved and implemented successfully.
- Overall, in the view of the Evaluation Team, the Agnel Institute had accomplished all the tasks assigned to it successfully, and was all set to up-scale the strategy.

### 3.4.9 Key Recommendations

- Considerable efforts, time and resources have been invested in developing the competency based curriculum by the Institute. The target group has also benefited substantially from the training. Therefore, there is a strong case to continue the programme and to expand the outreach through establishment of several more PPPs in Goa and neighbouring states like Maharashtra and Karnataka, with support of the Agnel Institute.
- AIFCCS must improve its delivery of entrepreneurship and management inputs. It is strongly recommended that the Institute must organize refresher programme on entrepreneurship and small business management, at least for the SHG leaders/Office Bearers.

- While creation of SUGRAN is a laudable initiative, not all the groups are able to take equitable advantage of the brand. There are serious capacity gaps among the groups. Inter-group variations are stark. While a few groups are able to do well for them selves, some other groups have languished behind.
- The income levels are too meager for most of the SHGs. There is a serious problem of scale of operation. They should be encouraged to borrow from the bank and expend their business to take them to economically viable size.
- AIFCCS should network with NABARD and other government agencies to set up a few retail outlets for SUGRAN at key spots in Goa. It may make an attempt to emulate models like AMUL and LIJJAT.
- The Institute should add new skills sets to expand its basket of opportunities.

### **3.5 Evaluation of Project Implemented by JSSATE-STEP, NOIDA**

#### **3.5.1 Introduction**

Jagadguru Sri Shivarathreeswara Academy of Technical Education - Science & Technology Entrepreneurs Park (JSSATE-STEP), NOIDA (henceforth addressed to as J-STEP) was established in the year 2000 to nurture and develop techno-entrepreneurship and to support the growth of MSMEs in the region. The J-STEP focused in the ICT and manufacturing sectors. It operated from the campus of JSS Academy of Technical Education which was one of the largest engineering institutions in the state of Uttar Pradesh, India. The J-STEP had set up 4 major centers of excellence, the Information Technology Business Incubator, the Product Lifecycle Management Competency Centre in association with the Government of France and Dassault Systemes, France, the Centre for Advanced Manufacturing Technologies and an Entrepreneurship Development & Training Cell that conducts awareness camps, training for potential entrepreneurs, and vocational training besides providing handholding and mentoring support to micro and small enterprises. J-STEP was also actively engaged in conducting Skill Training Programmes for unemployed and poor youth of the region in various employable trades such as Air Conditioner servicing, Plumbing, Motor Winding, Computer Hardware, Networking, Ferro Cement, Tally, Cell Phone Repair, Diesel Engine maintenance, etc. Given the overall competence, J-STEP was selected as one of the four agencies for implementing the SKILLS Project.

### 3.5.2 Activities Undertaken by J-STEP as per the Result Resource Framework

J-STEP was mandated to:

- i. Develop web-based course curriculum in multi-skilling for ICT industries.
- ii. Develop and host the skill web portal [www.skillindia.com](http://www.skillindia.com)
- iii. Act as a mother center in the above trade, including training of trainers. However, subsequently, developing a sustainable model of Public Private Partnership to up-scale the process of skill formation was also added to its portfolio of activities.

The J-STEP undertook the following activities to accomplish the tasks:

#### *3.5.2.1 Identification of the trades for developing Web-based Course Curriculum in Multi Skilling for ICT focusing on Wireless and Networking Segments*

J-STEP commissioned the services of an external consulting organization viz. M/s Prastut Consultant Pvt. Ltd. to conduct a survey of the National Capital Region to further identify the vocations where mass employment opportunities exist. The survey covered major industry players, training institutions and selected potential trainees falling under the unemployed disadvantaged groups. Based on the survey results, the following trades that were quite unconventional were identified:

- i. Installation and Maintenance of Cellular Phone Towers
- ii. Installation and Maintenance of Data Communication Networks

#### *3.5.2.2 Administrative Setup and Identification and Training of Trainers*

The Project was headed by the CEO of J-STEP, a very competent person in the field. An Advisory Committee under the Chairpersonship of Advisor - JSS Mahavidyapeetha, NOIDA was set up for overall monitoring of the project as well as to lay down the procedures and policies for implementing the project. Besides, an Implementation Committee was also formed under the CEO with Head of the Department of Electronics and Communication and Head of the Department of Computer Science as members. Four industry experts were identified from Airspan India Ltd, Siemens, Radwin India and Kaveri Telecom to provide advice and inputs during the implementation of the project.

Two different teams were set up - one for the portal and one for multi skill training. It was difficult to find right kind of trainers due to acute shortage of such persons. Nevertheless, J-STEP could manage to hire a Technical Trainer in the field of data communication network area in the month of September 2006. Subsequently, two trainers were hired for maintenance of cellular phone towers. Apart from these three trainers, J-STEP also hired services of two professionals to help in e-Portal development (of which one left, soon), one professional to manage procurement of equipments and networking with OEMs and one professional to assist in promoting MSMEs and networking with other stakeholders, including the potential trainees.

The Project Coordinator was imparted basic training in the wireless telephony segment and was further sent for advance training in the industry. Since the other professionals recruited for the job were quite experienced, a short orientation programme of one week was conducted by J-STEP.

### *3.5.2.3 Development of Courseware and Curriculum for the Identified Trades*

The competency based curriculum following the DACuM methodology was developed for both the trades. To develop the courseware, industry and expert inputs were sought continuously. The industry-expert interface provided a unique opportunity to give the course a balanced mix of theory and practice. Several visits were made to industry for consultation and incorporate their suggestions. In all, only 15 per cent weightage was provided to the critical theoretical aspects whereas hands-on practical training was assigned the balance 85 per cent. Both the trades were divided into need-based six modules each. Besides the technical inputs, a few soft inputs were also incorporated such as English communication, negotiation skills, writing skills, basic management skills, etc. The modular course material was developed by the J-STEP and vetted by the industry and the experts.

The courses were developed in a manner that it had built-in mechanism for evaluation. While it is too early to comment on the evaluation process, the J-STEP has made the provision of eliciting feedback from the employers of its alumnae. The duration of the training programmes was stipulated to be of 3 months, 4-hour a day. The target of the number of trainees to be trained was 90 persons in each trade.

#### *3.5.2.4 Identification of the equipments and tool kits required*

A complete list of training systems and tools required was finalized through interactions with the industry experts. The basic equipment have already been purchased and installed. Since the training systems in this domain are expensive and also the obsolescence rate is high, the systems had to be carefully sourced and analyzed, to arrive at the specific equipments at affordable ranges, which could be used for this training. In fact, it is emerging as a good model for public-private partnership, as J-STEP successfully motivated a German firm RFS which supplied antennas to provide training. The equipment were sourced from reputed companies like CISCO, AIRTEL, ERICSSON, NORTEL and AIRSPAN. A separate laboratory was set-up exclusively for the project and the training stations were designed and installed in the laboratory.

#### *3.5.2.5 Participant mobilization and Counseling*

The first batch of trainees was recruited in August 2006 and the training started in the first week of September 2006. Extensive promotional activities including advertisement in newspapers, publicity and meetings in nearby rural areas and contact with NGOs to motivate right kind of trainees to join the programme, were undertaken by J-STEP. For the first programme, J-STEP received 30 applications of which 20 trainees were finally selected after a rigorous selection process. The CEO of J-STEP told during discussions that it was difficult to get adequate number of the right kind of trainees.

#### *3.5.2.6 Designing and developing an e-Portal [www.skillindia.com](http://www.skillindia.com)*

The Portal was envisaged to serve the purpose of being a repository of information that can be accessed by all the stakeholders of a vocational training eco-system. The Portal [www.skillindia.com](http://www.skillindia.com) was to capture a variety of information pertinent to the short term vocational training and presents it in a user friendly fashion. The main features of the portal were:

- Providing information related to particular trades/vocations - competency based curriculum, course material, demonstrations, slide shows etc. for ready use in training.
- Facilitating employment through an EMPLOYMENT EXCHANGE - a facility that has high success in the high end job sector and is a rapidly recognizable need today for the vocational sector

- Encouraging the participation of subject experts to ensure that the latest knowledge was available in the portal and also to offer valuable consultations to both trainees and training institutions.
- Profiling training institutions to enable the reach of good quality institutions and to also support the decision making process of a prospective trainee.
- Peripheral areas with information pertaining to soft skills, self-employment, training news etc. were also available.

The target groups that would potentially benefit from the Portal were training institutions, trainees, employers, NGOs/ Government agencies and consultants/ experts.

The process of developing the Portal was quite systematic. An Interaction Workshop of users and NGOs (involved in skill development) on Development of the e-Portal 'skillindia.com' was organized at Tiruchirapalli on 27 June 2005. About 35 NGOs from across the country participated in the workshop. A lot of suggestions were made on how to make the Portal more user-friendly.

The web Portal was inaugurated on 18 October 2007 jointly by the Hon'ble Minister for Science and Technology and Hon'ble Minister Housing and Urban Poverty Alleviation, Government of India. Currently the Portal offers basic and premium content for 49 trades, obtained from the 6 institutions involved in the VoTEG and the SKILLS Projects.

The Project envisages the trades to be scaled up to about 200 in the near future. A collaborative process of adding new trades and updating existing information has been put in place in the Portal. Marketing strategies are being put in place to ensure that there is a wide participation from potential employers in the Portal as "getting employment" is a major outcome for any vocational training.

The Portal was developed with support of a J-STEP incubatee company working in the area of web application development as a partner for development of the advanced features of the Portal such as, the 'learning basket', 'upload centre', etc. Network Security audit of the Portal was performed with the help of Network Systems Solutions Limited - an agency certified by the National Informatics Centre, Government of India.

### *3.5.2.7 Promotion of Public-Private Partnership (PPP)*

Since the Project has yet to take shape to come to a stage wherein the PPP could be developed, J-STEP has not been able to make any headway in this

regard. Moreover, as will be discussed later, it might be a somewhat difficult task to develop PPP in this area. However, as per the schedule, the advertisement for the PPP was expected to be released in the newspapers in the month of September 2007.

### **3.5.3 The Evaluation Process**

The Evaluation Team visited the J-STEP on 21 September 2007. The implementing agency made a presentation on the progress of the SKILLS Project and gave a demonstration on the web portal, [www.skillindia.com](http://www.skillindia.com), developed by them (see Annexure IV-b for the list of persons interviewed). After the meeting, the Team visited the training laboratory and interacted with 20 trainees undergoing the programme.

### **3.5.4 Major Findings and Observations**

#### ***3.5.4.1 Profile of the Project Team and Infrastructure Facilities***

The team implementing the project was found to be technically qualified and had adequate experience in dealing with such training programmes. The Technical Assistant of the Portal was well qualified in web designing and had one year hands-on experience at the National Informatics Center at Dehradun.

A specialized laboratory was set up as part of the project including a dummy 20' Communication Tower to give hands-on training to the trainees. A well equipped class room was also set up with space to accommodate 20-22 trainees at a time.

#### ***3.5.4.2 Major Observation on the e-Portal 'www.skillindia.com'***

##### Coverage of the Portal

The Portal presently covered 49 trades. It provided information on sponsors, partner institutions, training institutions, member networks and target groups, etc. It also provided a comprehensive learning basket covering relevant and updated learning resources for each vocation. A competency based curriculum and structured learning information was also provided for most of the trades. Potential trainees could use the information to benchmark their learning. Training institutions could use the information to supplement their training resources. A step-by-step navigational aid had been designed that took the user through the

curriculum of each vocation. Additional information such as on-line tests, presentation slides, movies/clips, toolkit information and full course material were available at a single touch.

