

## CHAPTER 30

### ADVANCED TRAINING FOR WOMEN, INSTRUCTORS, INDUSTRIAL MANPOWER, FOREMEN, SUPERVISORS AND RESEARCH & DEVELOPMENT OF INSTRUCTIONAL MEDIA PACKAGES THROUGH CENTRAL INSTITUTES

#### INTRODUCTION

30.1 Skill building and training contribute significantly for promoting the interests of individuals, enterprises, economy and society. Technological changes, changes in financial markets, the emergence of global markets for products and services, international competition, new business strategies, new management practices, new forms of business organization are among the more significant developments that are transforming the world of work. Skill building and training, a central pillar of decent work, is a means to empower people, improve the quality and organization of work, enhance citizens' productivity, raise workers' incomes, improve enterprise competitiveness, promote job security and social equity and helps individuals become more employable in rapidly changing internal and external labour markets.

30.2 DGE&T continue to improve quality of productivity throughout the economy by systematic supply of trained manpower to the Industry through various vocational training programmes.

#### FUNCTIONS

30.3 DGE&T offer a range of training courses catering to the needs of different segment of the society. The courses are available for the school drop outs; ITI passed out persons, ITI instructors, Industrial Workers, Technicians, Junior and middle level Executives, Supervisors/ Foremen, Women, Persons with disabilities, SC/STs, Ex-servicemen, Retrenched workers etc. It also conducts training oriented research and undertakes development of instructional media packages for the use of trainees, instructors and affiliation of ITIs with National Council of Vocational Training (NCVT) etc. Brief of these programmes have been given in the following Paras.

#### WOMEN VOCATIONAL TRAINING PROGRAMME

##### Genesis

30.4 The Women's Vocational Training Programme in Ministry of Labour was launched in 1977, aimed at the social development & economic growth of women through vocational training. A separate Women's Cell was formed for the purpose, which has developed into the Women's Occupational Training Directorate. This Directorate is responsible for designing & pursuing long term policies related to Women's Vocational training in the country.

##### Institutional Network

30.5 A network of Institutes, both under the Central & State Sector, have been set up for extending skill training facilities to women, which aim at stimulating employment among women of various socio- economic levels and different age groups.

##### Central Sector

30.6 Under the Central Sector, the Institutional Network includes 11 Institutes, providing training facilities exclusively for women in skills having high wage-employment and self-employment potential. The institutes set up under the Women's Occupational Training Directorate are: (i) National Vocational Training Institute (NVTI) for Women, NOIDA (1977) and (ii) Regional Vocational Training Institutes (RVTIs) for Women at-Mumbai (1977), Bangalore (1977), Thiruvananthapuram (1983), Hisar (1986), Kolkata (1986), Tura (1986), Allahabad (1991), Indore (1992), Vadodara (1993) and Jaipur (1994) (Figures in bracket show the year of establishment)

30.7 The NVTI at NOIDA and RVTIs at Bangalore, Thiruvananthapuram, Jaipur, Allahabad, Kolkata and Tura are housed in their own permanent premises. RVTI Mumbai is operating from a permanent building provided by the State Government of Maharashtra in 1986. The RVTIs at Hisar, Indore and Vadodara are operating from the temporary premises given by the respective State Government. For construction of permanent building for RVTI Hisar, the State Government of Haryana has allotted the land measuring about 6.5 acres at Panipat. Land, measuring about 5 acres has been identified for RVTI Indore in the premises of ESIC hospital at Indore. For RVTI Vadodara, the State Government of Gujarat has already allotted the land.

30.8 Hostel facilities are available at NVTI- Noida and RVTIs at Bangalore, Mumbai, Jaipur, Thiruvananthapuram, Kolkata, Tura and Allahabad.