The most interesting component with tremendous potential was the 'skill employment exchange'. It was envisaged to bring potential job-seekers and job-providers on one single platform. In addition, to enable one to view available jobs in a particular vocation, a simple mailing facility would facilitate reaching out to the trainees and the training institutions through a district/state-wise search and dispatching facility. The potential employers would have the facility to upload, modify or delete information on their skill personnel requirements. It would facilitate an employer in finding a right kind of skilled worker and a skilled worker in finding out a job at a place of his/her choice.

The Portal envisaged offering a few auxiliary features, e.g. an entrepreneurship guide, soft skill tools, trade-wise discussion forums, etc. However, this facility was yet to be operationalized.

#### Design and Efficacy of the Portal

The Portal was well designed with easy navigational menu. J-STEP had substantially improved upon the format initially suggested by the sponsors. One could go to any particular trade, could get information on partners or sponsors, could go to a particular district site and find out if a job is available and an entrepreneur can find a person who fits his/her bill. The trainees could check if the training being imparted to him/her by a technical training institute was up-to-date and comprehensive or not. It could facilitate trainees in demanding effectiveness and efficacy of the training. The Portal would also be useful for technical training institutions as they would get access to updated courseware. It would serve as a major source of information for vocational centers that hardly have any access to latest developments in the field and continued with obsolete training material and methodology. In all the design of the Portal was well thought out and user friendly.

#### Limitations of the Portal

While the Portal was an innovating way of imparting skills to large populations, it suffered from the problem of lack of internet connectivity in remote areas and also the use of English as the medium of instruction and communication in the portal. It is understood that the Portal was conceived to reach out to also those who could not afford to attend any technical institute because of their low or no

educational qualifications. Unfortunately they would have little use of this Portal. This number is fairly large.

Moreover, it would almost be impossible for a trainee to learn a skill solely based on the portal since most training require hands-on practice. This means in spite having access to the Portal a person desirous of acquiring skills would need to go to a vocational training center. This limits the efficacy of the Portal significantly.

#### Sustainability of the Portal

The issue of sustainability is strongly associated with its utility. Of paramount importance is its financial sustainability that is, could the Portal operate without funding support from external sources and generate enough revenue to operate on its own. Interactions with J-STEP indicated that they did not have a sustainable business model and were planning to approach a few funding agencies to support its operational costs.

One could argue that if all the stakeholders that benefit from the Portal pay for the services, a market driven for-pay model could be developed and sustained. If yes, what kind of demand would this put on the system, the host? More work needs to be done in this regard to ensure a thriving skills portal.

#### ***3.5.4.3 Major Observations on the Training Component being implemented***

##### Curriculum and Training Material

The curriculum was evolved in a participatory and consultative mode. Discussions indicated that training on maintenance of cellular phone towers was the first of its kind in the country. So far, training in this area had only been on-the-job-training and no institution formally imparted skill training in this trade.

A very innovative curriculum, with only 12 per cent theory and major (82%) focus on hands-on experience makes it quite novel. The Evaluation Team also had an opportunity to look at some of the manuals and work books. The training material developed was of high quality, easy to understand and comprehensive. The course material for installation and maintenance of data communication network was also equally good. Part of the course material was under preparation and was likely to be ready by the end of October 2007.

### Profile of the Trainees

The 20 trainees selected for the programme were in the age group 16 to 23 years except two trainees who were 31 years of age. While 15 belonged to general category, the batch had three trainees from scheduled caste and two from other backward communities. In terms of their education, 13 trainees were class XII pass, 5 were class X pass and 2 were school drop outs from class X. 16 of them were unemployed, 11 came from service family background, 6 from small business families and three from farming. Their average annual income was Rs. 97,550 ranging between Rs. 36,000 and Rs. 2,40,000.

### Impact of the Training Programme

Since the first programme itself was underway, it would be premature to make any judgment. Nevertheless, open interactions with the trainees did indicate that they were quite satisfied with the programme. Some of them mentioned that they would be even willing to pay a higher fee for such programme. A few of them told that quite a few young persons among their peers desired to join the next batch. It was a pleasant surprise to come across a group of 20 wherein almost 20 per cent wanted to set up their own small enterprises. The remaining wanted to get a job as soon as possible. They also wanted to get some inputs on English communication. The Team was informed by J-STEP that this was very much a part of the curriculum and would be imparted at a later stage.

### Promotion of Public-Private Partnership

Private partnership entails a sound revenue model so that the private party is able to recover its investments and make enough money that has attractive return on investment. However, so far, no revenue or business model had been developed by J-STEP. The Team felt that a business and a revenue model should be developed before even trying to promote PPP. As stated by the CEO, J-STEP, they were in the process of evolving a business model for PPP. The attempts to promote PPP were likely to be initiated somewhere in October. However, since initial investments in these two trades were quite high, it might be difficult to get an entrepreneur to invest in a venture with long gestation period. The alternatives being explored by J-STEP were to rope in ISP's and OEM's like AIRTEL, RELIANCE, SIEMENS, ERICSSON, CISCO, etc. However, this kind of partnership would have its share of risk. These ISPs might train workers exclusively for their own requirements and could resort to unfair means like insisting on bonds from trainees to serve their company for some specified period or use the trainees for their regular work without making payment etc.. These

issues could be handled by incorporating suitable checks and balances in the MoUs to be signed with private partners.

### **3.5.5 Recommendations and Suggestions**

#### **3.5.5.1 Recommendations on e-Portal**

- Since the Portal [www.skillindia.com](http://www.skillindia.com) is yet to be completed and lot of work needs to be done if the Portal has to have 200 trades, it is recommended that the Project support be extended, in a time bound manner, so that the task is accomplished.
- While enhancing the coverage to 200 trades, attempts should be made to include skills related to handicrafts, forest based products, salt farming, carpentry, maintenance of farm equipment etc. that are more relevant to rural areas.
- Translating the material in major vernacular languages and putting on the web will enhance its utility substantially. The sponsors may like to explore the possibility of getting it done by partnering with other regional center of technical training of repute.
- The marketing plan of the Portal is missing. There is a need to reach out to all the stakeholders in a manner that they start using the facilities. In this respect, the most tedious task is going to be to reach out to the employers. It is suggested that a series of awareness workshops at the regional or state level should be conducted in collaboration with small industry association to make them aware and motivate them to take advantage of the Portal to get trained skilled workers.
- Initially, the Portal might give free access to the users. However, subsequently, it should start charging for its services from the users. For example, employers are likely to be too willing to pay for getting skilled workers. Similarly, training institutions should also be made to pay if they want to upgrade their training methodology and courseware. It will directly benefit them. One could also think of marketing the concept to various government agencies to pay for such services, including employment exchanges, State Directorates of Employment and Training and of Technical Education, who could pay on behalf of their Industrial Training Institutes and vocational schools. It might be difficult to charge the trainees as they may find it of only limited use.
- J-STEP should evolve a Public-Public Partnership Model to spread its outreach. It means that J-STEP should enter into strategic partnership with government supported or government sponsored institutions, government

departments and agencies engaged in promotion of skills such as Ministry of Labour, Ministry of Housing and Urban Poverty Alleviation, Government of India, State Directorates of Technical Education, a few NGOs engaged in skill formation, etc.

- Some of the existing skill related portal websites could be reviewed to make the employment exchange of the skillindia portal more efficient.
- A different kind of PPP model roping in some of the TV Channels could be explored, particularly in the food processing sector. A number of TV shows relate to cooking different cuisines, and are quite popular. If they agree, some modalities could be worked out to use their films.
- Till such a market strategy succeeds, either UNDP or DST should provide funding support to keep this initiative going on.

#### 3.5.5.2 Recommendations on Skill Training

- The skill training model and the coursework need to be promoted aggressively. The present set of trainees, once they are absorbed by the industry, could be used as ambassadors to promote the J-STEP programmes.
- The programmes have a fee of only Rs. 3,000, which is quite low, looking at the kind of investments and job potential. The fee should be increased to at least Rs. 6,000 (in fact, much higher fee is being charged by the PPPs of the Agnel Institute and TREC-STEP). If the feeling is that poor trainees cannot afford higher fees, J-STEP should explore the possibility of getting a few fellowships/scholarships from the industry as they are going to be the ultimate beneficiaries, given the shortage of skilled workers.
- The trainees attending the programmes should be given a comprehensive orientation and briefing before starting the programmes, so that they are aware of what could they expect from the programme.
- A Business Plan for the PPP should be prepared at the earliest. However, adequate precaution should be taken before roping in the large industry players due to the risks mentioned above.

## **3.6 Evaluation of Project Implemented by VIB, Nimpith**

### **3.6.1 Introduction**

Set up in 1991, Vivekananda Institute of Biotechnology (VIB), Nimpith was a part of the Ramakrishna Ashram at Nimpith, South 24-Parganas, West Bengal. As a part of the Ramakrishna Ashram that has been working for more than six decades for upliftment of rural people in Sundarbans through establishment of schools, health care facilities, Krishi Vigyan Kendras, etc., the Institute's mandate was to help people at the grass roots level benefit from relevant science and technological advancements leading to increased incomes. For this purpose VIB had set up a modern agri-biotechnology resource center, an advanced agri-biotech R&D facility, a well equipped training center and a platform to incubate the trained people and develop them as entrepreneurs.

VIB was one of the four organizations that had participated in the UNDP supported Vocational Training for Employment Generation (VoTEG) programme wherein the Institute identified Agricultural Biotechnology in general and Biofertilizer Technology in particular, as its area of focus. The objective of the project was to generate a pool of knowledge based farmers, workers and entrepreneurs who could serve as technology delivery and diffusion agencies at the grass root levels. The Institute developed a quality competency based curriculum and conducted a series of training programmes in these two areas. Its successful participation in the VoTEG made the Institute a natural choice for implementing the SKILLS Project.

### **3.6.2 Activities Undertaken by VIB as per the Result Resource Framework**

VIB undertook the following activities:

#### *3.6.2.1 Identification of vocations needing skill development in agriculture based on market assessments and improvement/development of training curriculum and manuals*

Based on a well designed survey in West Bengal in collaboration with the Indian Institute of Management, Kolkata, VIB identified Biofertilizer Technology (BFT), Horticultural Biotechnology (HBT) and Plant Protection (PP) as the focus areas for training. Six training modules in BFT, seven in HBT and one in PP, each of two and a half month duration, were developed with assistance from 17 external resource persons of national and international repute and 10 from VIB. Faculty from VIB visited several agricultural laboratories in Israel and the University of

Florida for benchmarking the course material developed matching international standards.

The training modules were later broken up into 20 BFT and 40 HBT modules of 1-3 days each costing Rs. 25 to Rs. 60 per day, for use at the grass root level by the PPP partner institutions, based on the time and affordability of farmers at one go. These training manuals served as input material for the PPP partners as well as for the e-portal developed by J-STEP and is a key output of Outcome 1.

### *3.6.2.2 Creation of a pool of experts for imparting training and augmenting laboratory and training facilities so as to act as mother resource center for the training of trainers*

VIB established extensive linkages with academic and research institutions and had 17 external trainers and 10 internal people for imparting training.

VIB upgraded its Soil Testing, Plant Tissue Culture and Biofertilizer Laboratories and augmented its training facilities for imparting hands on training.

So far VIB had provided training of two and a half months duration to 128 candidates for a fee of Rs 1,500 per person. Most of the trainees were groomed to provide Escort Services, that is, supplying agri-input products like tissue cultured plant material, biofertilizer, vermicompost and biopesticide and soil testing facility from VIB, to farmers in their localities and thus act as nodal persons of VIB for technology and knowledge diffusion. While this activity did not serve the Outcome 1 of an ICT based framework for mass outreach, it was successful in establishing a network at the grass root level for training, the other key output of Outcome 1.

### *3.6.2.3 Establishment of a public private partnership (PPP) model for large scale capacity building in the areas of interest and acting as an incubator to develop institutions/ franchisees for providing skills training*

VIB had so far established four *Vivekananda Center for SKILLS (VCS)* in PPP mode at four locations in West Bengal for imparting skill development training. These VCSs were established as franchisees of VIB for providing training to farmers and agro-service providers from the neighbouring region on knowledge and skills for better crop production and management.

The process of establishing the PPP was initiated through advertisements in two local language and three English language dailies, inviting proposals for PPP. The response was overwhelming and attracted 67 proposals (65 from West

Bengal and two from Orissa). Twenty five proposals were short listed on the basis of the respondents' background, idea and capability. Of the 25, 14 were selected in the second round for site visits and discussions.

A model Franchisee business plan was prepared and presented by VIB before a committee of experts. The panel was in favour of including Escort Services with Training to make the business financially viable. The panel recommended selecting one PPP partner to begin with and evolving a sustainable business model before increasing the number of partnerships. After several rounds of interaction with the candidates, *Pramila Krishi Udyog, Jiaganj, Murshidabad*, run by a husband-wife team, was selected as the first partner in the programme in December 2005.

Based on the lessons learnt from the first VCS, three more VCS in three different districts of West Bengal (in different agro-climatic zones) viz. Pathar Pratima in South 24-Parganas, Aamdanga in North 24-Parganas and Bara Bainan in Raina, Burdwan district were established. While the first one was set up by *Pathar Pratima Dakshinshibganj Lok Shiksha and Rural Development Society*, an NGO at Pathar Pratima, the second VCS was established at *Karunamayee Agri-clinic and Service Centre*, Aamdanga and the last one was set up by an individual with active cooperation of the local Gram Panchayat.

This activity directly corresponded to the requirements of Outcome 2 as per the results and resources framework of the Project.

#### *3.6.2.4 Improvement in content and delivery of training through convergence with KVIC and other partners as per Outcome 3*

Senior officials from KVIC, Sundarbans Development Board and the Department of Gram Panchayat were involved with the Project. VIB was planning to develop training on banana fibre extraction and apiculture and related technologies along with KVIC. The apiculture training was expected to immensely benefit the people who collected honey from the jungles of Sundarbans. VIB was also exploring the option of accreditation of its services and products.

### **3.6.3 The Evaluation Process**

#### **3.6.3.1 Evaluation of Training Interventions**

To assess the progress of the Project and recommend ways for replication, scalability and synergies with similar efforts for maximum benefits, VIB, Nimpith

and the Vivekananda Centres for Skills (VCSs) at Pathar Pratima, Aamdanga and Jiaganj were visited from 1 to 4 September 2007. The progress was judged in terms of activities undertaken, output targets achieved, in terms of number of persons trained and their profile, and impact of the Project on target beneficiaries, in terms of their access to skills and increase in their incomes after training, gender participation, etc.

The evaluation process started with a meeting at VIB, Nimpith where the Project team from VIB, Financial Consultants to the Project and a representative from the Department of Panchayat and Rural Development, West Bengal were present (for details, see Annex IV-c). The Project team made a presentation on activities pertaining to the project. Each person involved in the Project explained his or her role in project implementation. The Financial Consultant presented a model business plan for the VCS and explained the criteria for long term financial viability of the same. Detailed discussions on scaling up the model for technology and knowledge diffusion among the most disadvantaged were held during the presentations.

This was followed by interaction with the above members as well as five trainees who received training at VIB.

### **3.6.3.2 Evaluation of PPP**

As described earlier the VCSs were operating in a public private partnership mode with VIB acting as an incubator or a nodal agency for establishing and promoting the VCSs and also monitoring their performance. The PPP partner was responsible for providing the building (approximately 2,000 sq. ft.) and infrastructure and bore the operational expenses for the VCS, while the nodal agency provided an initial grant for training aids, computers and the set up costs. The estimated startup cost of the training centre to be borne by VIB was around Rs 6.0 lakhs.

VIB took care of the publicity through farmer meetings at district, block and village levels, demonstration of benefits to farmers, advertisement through handbills, etc. VIB also helped in the selection of candidates, training of trainers, content delivery and monitoring. It was observed that an effective monitoring mechanism was in place which helped proper implementation of the project to a significant extent. Certificates were also issued to the successful candidates by VIB.

VIB had so far established VCSs at four locations for skill development training in West Bengal, as follows:

	District	Location of VCS/Block
1.	Murshidabad	Jiaganj
2.	South 24 Parganas	Pathar Pratima
3.	North 24 Parganas	Aamdanga
4.	Burdwan	Raina II

Of the four VCSs, the evaluation team visited the first three VCSs. The VCS at Burdwan was not visited since it was very new and was being set up.

#### *The Jiaganj VCS*

The VCS at Jiaganj was established by Dipika Mandal and Dayaram Mandal and was operational for over a year and a half. This was biggest and the oldest of the VCSs promoted by VIB. During the visit to the Center, the team was impressed by their performance and future plans. Not only that they were able to generate a profit of about Rs. 2.5 lakh per annum, they were catering to a large number of farmers in the area (see, Box 4). The training facility at VCS, Jiaganj started from May 2007. Training helped them get expert resources from VIB for advice and also building goodwill. People, including farmers and input dealers were coming from as far as 30 kms to avail the training. The evaluation team spoke to some trainees to access their background and expectations. The opinion of the VCS trainees on the organization and the inputs was very encouraging. While the educational level of the trainees at Jiaganj was not high, they were experienced farmers and keen to learn. They found the inputs very useful and were willing to pay even a higher fee for the training, if required.

**Box 4**  
***Agro Extension Makes Good Business Sense***

*Dayaram is a school teacher and has been doing business in agri-inputs since 1984. Dipika, his wife, was also engaged in the business since 1989. They started a micro-nutrient manufacturing venture in 1998 and are keen to set up a soil testing lab. Their Escort Service business is currently catering to 7,000 to 8,000 farmers and is able to fetch a net profit of Rs 2-2.5 lakh per annum. They have established a hub and spoke model with nodal persons who acted as franchisees and shared commission for bringing business. Currently they have 17 nodal persons and hopes to increase the business to 50 nodal persons in another year and to about 200 in three years so as to cater to over 20,000 farmers in the entire Murshidabad district.*

*Pathar Pratima VCS*

Chinmay Maiti, an economics graduate and trained at VIB, ran the VCS at Pathar Pratima. This remote VCS catered to 10 Gram Panchayats of Pathar Pratima Block through Chinmay and nine nodal persons. The evaluation team interacted with the nodal persons and about 20 farmers who came for training. Two women, Srabani Jana and Durgarani Maiti, who wanted training in goatery and poultry were also present. The average education level at Pathar Pratima was Class XII and farmers were willing to adopt new practices like organic farming. The fee charged by the VCS was Rs 30/- per day per course.

The farmers told that they were benefiting from training and were interested to learn more. A case in point was Abalakanta Bhuinya. A simple farmer of Dakshin Mahindra Nagar, Pathar Pratima, 30 years old Abalakanta led a difficult life with his family. He had studied till class IV and was dependent on his 1 ½ bighas of land for cultivation. He had been involved in farming for the past 15 years, produced brinjal, paddy & chilli and earned around and Rs. 2,000 monthly. With the regular use of chemical fertilizers, Abalakanta used to get a good yield from production. But gradually his efforts went in vain and his production was badly hit.

He came to know of the VCS in a farmers' gathering and joined. He found the training useful and got economic benefit. Presently he produces tomato, okra and

snake gourd in 10 *kathas* of land. Investing Rs.6,000 he could earn Rs.21, 600. Abalakanta was happy to share his knowledge with fellow farmers.

39 year old Narayan Jana from Madhavnagar village of Pathar Pratima had been practicing farming since 13 years. He had 6 Bighas of land and his major crops were Potato, Chilli, Colocasia and Paddy. Jana, underwent the training at VCS on “Neem & Vermi Compost Technology”. He also realized the importance of using Bio & Organic fertilizers. He now produced banana, cauliflower, paddy, sugarcane and tomato in his 16 *kathas* of land. Narayan Jana was thrilled to see his crop-filled farms. His last year’s income was Rs.68,000. He appealed for spreading of VCS training to wider group of farmers and also formation of a ‘Farmers Co-operative’. He was no longer the same undemanding farmer!

#### Karunamayee Agri-clinic and Service Centre

Nivedita Das Roy, a post graduate in Agriculture and with work experience in private sector and NGO had started the Karunamayee Agri-clinic and Service Centre at Aamdanga, North 24-Parganas in 2006 after receiving training at the Bidhan Chandra Krishi Viswavidyalaya. She then attended training at VIB and started a VCS in September 2007. The evaluation team interacted with Nivedita and a batch of farmer trainees. While the VCS had only one nodal person, Nivedita was contemplating taking 10 nodal persons who would work on the basis of commission.

The farmers had so far used the escort services from Nivedita and the training has just started. The farmers raised the issue of delay in supply of material from VIB and requested for solving the logistical problems causing the delay. They also complained that the Neem oil was not effective.

### **3.6.4 Major Findings on Training Interventions**

#### *3.6.4.1 Profile of Project Team*

The project team was found to have adequately trained personnel for implementing the SKILLS Project. 21.4% of the team members were women. Besides the 10 internal resource persons, 17 external resource persons were identified for imparting skills training. The project team members were given training at various research institutions. Review Committees with experts from different fields were set up for advising and monitoring the progress. Since the team at VIB did not have background in finances and business planning, a financial consultant helped the team in preparing business plans for the VCSs.

#### *3.6.4.2 Curriculum and Training Material*

The curriculum and training modules prepared by VIB were found to be of very good quality and suitable for West Bengal. Splitting the training curriculum into 1-3 days modules was found to be very useful. Apart from the training materials for the trainees, VIB has also developed, interactive CDs, booklets, leaflets and flip charts for imparting training to the farmers at the VCS level.

Agriculture being region specific, the training needs and course modules may vary from region to region. Even within West Bengal because of the different agro-climatic zones, different crops are grown in different areas. Hence all the course material developed by VIB may not be suitable for mass dissemination through a national level portal.

#### *3.6.4.3 Profile of Trainees*

- i. Qualification: As the training course at VIB was meant for potential trainers, job seekers and entrepreneurs, the minimum entry level qualification was set as Class X pass. Out of the 128 persons trained during the SKILLS Project, 12% were Class X pass, 39% had completed Class XII and balance 49% were graduates/post graduates.
- ii. Economic Background: Most of the trainees belonged to poor families. 33% came from families with annual incomes less than Rs 10,000 and only 27% had annual family incomes above Rs. 50,000. This fitted well with the overall objective of the Project of providing a training platform for resource poor people.
- iii. Inclusion: Out of these 128 trainees, 85% were men and 15% women. 2% of the trainees were physically challenged.
- iv. Purpose of Undertaking Training: 43% candidates had indicated that their main purpose for enrolling for training was to improve their cultivation practices, while 28% expected better job prospects and the balance 29% trainees wanted to be self-employed and start business on their own.

#### *3.6.4.4 Impact of Training*

Proficiency and knowledge of trainees were assessed on the basis of written tests taken during joining and at the end of the course. Trainees showed marked improvement in performance in the relevant trade after receiving training. While only 10% of the students scored over 50% during initial benchmarking, 81% scored over 50% during the final assessment. Fig 2a and Fig 2b below depict this

improvement. All the five trainees interviewed said they greatly benefited from the training and have successfully used their knowledge.