**TRAINING**

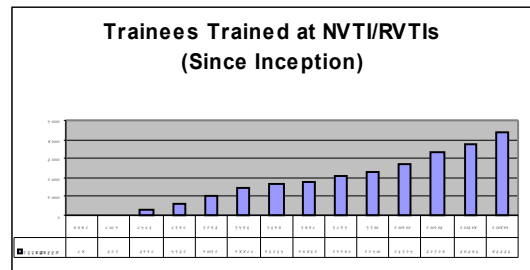
**Central Sector**

30.9 Regular skill training programmes are presently being organised in Basic, Advanced and Post advanced Skill courses, in areas having wage/self employment potential. Table 30.1 reflects the training seats facility available in the NVTI/RVTIs.

30.10 Training areas presently covered are: Secretarial Practice, Electronics, Architectural Assistantship, Computer Operator and Programming Assistant, Instrument Mechanics, Dress Making, Embroidery, Hair & Skin Care, Fruit and Vegetable Preservation, Desk Top Publishing and Fashion Technology. Institute wise availability of trades is given in **Table 30.2**.

30.11 The National/Regional Vocational Training Institutes for Women are the only women exclusive Institutes, which provide facilities for advanced skill and post-advanced

training to women. The training facilities for women have been steadily growing and as on October 2005, there were 3332 training seats in NVTI/RVTIs (this includes seats for regular and additional adhoc courses). Besides the regular long term courses these institutes also organise (i) Short term/ad- hoc courses (ii) Training Programmes in Pedagogy for ITI instructors and (iii) Short term courses in preparation/use of Audio-Visual aids. NVTI/RVTIs have trained about 43,336 trainees since inception in various training courses until 31.3.2005 this includes 26,139 trained in regular long-term courses and 17,197 in short-term courses. During 2005-06, about 5169 women have been trained until October 2005 in various training courses; it includes 2573 trained in regular long term courses and 2596 in short term/ad hoc courses in areas like using MS office, Word processing, Personal Grooming, Repairs/maintenance of Domestic Electronic equipment, Embroidery, Dress Making etc. In Oct.2005, there were about 3600 trainees on roll against 3332 training seats. The number of trainees trained, since inception, can be seen in the **chart - I**.



**New Initiatives**

30.12 Continuous efforts are made to diversify, strengthen & modernize the existing training network. A Special Drive was also launched in January 2003 and 400 training seats were added. Additional training seat were subsequently added in the session commenced in August 2003 and presently, 3332 training seats are available in NVTI/RVTIs.

**Project on 'Decent Employment for Women'**

30.13 A pilot programme on 'Decent Employment for Women in India' funded by US department of labour (US \$ 1.3 million)

has been jointly implemented by the ILO and Directorate of Vocational Training for women, DGE&T, Ministry of Labour & Employment. The project has been implemented in Delhi and Bangalore to provide skill training to women in the informal sector and have been assisted in securing decent wage/ self employment. By the end of June 2005, 4400 women beneficiaries in Delhi and Bangalore have been provided a holistic package of pre training, training and post- training services.

For training of women in the non-formal sectors, course outline has been drafted for areas like House keeping, Garment Sector, Food Technology & Catering, City Taxi driving, Two- wheeler Mechanics, Electronics, processing and Care Economy, Soft Skills and Entrepreneurial Skills

A database lab has been set up at NVTI, Noida to develop a Data Management System on training providers in the formal sector and training activities of NGO partners under the project.

**State Sector**

30.14 Vocational Training facilities exclusively for women at Craftsmen level (Basic courses) are provided through a network of Women Industrial Training

Institutes (WITIs) / Women wings in general ITIs under the administrative control of the State Governments. The details on number of WITIs/wings etc. & the training seats sanctioned is collected from the respective State Governments and compiled by the Women Cell at DGE&T (details at Table 30.2). There are 837 Women ITIs and Women Training Wings in General ITIs (224 Govt. women ITIs, 98 private women ITIs, 483 Women Training Wings in Govt. ITIs and 32 women training wings in private ITIs) having a total of 47391 training seats.