#### BOX 5

##### Impact of Training

*Nakul Bera, a middle aged farmer from Uttar Mogalpur village of Hoogly District in West Bengal was till recently dependent on the yield from his small patch of land. But not any more! Though a school drop out, Nakul's urge to learn more about agriculture brought him to VIB. After completing his training at VIB, he has taken up Escort Services and also conducts awareness camps in his region. Nakul now supplies biofertilizers, biopesticide and seeds to around 4,000 farmers in four Blocks of Hoogly District and makes a net profit of Rs. 3,000 to Rs. 4,000 per month. He expects to expand his business to other neighbouring districts and is grateful to VIB for the training, support and opportunity provided to him.*

*Animesh Mandal, after passing his Higher Secondary Examination worked in a construction company and practiced agriculture before he ventured into dealership of chemical fertilizers. The training on biofertilizer technology at VIB helped him know more about the importance of soil health, biocontrol and vermicomposting. His land benefited from the interventions and he started awareness camps with technical support from VIB. So far over 200 farmers have benefited from the camps. The training at VIB has opened his eyes to new opportunities and he is now planning to start a vermicompost project from municipal waste at Baruipur.*

Fig. 2a

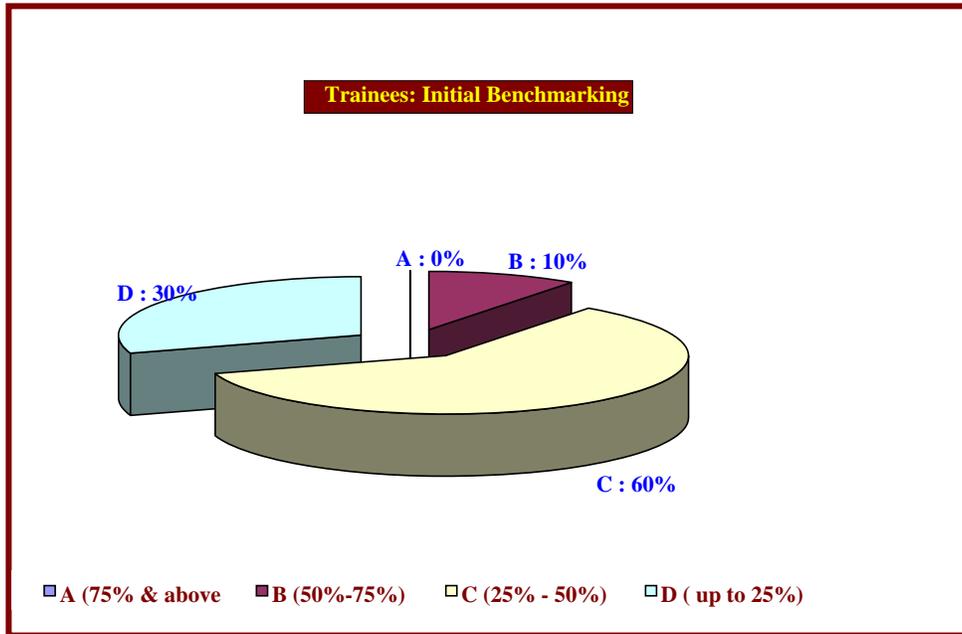
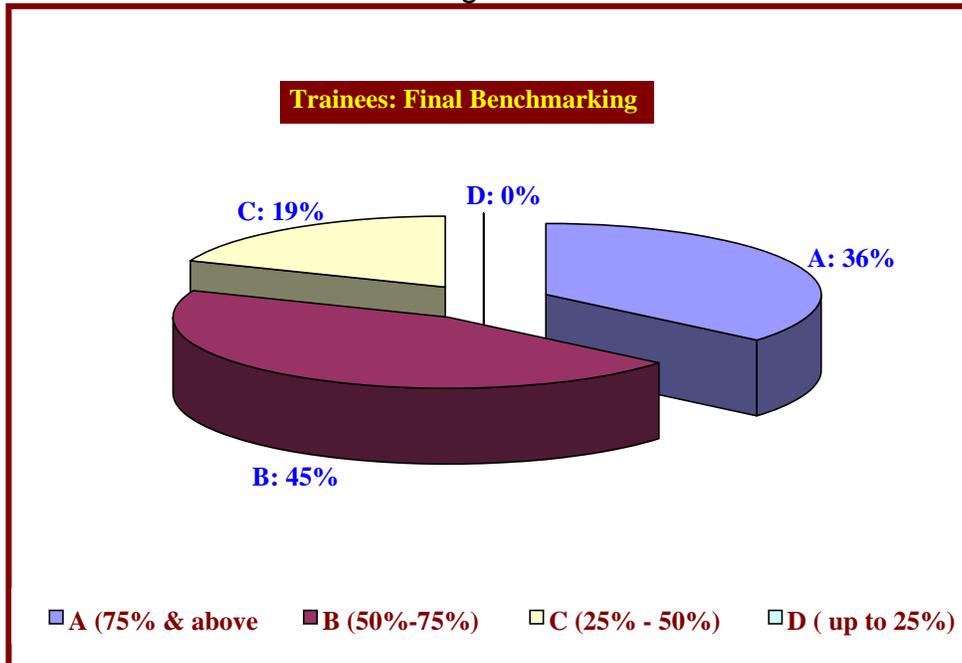


Fig. 2b

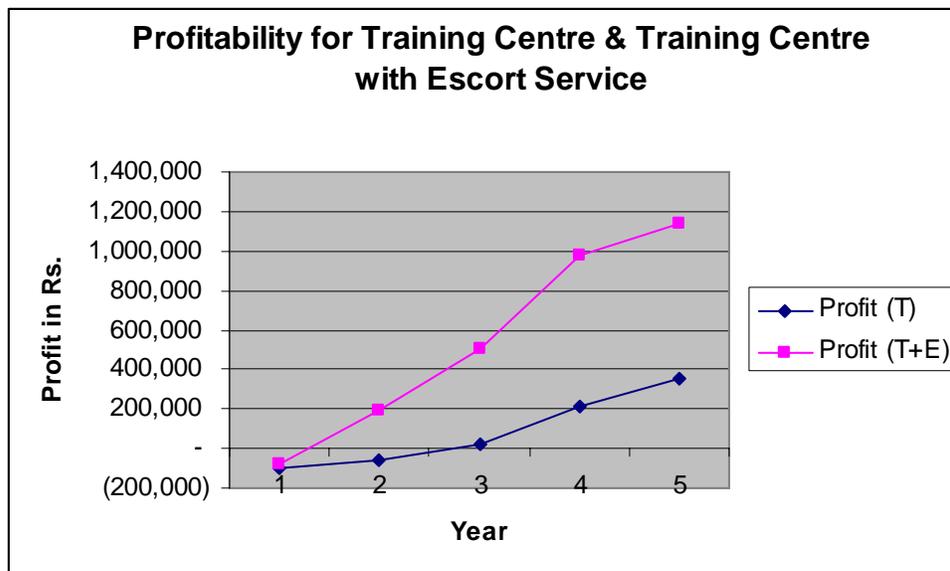


### 3.6.5 Major Findings on PPP Intervention

#### 3.6.5.1 The Business model

The PPP partner at Jiaganj had developed a scalable and viable model for agri knowledge and input provision. This was possible because the promoter had hands-on experience of doing business. Moreover, Murshidabad was suitable for growing good quality vegetables. The promoter planned to provide employment to over 200 nodal persons in a span of three years, (Box 4, above). The efforts were highly commendable. The model had high potential for replication. However, the VCS model may not be viable with the training module alone. Providing escort services will play an important role in sustainability of the strategy. A comparison of the income and expenditure of the four PPP partners is given in Annex VIII.

To make the business viable the VCSs should be located in a place where it can draw 3,000 to 5,000 farmers and cover 2 to 5 Gram Panchayats. It was proposed to include escort service along with the training activities to ensure viability. As per profitability analysis a VCS with only training was expected to breakeven in the 3<sup>rd</sup> year of operation while one with training and escort services was expected to breakeven in the 2<sup>nd</sup> year of operation itself and post much higher profit margins as shown in the graph below. In both cases reasonable number of trainee registrations was assumed.



In the initial year it was decided that VIB would not take any share of revenue from the VCS. After completion of one year, the VCS and VIB would share the profits in the ratio of 70:30.

#### *3.6.5.2 Improvement in quality of course material*

Based on the inputs from farmers, the course material was broken up into modules of 1-3 days which farmers could attend depending on their availability and seasonal requirements. VIB was implementing a centralised MIS system to capture all operational data pertaining to the functioning of the VCSs so as to streamline monitoring of VCSs. VIB planned to include field visits as a part of the curriculum to make it more interactive. Plans were afoot to introduce training at the Gram Panchayat level so as to increase attendance.

It was observed that VIB was yet to sign MoUs with the VCSs. There were logistical and cost related issues in supplying agri-inputs and provisioning of escort services from VIB, especially when the VCSs were quite at a distance. Some of these issues need to be mutually resolved by the promoter and operators of the VCSs.

#### *3.6.5.3 Profile of trainees at VCS*

Most trainees in the VCSs were small and marginal farmers. In Jiaganj input dealers have also attended the training courses. The educational level of farmers varied from VCS to VCS. It was higher at Pathar Pratima than at Jiaganj and Aamdanga. The number of women trainees in the VCSs was low since agriculture is largely handled by men. Special training programs on mushroom cultivation and nursery techniques have been arranged exclusively for women at Pathar Pratima VCS.

#### 3.6.5.4 *Issues faced by farmers/trainees*

Since the training programme had just begun, it was difficult to observe substantial impact of training on farmers' incomes. However, a few cases pointed earlier and the interest of farmers proved that they were gaining from the training. Access to finance had been an important issue with farmers, at all locations. Some of the problems in the Pathar Pratima area were non-availability of cold storage and food processing industry, scarcity of sweet water for farming and supply of quality seed. There had been requests for training modules on goatery and poultry rearing. Some farmers wanted training in financial management also.

#### 3.6.5.5 *Convergence with KVIC and other government Programmes*

VIB was actively working with the Sundarbans Development Board, Department of Gram Panchayat, KVIC and others to gain maximum benefit for the project and also introduce new activities like apiculture and related technologies. Nevertheless, there was ample scope to increase its network to upscale the activity to make it more visible with an increased outreach. This could be done by mapping all the government and non-government projects in agri extension in the state.

### 3.6.6 Key Recommendations

- Considerable effort had gone into the development of the programmes and their delivery. The target group benefited from the training. Therefore, there is a strong case to continue the programme and to expand the outreach through establishment of more VCSs in other regions/areas. While it was too early to say that the VCSs will be self sustained, the VCS at Jiaganj has shown a viable model that should be emulated.
- Replication of VCSs may be planned by studying the potential for such business in different agro climatic zones and designing a hub and spoke model where each zone could have a nodal institution connected to several VCSs in the region. In this case the nodal institutions should report to VIB. VIB should play the role of content monitoring, quality control and accreditation. However one has to examine whether VIB has the bandwidth to handle such a big network. To begin with an extensive pilot can be run in two to three agro-climatic zones.
- In order to make the VCSs sustainable in the long run, the current set of services may be bundled with services like soil testing, repair of farm implements, provision of finances, etc., all provided under the same roof.
- VIB should add new skills sets, as suggested by a few trainees.

- Periodic feedback mechanisms need to be developed to get feed back of the trainees with respect to the overall training programs, teaching material, resource persons, duration of the training and benefits accrued.
- The PPP partners may need to produce the agri-inputs locally that, at present, are being brought from the VIB.

### **3.7 Evaluation of Project Implemented by TREC-STEP, Trichy**

#### **3.7.1 Introduction**

Tiruchirapalli Regional Engineering College-Science & Technology Entrepreneurs Park (TREC-STEP) was a part of the national endeavours to foster Knowledge-based industries and was the first Science and Technology Entrepreneurs Park initiated in the country. In the last two decades, it has nurtured a new genre of Knowledge-based entrepreneurs and taken initiatives in promoting technology-based growth through training in technology and business skills. It was located adjacent to Tiruchirapalli Regional Engineering College and surrounded by large industrial enterprises like Bharat Heavy Electricals Limited, the Railways' workshop and Heavy Alloy Penetration project as well as many small and medium enterprises and academic community. Its proximity to Chennai and Bangalore, both software hubs, meant linkages with both the 'old' economy as well as the 'new' one.

Over the years, TREC-STEP had promoted 156 enterprises. In addition it had conducted more than 300 training programmes on areas like entrepreneurship, Information Technology, Total Quality Management as well as on developing technical skills.

TREC-STEP was one of the four organizations that had participated in the VoTEG programme. Given its proven track record, professional competence, infrastructure, network and past experience, TREC-STEP was selected for partnering in the SKILLS Project in the area of Modern Appliances Maintenance (MAM). TREC-STEP was also designated as the National Implementing Agency to provide overall coordination services to the Project.

#### **3.7.2 Activities Undertaken by TREC-STEP as per the Result Resource Framework**

Based on the overall objectives of the SKILLS Project, strengths of TREC-STEP and the need for training and skill development for improved living standards of

poor, disadvantaged communities, TREC-STEP undertook the following activities:

*3.7.2.1 Identification of unconventional but market demand based trade/ skill and improvement/ development of training curriculum and manuals*

As mentioned above, based on the past experience of VoTEG Project and the boom in the market for white goods (primarily home appliances), TREC-STEP identified Modern Appliances Maintenance as the trade for imparting skills. This broad segment was further narrowed down into two sub trades viz. trades viz. Appliances' Servicing and Maintenance; and, (ii) Refrigeration and Air-conditioning Appliances Servicing & Maintenance, both having a common component of modern home appliances maintenance. Owing to a great demand from the market, two additional trades, computer hardware maintenance and cellular phone maintenance, were also taken up under MAM by TREC-STEP.

The training modules developed during the VoTEG Phase were upgraded to include/ update technology, circuits, etc., for all the four trades, in a new, colourful layout, after a detailed review of the programme design, curriculum and input structure. The courseware for cell phone maintenance was redone entirely. Simultaneously, the list of Tool kits and Training systems were prepared and a few custom made training systems such as dynamic demonstrator sets for consumer electronics appliances, advanced educational technology such as audio visual aids, etc., and specialized measuring instruments and tools were also procured by TREC-STEP.

The curriculum was framed keeping in mind the educational level of the trainees (secondary school level) and was oriented towards practical training back up by basic theoretical underpinning. The mode of input delivery was, by and large, hands-on training and more stress was laid on performing skills. In addition to these hard technical skills, the soft skills such as communication, planning, attitudinal, service estimate preparation skills are also an integral part of the training curriculum. Moreover, for those who wanted to set up their own enterprises, special training modules in micro venture entrepreneurship development were also made available.

*3.7.2.2 Creation of a pool of experts for imparting training and augmenting laboratory and training facilities so as to act as mother resource center for the training of trainers*

TREC-STEP had created an extensive network with industry and academic and research institutions alike. With this network, TREC-STEP had access to a vast pool of quality resources for its programmes.

A total of 25 trainers were identified based on their experience in appliances servicing and ability to mentor the target segment of trainees and deployed them after orientation and training for providing skill training at PPP SKILL Academies at Chennai and Bangalore.

So far TREC-STEP had imparted training to about 1,350 trainees through its Academies. The fee charged from the students was Rs. 6,000 per student for training under the SKILLS programme. Most of the trainees were provided escort services for obtaining a job or setting up their own enterprise. Special campus selection events were organized by TREC-STEP, for OEMs to recruit trainees as service technicians for MAM industry, for their service centers in various regions across the country. The experience of the organization is that the demand for such trained technicians outstripped supply. Indian Bank had offered to support the trainees of TREC-STEP SKILLS Academies in Tamil Nadu by extending credit facilities if they wanted to set up their enterprises.

*3.7.3.3 Establishment of a public private partnership (PPP) model for large scale capacity building in the area of MAM and acting as an incubator to develop institutions/franchisees for providing skills training*

TREC-STEP had so far established four TREC STEP SKILLS Academies in PPP mode - one at Bangalore and three at Chennai (at Nungambakkam, Tambaram and Perumbur), with 30 faculty members deployed by these four centers, for imparting skill development training in MAM. So far, 1343 trainees have been trained under the SKILLS Project. TREC-STEP has plans to promote two more SKILLS Academies by the end of October 2007.

The process of establishing the PPP was initiated through two rounds of advertisements in prominent English and Regional Language dailies in Chennai and Bangalore in May 2005. It resulted in around 40 responses, out of which 16 Entrepreneurs were selected after scrutiny of applications, based on their experience, capability to invest and aptitude for this grass root level skill training initiative. These 16 Entrepreneurs were then interviewed by a selection committee, chaired by a senior DST official.

A model Franchisee business plan, besides a detailed MoU, were prepared by TREC-STEP for setting up a SKILLS Academy. Four Entrepreneurs from Chennai and 3 Entrepreneurs from Bangalore were selected. Two SKILLS

Academies became operational in Chennai at Nungambakkam and Tambaram from 10 October 2005, and one Academy started its operations at Bangalore in January 2006. One more SKILLS Academy at Perumbur, Chennai, had also commenced its operations in June 2007.

### **3.7.3 The Evaluation Process**

To assess the effectiveness and efficacy of the operations of TREC-STEP and its SKILLS Academies, the Evaluation Team visited Trichy, Bangalore and Chennai on 10, 11 and 12 September 2007. (Refer Annex IV-d for list of people interviewed).

At each TREC-STEP SKILLS Academy, a presentation on activities pertaining to implementation of the project was made. The evaluation team interacted with the members of the implementation team as well as trainers. The team also visited the training laboratories and observed how the training is imparted. The team met sample cross sections of the trainees randomly and interacted with them to ascertain their economic background and obtain their feed back. The Academies presented the training and employment statistics and furnished the response to the questionnaire.

The nodal agency (TREC-STEP) took care of the publicity through newspaper advertisements, hoardings, publicity vans, leaflets, etc. The promotional materials were found to be of high quality both in design and content. Some innovative methods like distribution of promotion material to passengers in buses were adopted to reach out to the target beneficiaries. The nodal agency also helped in the selection of candidates, training of trainers, content delivery and conduct of the examinations. It was observed that an effective monitoring mechanism was in place which helped the implementation of the project to a significant extent. Certificates were issued to the successful candidates by the nodal agency itself. The fact that the certificate was issued by a well known organization like TREC-STEP and carried the emblems of UNDP and DST helped in establishing the brand, particularly in Tamil Nadu.

### 3.7.4 Major Findings

#### 3.7.4.1 Profile of Team

The Project team had well trained people. Participation of women in the programme implementation was found to be adequate.

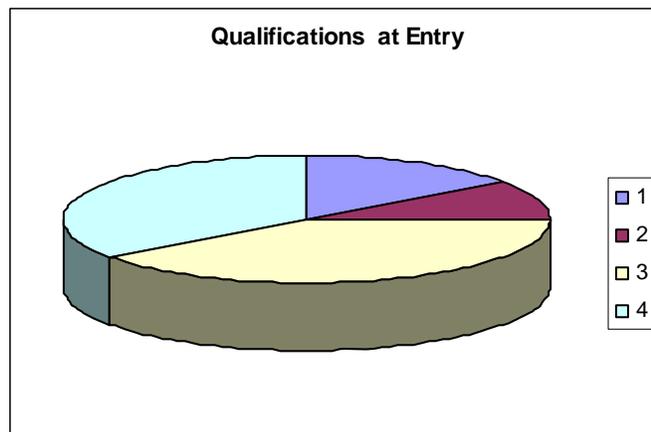
#### 3.7.4.2 Profile of Trainees at SKILLS Academies

The number of women trainees was low (about 3%). It was felt that the kind of skills selected were not suitable for women. The programmes in Goa were specially tailored to women and hence were successful from the point of women participation.

A significant number of participants were school drop outs as seen from the diagram below.

#### Qualifications of the Trainees

(1. Graduates, 2. Diploma/ITI, 3. School Dropouts, 4. Class X/XII pass)



#### 3.7.4.3 Enrollment of trainees

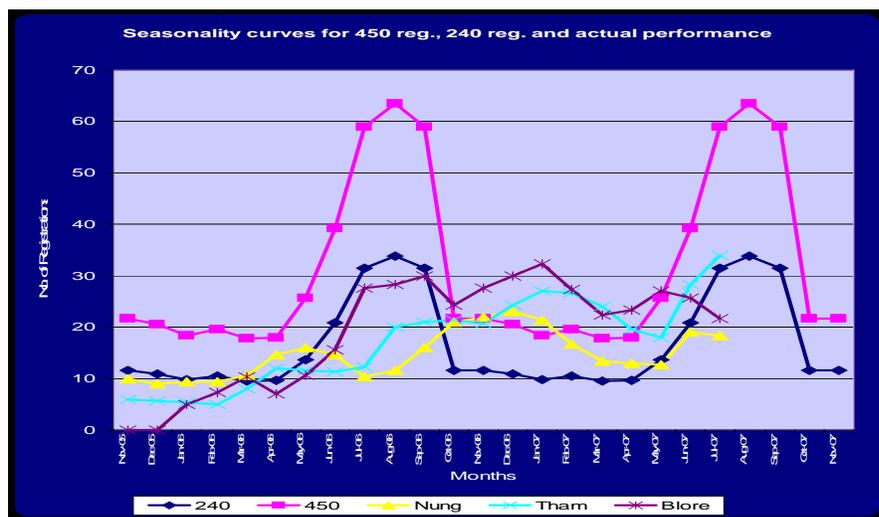
The enrolment was initially lukewarm but improved in the second year. The enrolment figures for various programmes offered by the franchisees at Bangalore and Chennai are given in the Table below.

### Enrolment in Different Programmes at TREC-STEP

Sr. No.	Registration Details					Trichy
	Course Name	Nungambakkam	Tamparam	Perumbur	Bangalore	
1	Diploma in Refrigeration and Air Conditioning	107	103	46	67	345
2	Diploma in Electronic Servicing and Maintenance Technology	109	76	30	140	144
3	Diploma in Computer Hardware Technology	177	225	76	99	685
4	Certificate Prog. in Mobile Phone servicing	112	161	58	177	169
	<b>Total</b>	<b>505</b>	<b>565</b>	<b>210</b>	<b>483</b>	<b>1343</b>

A seasonal fluctuation was observed in enrolment (see Figure below). It was observed that leveraging Govt. Sponsored programmes improved enrolment.

#### Seasonal Pattern in Enrolment



The total enrollments / registrations achieved by the project when compared to the number of queries was low at 27%. That is to say that out of 100 unemployed youth who had shown keen interest in the technology training programme and accessed the PPP centers with interest and commitment, nearly three fourths were unable to meet the cost of the training which was Rs. 6,000. There thus seems to be a huge affordability gap. Moreover, people were accustomed to free programmes in these sectors. The concept of paid programme was new, especially since the training was directed mainly towards economically and socially disadvantaged sections of the society. This may be another reason for enrolment not reaching the targeted level.

Among the four courses, Diploma in Computer Hardware Technology (33%) and Certificate Programme in Mobile Phone Servicing (27%) were found to be more popular. The Electronics and Appliance Servicing was taken up by 21% of the students and the rest (19%) accounted for Refrigeration and Air Conditioning.