30.15 To promote participation of women in Craftsmen Training, the NCVT has recommended that the State Government reserve 25% seat for women in general ITIs. The Women Industrial Training Institutes (WITIs) / Women' s wings in general ITIs offer training in Basic Skill Courses (as under Craftsmen Training Schemes) in selected trades out of the 50 engineering & 48 non-engineering trades approved by the NCVT. A comparison between the growth of the general Institutes (ITIs) & women exclusive ITIs over the last decade is reflected in the **charts –II & III.**

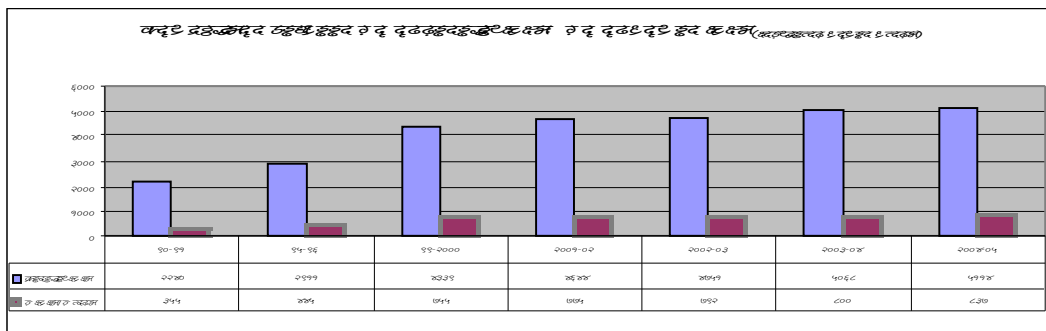


Chart – II

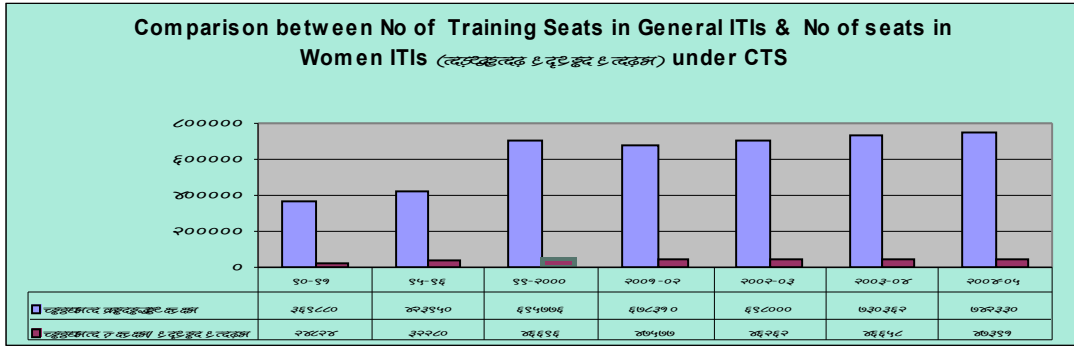


Chart – III



## CRAFT INSTRUCTOR TRAINING

30.16 Training of Craft Instructors is the responsibility of DGE&T in the Ministry of Labour & Employment. The Craft Instructors' Training Scheme is operational since the inception of the Craftsmen Training Scheme. The first Craft Instructors' Training Institute was established in 1948. Subsequently 5 more institutes namely, Central Training Institute for Instructors {now called as Advanced Training Institutes (ATI)}, ATI at Ludhiana, Kanpur, Howrah, Mumbai and Hyderabad were established in 1960's by DGE&T.

30.17 Objective of the Craft Instructor Training is to train Instructors in the techniques of imparting industrial skills, in order to train semi-skilled / skilled manpower for industry. Under the programme, Instructors from State Govt. I.T.Is and from Training Centres established by industries under the Apprentices Act are trained in 27 trades. Total seating capacity in the trades in operation in the above stated six Institutes are 1050.