#### 3.7.4.4 Partnership

The implementation of the programme so far clearly demonstrated that PPP mode was quite successful in delivering the skill development programme. The PP partners were found highly committed. They were satisfied with the support received from the nodal agency (TREC-STEP) and DST. There was clear evidence of good mentoring by the nodal agencies. It was observed that an excellent communication system had been put in place between the nodal agency and the partners.

The nodal agency took care of the publicity through newspaper advertisements, hoardings, publicity vans, leaflets, etc. The promotional materials were found to be of high quality both in design and content. Some innovative methods like distribution of promotion material to passengers in buses were adopted to reach out to the target beneficiaries. The nodal agency also helped in the selection of candidates, training of trainers, content delivery and conduct of the examinations.

It was observed that an effective monitoring mechanism was in place which helped the implementation of the project to a significant extent. Certificates were issued to the successful candidates by the nodal agency itself. The fact that the certificate was issued by a well known organization like TREC-STEP and carried the emblems of UNDP and DST helped in establishing the brand, particularly in Tamil Nadu.

The equipment grant helped speedy and efficient implementation of the project. The equipment was found to be in good condition in all places visited. The soft

skill development as part of the training was a novel idea. However, the use of information technology in training was found to be limited.

#### 3.7.4.5 Impact of training

It was observed that about 66% of the participants opted for employment. About 18% of the trainees ventured into self employment and 16% went for higher studies. More entrepreneurs were from those who studied mobile phone servicing.

There were a number of success stories. Some of the participants had done exceedingly well. Most striking example was that of Mr. P. Samrat of Bangalore who was trained in the Refrigeration and Air Conditioning program and was absorbed by IFB Ltd, a multinational white goods manufacturing company. The details of some of the trainees who were well placed are given in the Table below.

**Some Cases of Success Stories, TREC-STEP**

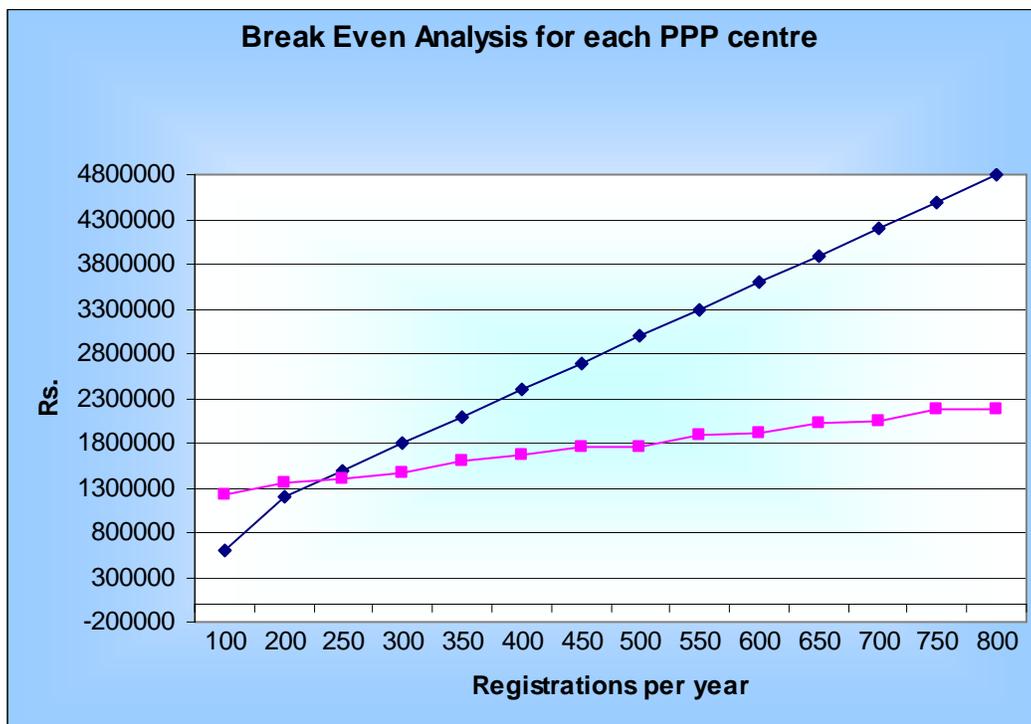
<b>Sr. No</b>	<b>Students Name</b>	<b>Course</b>	<b>Company Name</b>	<b>Monthly Salary (Rs)</b>
1	<i>P. Samrat, 10th</i>	<i>Electronics</i>	<i>IFB</i>	<i>14,000</i>
2	<i>Vijay Simpson, 10th</i>	<i>Refrigeration &amp; AC</i>	<i>DELL</i>	<i>10,000</i>
3	<i>P. Bush Marcel, 10th</i>	<i>Refrigeration &amp; AC</i>	<i>Samsung</i>	<i>10,000</i>
4	<i>J.Jeevanantham, 12th</i>	<i>Computer Hardware</i>	<i>Graphic Arts</i>	<i>8,000</i>
5	<i>Sunita, B.Com.</i>	<i>Mobile Phone</i>	<i>Nokia</i>	<i>8,000</i>
6	<i>Sanjay, 10th</i>	<i>Electronics</i>	<i>Onida</i>	<i>8,000</i>
7	<i>K.P. Rajan, 10th</i>	<i>Refrigeration &amp; AC</i>	<i>Hinduja Group</i>	<i>7,000</i>
8	<i>Basker Babu, 10th</i>	<i>Electronics</i>	<i>Infosystems</i>	<i>6,000</i>
9	<i>S.Prakash, 10th</i>	<i>Electronics</i>	<i>Midas Service</i>	<i>6,000</i>
10	<i>S.Gunasekaran, Diploma</i>	<i>Refrigeration &amp; AC</i>	<i>Midas Service</i>	<i>6,000</i>

The evaluation team found that some senior participants looked forward to either change of employment or augmenting their knowledge to perform better in the

current job. Many participants, particularly, those who did air conditioning could secure jobs abroad, either immediately or after some experience.

### 3.7.4.6 Business model

The business model developed was essentially based on the number of registrations that could be achieved by a PPP Centre since a large part of the operational costs were fixed costs. It was seen that a Centre could breakeven with around 250 registrations per year at the present level of expenditure. The analysis was however not done over a period of time and hence profitability was not studied properly.



### 3.7.5 Key Recommendations

- One of the reasons put forward for not reaching the target in enrolment was that the programmes were paid ones and the target group belonging to the economically weak strata of society may find it difficult to pay the fees. TREC-STEP should consider leveraging state and central welfare and employment generation schemes to meet this gap.

- There has to be a wider choice of skills. New skills need to be added.
- The SKILLS Academies presently limited to Chennai and Bangalore could be set up in semi urban areas to provide access to unemployed youth from weaker sections in adjoining rural areas.
- Considerable effort had gone into the development of the programmes and the programme delivery. There was adequate evidence that the target group had benefited from the programme. Thus there is a strong case to continue the programme to extend the reach of the target group with better coverage of skills.

## IV. OVERALL ASSESSMENT OF PROJECT RESULTS

### 4.1 Impact of the project on target beneficiaries

A major objective of the programme was to establish a network at the grass root level to disseminate standardized modules for skill building with suitable local adaptations. For this purpose four regions were identified across the country and skills in demand pertaining to those regions were identified. These skills are diverse in nature and scope and addressed different segments of population, both urban and rural, all belonging to weaker sections of the society.

The programme was successful in attracting semi-educated youth in both rural and urban settings with large number of school drop outs, farmers and also marginalized women (in Goa). The experience in Goa is in particular worth noting. The tremendous self confidence and pride inculcated in the rural womenfolk through this programme itself could be regarded as a unique success. The transition from a passive home maker to a partial bread winner should definitely be viewed as role models to be emulated. Out of the 322 trainees in Goa, about 3 per cent were rehabilitated from their earlier engagement as commercial sex workers. A few trainees were physically challenged. The evaluation team noted a true empowerment of women, though in a limited scale.

In the other three areas, while participation of women was satisfactory at the institutional project team levels and PP partner levels, there was limited participation of women as trainees or trainers. This could be largely attributed to the choice of skills imparted. More thought could be given in designing courses that are more inclusive and relevant in rural areas like skills related to handicrafts, forest based products, salt farming, carpentry, maintenance of farm equipment etc..

In all four cases trainees expressed satisfaction in the quality and usefulness of the training imparted. The evaluation team could feel improvements in terms of skill, knowledge and confidence in the trainees. Trainees were willing to pay for the training, whether in repair of home appliances or agriculture, in spite of various free training courses provided by government agencies. This should be treated as an indicator of success for the programme.

The e-portal developed as a key strategy for mass out reach has its limitation of reach because of non-availability of internet connection in many areas and use of English as the medium of instruction.

## 4.2 Economic viability of project activities

Activities in the project that had the scope to generate revenues were training by the implementing agencies and the training through PPP models.

The main purposes of the training courses at the institutions were to develop suitable training models along with course material for replication and also to build a cadre of trainers and entrepreneurs. Hence the revenue earned by the institutions through these training courses was not expected to cover the set up and development costs of the project but provide for the incremental costs incurred. While such cost benefit analysis was not available for analysis and comment, the business model developed for the PPP incorporated the idea of incremental cost coverage and is discussed below.

It was observed that around 18% of trainees from MAM after completion of training were likely to set up their own business while around 66% were likely to go for jobs. Many of the trainees were well placed. It is worth mentioning the case of Mr. P. Samrat of Bangalore who was trained in the Refrigeration and Air Conditioning program and was absorbed by IFB Ltd, a multinational white goods manufacturing company for a monthly salary of Rs. 14,000/-. In the case of agriculture, over half of the farmers took training to improve farming practices and thereby farm incomes. In the case where trainees were set up into SHGs, most trainees used the training for self employment. It can thus be inferred that these training courses were capable of generating income at the individual (trainee's) levels.

The salient features of the business plans developed for PPP models by the different institutions are:

- **Capital Cost:**
  - In the case of TREC-STEP and AIFCCS, around 70% to 75% of the initial capital cost is brought in by the private entrepreneur and 25% to 30% is paid by the nodal institution from the project. In case of VIB, the entire initial capital expenditure (around Rs. 600,000/VCS) of the VCSs is borne by the project.
  - The entrepreneur provides training space.

- **Recurring Cost:**
  - Costs pertaining to curriculum development and materials, training of trainers, promotion and monitoring, assistance in post training placements etc. are paid by the institution.
  - Salary of staff and trainers, office, administration and travel costs etc. are borne by the private partner.
  - In most cases a pre-operative period of six months is considered.
  - The models have not considered any cost of capital
  
- **Income:**
  - Course fee is structured around Rs 6,000 for a three month course or around Rs 25 to Rs 60 for a 1-3 days course (for agri-based courses).
  - At Rs 6,000/- fee and 250 registrations per year, the income earned is Rs 15 lakhs per year.
  - The revenues earned are shared in the first year of operation by the entrepreneur and the institution in the ratio of 90:10 and in the following years in 70:30 ratio (there are some variations depending on particular situations; in case of agri-based model, income is not shared in the first year).
  
- **Profitability:**
  - With reasonable number of courses and registrations (around 250 registrations per year for MAM), the model breaks even in the 2<sup>nd</sup> year of operation.
  - The agri-based PPP model with training alone breaks even in the 3<sup>rd</sup> year of operation and the profit margins are low (around Rs 2 lakhs in year 4). Support of escort service (sale of agri inputs) increases the project viability substantially and profits can be booked from the 2<sup>nd</sup> year of operation.
  - The revenue earned by the nodal institution is expected to cover the recurring costs of promotion and monitoring of the PPP Centres.

## **Conclusions**

The above business model suggests that the concept of providing training in market dictated skills on commercial terms (through Public Private Partnership) is a sustainable innovation with long term economic and social impact. This is

provided the development and set up costs as well as the deficit in the first few years are met by a grant from the government or a development agency.

The crucial factor in this business is to be able to get adequate number of trainees. To achieve this, the PPPs need to maintain high standards of training and adopt innovative means of marketing and develop partnerships to sustain the interest of people in fee-based training.

## V. POSSIBLE DIRECTIONS FOR FUTURE ACTIVITIES

- 5.1 The evaluation team strongly feels and recommends that the programme needs replication and augmentation at a wider and larger scale. While the PPP model has been tested mainly in big cities, there is a need to expand it to more rural and semi-urban areas. This can be done by developing hub and spoke models of training organizations. The nodal institutions of this Project may be entrusted to play the role of monitoring and accreditation.
- 5.2 The funding support involved in the PPP mode is limited. A long-term plan should be drawn up involving the state governments with adequate budgetary allocations for setting up skill training infrastructure at grass root level in PPP mode. There is also a need to identify many more skills so as to serve the needs of people from different locations and also backgrounds.
- 5.3 The scaling up endeavour should network and partner with other agencies/ministries of the Central Government such as DGE&T, Ministry of Labour and Employment, Ministry of Housing and Urban Poverty Alleviation, Ministry of Rural Development, Khadi and Village Industries (Ministry of MSME); Development Commissioner (Handicrafts) and Development Commissioner (Handlooms) of the Ministry of Textiles, Directorates of Technical Education of the state governments, Employment Exchanges being run by the state governments, NGOs engaged in skill formation, etc. so as to evolve a comprehensive scaling up strategy without duplicating efforts and resources.
- 5.4 Having argued for the caution, the Evaluation Team is also aware of the scope for involvement of the private sector in this endeavour. The corporate sector should be encouraged to take advantage of the process of skill formation evolved under the project and set up its own academies, as a part of its Corporate Social Responsibilities. While this is already happening at pilot scales, district wise strategies may be evolved along with Corporates. In this respect, attempts should be made to encourage electronic media (Television) to participate in the programme, particularly marketing such efforts.
- 5.5 The E-Portal skillindia.com should be made universally accessible by the PP partners and franchisees to encourage wider dissemination of training methodology in various skills.

- 5.6 MSME Industry Associations should be made aware about the 'Virtual Employment Exchange' through a series of awareness workshops and encouraged to participate in it actively.
- 5.7 Government and UNDP should study and develop models for linkage of these skills training organizations with prospective employers so that demand-supply issues are addressed adequately.
- 5.8 Since it is expected that a large proportion of people would be self-employed after obtaining skill training, there is a need to focus on access to capacity building in entrepreneurship, credit and markets for the products and services of those who set up their own enterprises after the training. Several organizations involved in entrepreneurship development could be roped in to participate in this process.

**SKILLS & KNOWLEDGE FOR IMPROVED LIVELIHOODS & LIVING  
STANDARDS (SKILLS) FOR THE RESOURCE POOR THROUGH APPLICATION  
OF  
SCIENCE AND TECHNOLOGY**

**TERMS OF REFERENCE FOR EVALUATION**

**I. BACKGROUND:**

The GOI-UNDP initiative on promotion of non-farm employment and livelihoods for resource poor communities sought to respond to the challenge of providing training in vocational skills by building on the significant work that had been done in CCF-I in partnership with the Department of Science and Technology, Ministry of Agro and Rural Industries through the Khadi and Village Industries Commission (KVIC) and the Development Commissioner, Handicrafts.

However, while the proposed interventions with the KVIC and DC (Handicrafts) did not take off the ground, the Department of Science and Technology was assigned to take a lead in the project on Skills and Knowledge for Improved Livelihoods and Living Standards (SKILLS) for the resource poor through application of science and technology with a budget allocation of US\$ 1 million. The experience gained under the VoTEG Project in CCF-I and the vast institutional network created set the base for the SKILLS initiative by DST.

**II. PROJECT STRATEGY**

There are three key elements in the project strategy;

- Harness the power of ICT for mass outreach of capacity building efforts at a low cost.
- Draw on public-private partnership (including NGOs) modality so that an extensive network of institutions is established to provide on-the-ground support for the skill-building initiatives.
- Converge with similar initiatives being undertaken by agencies such as KVIC, DC (H) and others so that a well-rounded approach is implemented.

At the heart of the SKILLS initiatives is the launch of an e-portal ([www.skillindia.com](http://www.skillindia.com)). This portal will contain a large number of training modules based on competency based course curriculum and instruction material developed through a rigorous iterative process. The portal will include the

relevant skill sets which some of the institutions from all across India have developed over the years for income generation activities. In addition, the four partner institutions in this project will focus on development of curricula and pedagogy instruments in four key areas that have very high potential for income generation. As indicated above, the courses would be identified based on a consultative process. Further, the partner institutions under VoTEG-1 together with some new institutions would serve as mother nodes for backstopping the e-portal. The e-portal will eventually also serve as an employment exchange for prospective job seekers and employers. The portal will be launched shortly with 46 skill sets.

The Tiruchirappalli Regional Engineering College Science & Technology Entrepreneurship Park, [TREC-STEP), Trichy is the National Implementation Agency (NIA). Under the lead of the NIA, three key partner implementing institutions have been identified based on their competence, relevance of areas of expertise, infrastructure availability and geographical spread. These institutions - the JSS Academy NOIDA, Vivekananda Inst of Biotechnology, Nimpith and Agnel Charities, Goa - along with TREC-STEP, Trichy, act as mother nodes for specific project components.

In addition, other institutions including NGOs will be identified to serve as grass-roots dissemination points for various skills trainings. The vocational trades being covered under the project will be identified and developed in partnership with these agencies. Suitable training will be provided to these agencies so that the entire project functions in a cohesive manner.

The project is supervised by a project standing committee under the chairmanship of NPD and NPC as the member secretary. A representative each of the Department of Economic Affairs and UNDP and two more experts would be co-opted on this committee. This committee will take decisions on day-to-day operations, and allocation of budgets, approvals and all other related issues. The Deputy CEO of KVIC has been co-opted as a member of the Standing Committee.

In order to integrate with other projects of the partner institutions, it was decided to constitute a Programme Coordination Committee with all the three NPDs from DST, KVIC and DC Handicrafts as members. However, since the proposals for collaboration with DC (Handicrafts) and KVIC have not been approved, it has been decided to transfer the funds earmarked (US\$ 100,000) for joint initiatives with these institutions to the PPP initiative being undertaken by STEP-TREC, Trichy, in view of the excellent response received from entrepreneurs in Chennai and Bangalore.

## **II. PROGRESS IN IMPLEMENTATION**

The first tranche of Rs 991akhs was released by the Department of Science &

Technology on 29 March 2005 but the actual disbursement of funds to the four implementing agencies took place only in end June 2005. The second tranche of Rs 250 lakhs was released in December 2005.

The Tiruchirappalli Regional Engineering College Science & Technology Entrepreneurship Park, (TREC-STEP), Trichy is responsible for developing curriculum for skills training in Household Goods, Air conditioning and Refrigeration repair and maintenance as well as for setting up Skills Academies on a franchise model. The advertisement placed in Chennai and Bangalore newspapers in end May 2005 seeking franchisees evoked a very good response. Two franchisees have been selected in Chennai and their Skills Academies were inaugurated by Dr. Maxine Olson on 10 October 2005. One more Skills Academy has been set up in Bangalore on 26 December 2005. All the three entrepreneurs - who have invested about Rs 20 lakhs each - are very optimistic of breaking even in 2006.

The Vivekananda Institute of Biotechnology at Nimpith, West Bengal is looking at the biotechnology and horticulture aspects of skills training. Entrepreneurship development models are being tried out at two levels. At the village level, youth are being given systematic training in water and soil testing and prescription and know-how in the scientific propagation of various biotechnological and horticulture products. The farmers of the few blocks around Nimpith have expressed their happiness at the quality of service they are getting through this instrument even though they have to pay for these services. At a block/district level, the laboratory facilities at Nimpith are being sought to be replicated on a franchise model in Murshidabad district in West Bengal. The investment by the franchisee will be in the range of Rs 7 to 10 lakhs.

The Agnel Ashram, Goa, is developing a training module for skills in the food and beverage sector. With the help of KVIC, 20 women's SHGs have been identified and they are being trained in various aspects of cuisine, hospitality and entrepreneurship. It is envisaged that eventually, a distinct brand name like 'Lijjat' will emerge.

The JSS Academy, NOIDA is developing curriculum for skills at the lower end of the IT industry. They will also host the website which is in an advanced stage of preparation and is expected to be launched shortly.

#### **IV. OBJECTIVES OF THE EVALUATION EXERCISE**

The scheduled duration of the project was upto April 2006. Based on the successful implementation of the project so far, it has been decided to extend the project upto 31 December 2007 with additional UNDP inputs of US\$ 505,000 to bring some of the pending activities to a logical conclusion as also to set up three additional academies during this period. Given that the project is officially scheduled to end in December 2007, the lessons learnt need to be captured to

strengthen implementation and replication in future. It is now proposed to carry out evaluation of the project to:

1. Review the overall progress of the project against each of the objectives mentioned above, in terms of the output targets, baselines and indicative activities listed in the Results Framework and suggest improvements.
2. Undertake a detailed assessment of the process that has been carried out under each component in terms of results that are visible on the ground and to suggest ways and means to further strengthen or improve those results.
3. To review the economic viability of project activities that generates income both at the individual and institution level.
4. To review the mechanisms in place and to suggest how the PPP model experimented under the project could be made sustainable once the project comes to an end.
5. To assess the extent of impact of the project on target beneficiaries - the poor, disadvantaged sections (e.g. unemployed youth, socially excluded groups, particularly, women).
6. To assess the efforts to involve women in project activities and decision-making bodies. In addition, identify reasons or possible causes for poor participation of women as well factors that have created an enabling environment.
7. To look at how this PPP model could be replicated and up-scaled to address some of the bigger concerns of the Government with respect to the living conditions of large percentage of population falling in the unorganized sector both in urban and rural areas; and
8. To suggest appropriate implementation mechanism including the Ministry/Department(s) that should assume the responsibility of implementing SKILLS promotion programmes under PPP mode in addition to DST both for urban and rural areas.

## **V. METHODOLOGY**

1. The evaluation team will be briefed by UNDP in New Delhi before starting its work on the evaluation.
2. The evaluation team will meet the National Project Director at the Department of Science & Technology, as well as other concerned DST representatives and other relevant Ministries/Departments to address some of the broader issues concerning the unorganized sector both in urban and rural areas.
3. The evaluation team will be provided access to all available project-related documentation such as progress reports, minutes of meetings etc. In addition, it should consult other reports such as evaluation reports, files, training manuals, guidelines and resource persons that it may deem necessary to make the most effective findings and recommendations.
4. The evaluation team will maintain close liaison with the concerned Programme Officer, UNDP, and the National Project Director, DST.

5. The evaluation team will visit all four project partner sites as well as the franchise operations in Chennai, Bangalore and Murshidabad. These visits will involve detailed interactions with:
  - a. Implementing Partner Institutions.
  - b. Target beneficiaries
  - c. Any other persons/organisations considered relevant by the evaluation team and DST/UNDP.
6. Although the evaluation team should feel free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitment on behalf of UNDP or Gol.
7. Through the concerned Programme Officer, UNDP New Delhi will arrange logistical support for the evaluation team.