30.18 The following types of courses are offered at the above institutes: -

- One-Year Courses to provide comprehensive training both in skill development and principles of teaching.
- Refresher Courses to update and upgrade the knowledge and skill of the instructors and to keep them abreast of technological developments in Industry.
- Modular pattern of training in the following three modules are also offered:

Name of Module	Duration	Institutes
Trade Technology	6 months	ATI, Hyderabad & CTI, Chennai
Training Methodology (Principles of Teaching)	3 months	
Engineering Technology	3 months	

## ADVANCED VOCATIONAL TRAINING

30.19 In order to upgrade and update the skills of serving industrial workers, an Advanced Vocational Training Scheme (AVTS) is in operation since 1977. The scheme was taken up by DGE&T, Ministry of Labour in collaboration with UNDP/ILO in 1977 at 6 Advanced Training Institutes (ATIs) under DGE&T and 16 Industrial Training Institutes (ITIs) of the 15 State Governments. The objectives of the scheme are To upgrade and update the skills of serving industrial workers to specialise in their field of work.

30.20 Under the scheme, training in selected skill areas is being imparted through short-term modular courses of one to six weeks' duration. Tailor-made courses suiting to the specific requirements of industrial establishments are also offered.

- The advanced skill training courses offered at 6 ATIs have been given in **Table 30.3**.
- Over 1,07,080 industrial workers/technicians have made use of the training facilities at 6 ATIs under DGE&T till Sept., 2005. From April to September 2005, about 3300 workers have been trained.

30.21 To meet the growing demand of industry, advanced skill training facilities were extended to 30 I.T.Is of various State Governments/ UTs under the Vocational Training Project taken up with financial assistance from World Bank during the period 1989-98. Under this project, training facilities in additional areas were created at 6 ATIs and the existing training facilities were also strengthened.

30.22 NC/CNC Training Centres have been established at ATIs, Chennai, Mumbai and Kanpur with UNDP/ILO assistance to meet the growing need of trained workers in Hi-Tech areas. Training courses for operators, programmers and technicians on NC/CNC Machines are being conducted at these Centres.

30.23 ATI-EPI Hyderabad was established in 1974 with the assistance from the Swedish International Development Authority (SIDA), ILO to cater the training requirement of industries/organizations by offering both shorter and long term courses in the field of Electronic & Process Instrumentation. Training activities of this institute are now grouped under five major wings:

1. Consumer Electronics Wing – provides training in the disciplines of Audio Radio, Colour TV, CCTV, Digital Camera & Cable TV Equipment, Cordless phones and Cell phones.
2. Industrial Electronics Wing – provides training in the disciplines of Power Electronics, Digital & linear ICS, Microprocessors, Micro Controller and PLCS.
3. Information Technology Wing – provides training in Computer Hardware, Software and Networking.

4. Medical Electronics Wing – provides training in all aspects of Sophisticated Modern Medical Electronic equipment.

5. Process Instrumentation Wing – provides training in Industrial Sensors, Process Control, Microprocessors, PLC in Process Industries

30.24 The second ATI-EPI at Dehradun has been set up to cater the needs of the Industries and other organizations of the Northern Region in the fields of Consumer Electronics, Industrial Electronics, Medical Electronics and Process Instrumentation. The Institute offers short-term courses, long term courses and tailor made courses in the field of Consumer Electronics and Industrial Electronics. A total of 2589 short term and long term courses were conducted at two institutes since inception and 30688 trainees have been trained up to October, 2005. During the year 2005-2006, 131 Courses have already been conducted and 1309 participants have been trained at these institutes.

#### **SUPERVISORY TRAINING**

30.25 DGE&T has established two Foremen Training Institutes (FTIs) at Bangalore and Jamshedpur for technological and behavioural up gradation of supervisory skills. The objectives include consciousness of better quality and productivity, ability for problem solving, cost reduction, and application of modern technology amongst supervisors/managers engaged in the industry.

30.26 The institutes besides, offering regular courses for award of Diploma and Post Diploma in Foremanship and also

offers short-term courses and Tailor- made courses suiting to the needs of the industries. In order to cope up with the changing industrial scenario, training facilities in the areas like CAD, CNC technology, Welding, Engineering Instrumentation and Metrology, Pneumatics, Electro-pneumatic etc. have been upgraded.