**The tentative schedule is as follows:**

1.	Briefing with DST and UNDP Officials	1 day
2.	Desk review	1 days
3.	Visit to Trichy/ Chennai/Bangalore	4days
4.	Visit to Goa	3days
5.	Visit to Nimpith/Murshidabad	4 days
6.	Visit to NOIDA	1day
7.	Discussions with DST/UNDP	1 day
8.	Report writing	7 days
9.	Presentation	1 day
	<b>Total</b>	<b>23 days</b>

**VI. MISSION COMPOSITION**

The evaluation team will consist of 3 members (including 1 team leader) with evaluation experience in the areas of skills training in the informal sector, livelihoods and institutional development. At least one member of the team will have expertise in the area of mainstreaming women's participation and empowerment.

The duration of the evaluation will be one month including field work, local travel time, consultations, research, briefing and debriefing at the UNDP office in New Delhi and writing the report including presentation.

The report of the mid-term evaluation should follow UNDP format, including findings and recommendations, and a draft version should be presented to UNDP prior to its finalization.

**VII. OUTPUTS EXPECTED FROM THE EVALUATION**

1. An evaluation report in UNDP format.
2. A PowerPoint presentation on the salient features of the evaluation.
3. A final report after incorporating comments/discussions at the wrap-up meeting.

**VIII. BUDGET**

Professional Fees: 23 working days  
Travel, boarding and lodging: Actual

*Questionnaire for the Implementing Agencies*

Dear All,

At the outset I would like to clarify that the current endeavour to evaluate the SKILLS project is not an audit but an attempt to come up with a joint and shared learning documentation. Keeping this in view, we will appreciate if the following documents and information are made available to the Evaluation Team, latest by August 2007.

- 1) A brief write up on your Organisation and the space which the SKILLS project has in the overall scheme.
- 2) What was the Organizational strategy for implementing the project? What is the background of the professionals involved in the project?
- 3) What was the process of implementing the project and what strategies did you adopt to systematize it to achieve the desired results?
- 4) What are the key innovative features of the curriculum developed and the delivery mechanism adopted by you?
- 5) How many batches and trainees have successfully undergone the training in the project? Please provide a socio-economic profile of the trainees in terms of social background (SC/ST/Minorities etc.), sex, educational qualifications, age, annual family income, experience and what were they doing at the time of their entry in the project? How were the trainees selected?
- 6) What is the usual success rate in terms of their enhanced employability? How many of them get jobs and at what remuneration and how many of them tend to set up their own enterprises? What is the performance of their enterprises?
- 7) What was the process of selecting PP Partners?
- 8) How do you check the quality of the training at the PP end and how do you ensure that the certification of the trainees is proper?

- 9) Have you ever taken feed back of the employers who have employed your trainees? If yes, how do they view quality of your training?
- 10) What has been the level of gender main streaming in your project and its management?
- 11) What is the business/revenue model you have for your partnerships? (Please provide a copy of the franchise agreement and also the business plans of the PP Partners if any)? How far the PP partners have been able to reach the stipulated targets set in the business plans. Please specify the factors favouring or adversely affecting the achievements of the PP partners?
- 12) In your view, how the project could be made sustainable once the project funding is over? What are your plans to continue with it?
- 13) What is the scope of up-scalability of the approach and the strategy crafted by you? What kind of constraints do you perceive in up-scaling? What are your suggestions in this direction?
- 14) Please opine on your relationships with the funding and donor agencies? Did you face any problem? If yes, how did you overcome those constraints?
- 15) What are the major achievements of your project in your view in terms of trust building, innovativeness, faculty motivation, team building and demonstrative capability of the project for other Institutions?
- 16) Please prepare five case studies (three successful and two not successful) of your trainees. I am enclosing sample cases for your consideration and reference.

These questions are only indicative but will form the base for your interaction. Nevertheless, please feel free to add anything you would like to share with us.

Thanks for your support,

## ANNEX-III

## List of Trades Covered by the e-Portal skillindia.com

SL No.	Trade	SL No.	Trade
1	Air-conditioning Systems	26	Iron Box
2	Arc Welding	27	Microbial Inoculants
3	Auto Ignition Gas Stove	28	Microwave Oven
4	Automatic Cooker Warmer	29	Mixer Juicer
5	Automobile and Tractor	30	Motor Winding
6	Azolla	31	Oven Toaster Grill
7	Bakery Products	32	PCO Machine
8	BGA	33	Photocopier Machine
9	Black & White Television	34	Popup Toaster
10	CD and DVD Players	35	Radio
11	Cellular Phones	36	Ready to Eat Items
12	Color Television	37	Refrigeration
13	Computer Hardware	38	Room Cooler
14	Cuisines	39	Room Heater
15	Dish Washer	40	Sheet Metal Fabrication
16	Electrical Wiring	41	Soil Testing
17	Emergency Lamp	42	Stabilizer
18	EPABX System	43	Table Top Grinder
19	Fan	44	Tape Recorder
20	FAX Machine	45	Telephone
21	Fruit & Vegetable Preservation	46	Vacuum Cleaner
22	Gas Welding	47	VAM
23	Generator	48	Vermi-compost
24	Geyser	49	Washing Machine
25	Inverter		

**ANNEX-IV-a**

**List of Persons Interviewed in Goa on 18 & 19 August 2007**

<b>Sr. No.</b>	<b>Name of the Person</b>	<b>Designation &amp; Address</b>
1.	Mr. JM Noronha	Coordinator, Agnel Education Complex
2.	Mr. Alphonso Pereira	Principal, Agnel Institute of Food Crafts and Culinary Sciences, Verna (Goa)
3.	Mrs. Sheryl Furtado	Project Coordinator, SKILLS Project
4.	Mr. Namdev Naik	Project Coordinator, SKILLS Project
5.	Mr. Joe Vaz	Trainer, SKILLS Project
6.	Mr. Siddesh Morajkar	Trainer, SKILLS Project
7.	Ms. Anjali Walvalkar	PPP, Professional Academy, Dhuler, Mapusa
8.	Ms. Marcelina Fernandes & Mr. Satish Mhalshekar	PPP, Kodibhay, Karwar (Karnataka)
9.	Ms. Janerina D'souza	President, Holy Cross SHG, Acoi, Mapusa
10.	Ms. Genevieve D'souza	Treasurer, Holy Cross SHG, Acoi
11.	Ms. Fatima Menezes	Secretary, Holy Cross SHG, Acoi
12.	Ms. Antonette D'souza	President, CA Caterers SHG, Acoi
13.	Ms. Minakshi	Treasurer, CA Caterers SHG, Acoi
14.	Ms. Shivani Pednekar	Secretary, CA Caterers SHG, Acoi
15.	Ms. Rupali Shirodkar	President, Shiroda SHG, Ponda & SUGRAN
16.	Ms. Neha Parvatkar	Treasurer, Shiroda SHG, Ponda
17.	Ms. Shanta Martias	Secretary, Shiroda SHG, Ponda
18.	Ms. Alka Sakhelkar	President, Annapurna FHG, Barcem, Quepeni
19.	Ms. Manisha Goswamy	Treasurer, Annapurna FHG, Barcem
20.	Ms. Santana Dias	Secretary, Annapurna FHG, Barcem

**List of Persons Interviewed during the Visit to J-STEP  
on 21 September 2007**

1. Prof. M.L. Gupta, Advisor, JSS Mahavidyapeetha, NOIDA
2. Dr. P.K.B. Menon, Consultant - STEP, (Former Advisor, DST, GoI)
3. Mr. R Raghunandan, Chief Executive, JSSATE-STEP, NOIDA
4. Mr. Sanjay Sharma, Project Officer, JSSATE-STEP, NOIDA
5. Mr. Sumeet Deewan, Project Coordinator
6. Ms. Shailly Mangal, Technical Assistant - E-Portal
7. Mr. Shatrughna Singh, Technical Trainer (Cellular Phone Tower)
8. Mr. Narendra Singh Bisht, Technical Trainer (Cellular Phone Tower)
9. Mr. Mandeep Goswami, Technical Trainer (Data Communication Network)
10. Trainees of the on-going Programme (20)

**List of Persons Interviewed at Nimpith on 1 September 2007**

1. Dr. B K Dutta, Director, VIB
2. Dr. Rama Dutta, SKILLS Coordinator
3. Dr. S K Das and Dr Si, Faculty
4. Dr. Ajit Poddar, Senior Microbiologist
5. Mr. Bhabatosh Choudhury, VIB Advisor
6. Mr. Dhritiman Biswas, VIB Staff
7. Mr. Salil Sahoo, VIB Staff
8. Mr. Ranadeb Sinha, VIB Staff
9. Ms Moumita Chatterjee, VIB Staff
10. Mr. Anshuman Bhattacharya. Financial Consultant
11. Mr. Jyotirmoy K Basu, Financial Consultant
12. Ms Nivedita Roy, Department of Panchayat and Rural Development, Govt. of West Bengal
13. 5 Trainees

On 2, 3, 4 September, the PP Partners and 20 trainees/VCS were interviewed at Pathar Pratima VCS, Jiaganj VCS and Aamdanga VCS.

**List of Persons Interviewed during TREC-STEP visit on 11 & 12 September 2007**

1. Mr. R. M.P. Jawahar, Executive Director, TREC- STEP at Trichy
2. Mr. A. Sivakumar, Project Coordinator, TREC- STEP at Trichy
3. Mr. Pramode Lomate, Programme Coordinator SKILLS Academy at Bangalore
4. Mr. K. Sampath Kumar & Ms. Jaishree Chater, Project Coordinators, SKILLS Academy, Nungambakkam and Perumbur at Chennai
5. Mr. S.R.S Raam Shekher, Programme Coordinator, SKILLS Academy, Tambaram
6. Trainees at Bangalore and Chennai SKILL Academies.

### Comparison of Performance of VCSs of VIB

### ANNEX-V

Details	VCS Pathar Pratima	VCS Jiaganj	VCS Aamdanga	VCS Bara Bainan
Name of Entrepreneur	Sri. Chinmoy Maiti	Smt. Dipika Mondal	Smt. Nivedita Dasray	Sri. Soumen Mondal
Date of Start	July, 2006	May, 2007	October, 2007	October, 2007
Training Programs held	11	17	2	2
Number of trainees	307 (from June 07)	161	13	80
Fees (Rs./ trainee)	30/-	25/-	40/-	30/-
Income from training in this period	9,210/-	4,025/-	520/-	2400/-
Income from escort services in this period	1,23,100/-	57,000/-	11,200/-	Not yet started.
<b>Total income</b>	<b>1,32,310/-</b>	<b>61,025/-</b>	<b>11,720/-</b>	<b>2,400/-</b>
Expenses for procuring inputs of escort services	88,250/-	37,160/-	6,300/-	NA
Operational cost in this period	20,687/-	22,470/-	4,950/-	3,700/-
Salary	13,000/-	12,000/-	750/-	750/-
Telephone	2,000/-	2,000/-	200/-	200/-
Stationary	600/-	1,000/-	300/-	450/-
Other Expenses	500/-	500/-	500/-	500/-
Food, Travel	4,587/-	6,970/-	700/-	1800/-
Rent	-	-	2,500/-	-
<b>Total expenses</b>	<b>1,08,937/-</b>	<b>59,630/-</b>	<b>11,250/-</b>	<b>3,700/-</b>
<b>Profit / Loss</b>	<b>23,373/-</b>	<b>1,395/-</b>	<b>470/-</b>	<b>(-) 1,300/-</b>

#### NOTE:

- VIB bears the cost of initial infrastructure, facilities, training equipment and kits, promotional materials, as well as part of recurring expenditures like faculty honorarium, food cost, part salary of the employees, training and conveyance etc., during the project implementation period.