30.27 During the year 2005-2006, 1274 persons were trained at these institutes. These institutes have conducted 2633 courses and trained 36490 foremen/supervisors in short-term and long-term course. Detailed information about the courses offered, entry qualifications, fee structure, calendar of the year etc. is available at DGE&T website www.dget.nic.in.

**CENTRAL STAFF TRAINING & RESEARCH INSTITUTE, KOLKATA**

30.28 The institute has been set up to conduct training for executive staff, undertake applied research in the field of vocational Training and to develop and disseminate instructional materials and projected / non-projected training aids.

30.29 Institute organizes training programmes for trainers and junior/senior management personnel engaged in planning, execution, control and evaluation of vocational training. The Institute conducts Problem Oriented Research Studies on different aspects of Vocational Training to bring qualitative improvement and for effective implementation of the National Vocational Training System.

30.30 Research studies in related areas are also undertaken, like determination of training required for physically handicapped and other weaker sections of

the society. One major area of activity under the Research Wing of the Institute relates to research, & development of curricula of new trades and revision/updating of existing trades, based on feedback from the industry. The institute also develops instructional material for Craft Instructor Training. It undertakes development of teaching aids (both projected & non-projected) keeping the pedagogical aspects in mind.

30.31 Upto November 2005, the Central Staff Training & Research Institute at Kolkata has trained 16186 participants. Since inception CSTARI has developed and revised 339 curricula and completed 156 Projects covering various aspects of vocational Training. It undertakes developments of teaching aids both projected and non-projected, keeping the pedagogical aspects in mind. Activities during current year upto November 2005-2006:

<b>No.of training programmes conducted</b>	<b>40</b>
<b>No.of participants trained</b>	<b>715</b>
<b>Research Projects completed</b>	<b>06</b>
<b>Production of models</b>	<b>12</b>

**NATIONAL INSTRUCTIONAL MEDIA INSTITUTE, (NIMI), CHENNAI**

**Introduction**

30.32 The Institute has been set up with the assistance of Government of Germany in December 1986. The institute has been made autonomous on 1<sup>st</sup> April 1999. The institute was earlier known as “Central Instructional Media Institute” (CIMI). As per the recommendation of the Governing Council in its 5<sup>th</sup> Meeting held on 29.06.2003 under the Chairmanship of the Hon’ble Union Labour Minister, the institute was renamed as National Instructional Media Institute (NIMI) to reflect its National Character. The main objective for the establishment of the

Institute is to make available instructional materials in various trades for the use of the trainees and trainers to ensure overall improvement in the standard of institutional training being imparted under the Craftsmen and Apprenticeship Training Programmes. Present activities of the Institute includes development, production and dissemination of Instructional Media Packages (IMPs) comprising of books on Trade Theory, Trade Practical, Test/Assignment, Instructor's Guide, Visual Aids, Support materials such as books on Workshop Calculation & Science, Reference text books, Table books etc. Development of Question Banks to conduct All India Trade Test for Craftsmen Trainees, and "Awareness Training Programme/"Multiplier Training Programme" for effective use of IMPs to the instructors of ITIs/ITCs to enable effective implementation of Vocational Training.

#### **Achievements**

- Up to November 2005, IMPs for 20 trades have been developed in English of which 138 books covering 18 trades have been published.
- IMPs for 11 trades have been translated in Hindi of which 48 books covering 11 trades have been published.
- IMPs for 8 trades have been translated in Tamil of which 34 books covering 9 trades have been published.
- Translation into Telugu, Kannada, Bengali, Gujarathi, Marathi and Oriya are at various stages of development.
- Development of Question Bank has been taken up for 8 trades and 2 allied trades viz., Machinist, Turner, Fitter, Electrician, Welder, MMV, Wireman and Mechanic Diesel and allied trades of Workshop Science & Calculation for Machine Shop and Heat Engine groups. Out of which Question Bank for 4 trades viz., Turner, Machinist, Fitter & Electrician have been completed and All India Trade Test were conducted using these question banks for the trades of Turner and Machinist.
- 65 Multiplier Training Programmes/ Awareness Training Programmes have been conducted and 2186 participants were trained.





