

Vocational Education and Training Initiatives for Women

Dr. Prabhakar Chavan

Associate Professor,
Department of Continuing and Adult Education and Extension Work
S. N. D. T. Women's University, Mumbai

Abstract

The vocational education and training (VET defined as “*an education that prepares people for specific trades, crafts and careers at various levels*”) is an important element of the nation's education initiative. In order for vocational education to play its part effectively in the changing national context and for India to enjoy the fruits of the demographic dividend, there is an urgent need to redefine the critical elements of imparting vocational education and training to make them:

- flexible,
- contemporary,
- relevant,
- inclusive, and
- Creative.

Today, the new global economy increasingly demands more high-skilled and better educated workers than ever before. While more women are working than ever before, many do not have the skills necessary to obtain the high wage jobs needed to adequately support themselves and their families. One of the nationally agreed objectives of the VET system is to achieve equitable outcomes for disadvantaged groups including women. An extensive research and consultation process have been undertaken to work out how to improve results for women from training linked to employment. All the major world organizations have recognized the vital role that a woman plays in educating the entire family & also taking part in economic development of the country. Indian women have excelled in almost all fields they are storming information and technology field.

This paper reviews the current knowledge about the impact of VET on women. It also discusses strategies for women's development, using VET. The paper concludes that “special attention should be given to providing complementary opportunities for retraining and for lifelong learning to all workers, but especially to women, to encourage and support the desired degree of mobility in the labour market”.

01. Introduction:

The VET is an important element of the nation's education initiative. In order for vocational education to play its part effectively in the changing national context and for India to enjoy the fruits of the demographic dividend, there is an urgent need to redefine the critical elements of imparting vocational education and training to make them flexible, contemporary, relevant, inclusive and creative. The Government is well aware of the important role of Vocational education and has already taken a number of important initiatives in this area.

Role of women in India has undergone several changes over many years. Women are emerging as self-reliant persons with equal status in all spheres of society, but they are still mostly employed in low-

Paid, low-skilled and low-status jobs. The emerging trends in technology indicate a greater need for the employment of many women, particularly in the skill-intensive and knowledge-intensive modern sectors. New educational policies and programs need to be formulated. Strategies must be worked out to overcome the lingering problems women face and improve the access of women to technical and vocational education and related areas of employment in India.

This paper reviews the current knowledge about the impact of VET on women. It also discusses strategies for women's development, using VET.

Conceptual framework of VET:

The VET is an education that prepares people for specific trades, crafts and careers at various levels from a trade, a craft, technician, or a professional position in engineering, accountancy, nursing, medicine, and other healing arts, architecture, pharmacy, law etc. Craft vocations are usually based on manual or practical activities, traditionally non-academic, related to a specific trade, occupation, or *vocation*. It is sometimes referred to as *technical education* as the trainee directly develops expertise in a particular group of techniques. Vocational education has diversified over the 20th century and now exists in industries such as:

- retail,
- tourism,
- information technology,
- funeral services,
- cosmetics, and
- traditional crafts and cottage industries.

Vocational education is related to the age-old apprenticeship system of learning. Apprenticeships are designed for many levels of work from manual trades to high knowledge work.

Dimensions of VET:

Vocational training refers to the imparting of specialized skills and knowledge, and instilling social and political attitudes and behavior patterns essential for successful economic activities by people engaged in dependent employment, self-employment or subsistence work. Vocational training can be of various types depending on the way it has been acquired. It is mainly of two types, 'Formal training' refers to all training courses held in state or private (but state-certified) institutions and regulated by state guidelines. 'Non-formal training' covers all forms of training which takes place without being subject to state guidelines. An in-company apprenticeship, both in formal or informal sector enterprises is one of the most common forms of non-formal training. This kind of training also includes all programmes and projects offering skills-upgrading for those already active on the labour market, but who wish to extend their competencies by attending evening or weekend courses. Separate from formal and non-formal training is 'Informal training', which denotes practical learning in the family, or traditional, largely unsystematic learning in small and micro enterprises in the informal sector (unsystematic in the sense of no deliberately devised curricula). There are no prerequisites for anyone to acquire vocational training. Both men and women can get trained at any time during their life. But today there is a need for more specialized and directed vocational education for women or girls. Studies have already proven that formal education is not a prerequisite for acquiring practical skills for income-generation, especially in the context of the informal sector. However, India's formal vocational training system often creates minimum educational prerequisites leading to exclusion of those with lower levels of education.

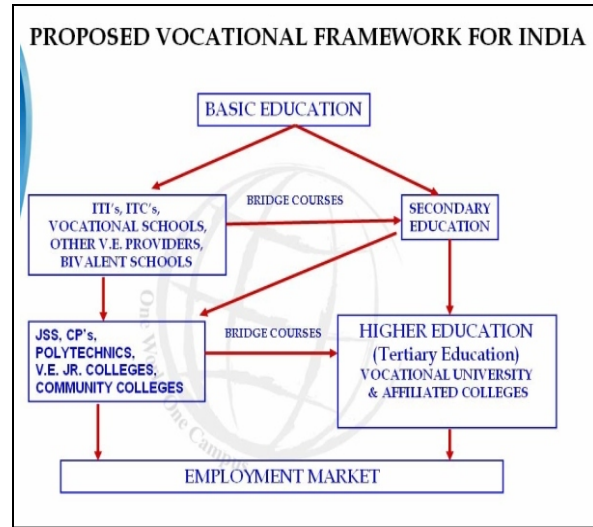
Difference between vocational education and vocational training:

The terms “*vocational education*” and “*vocational training*” are often used interchangeably, but do not mean the same. In India, vocational education falls under the charge of the Ministry of Human Resources Development (MHRD). The Ministry oversees vocational courses being offered in school Grades 11 and 12 under a Centrally Sponsored Scheme called 'Vocationalisation of Secondary Education' since 1988. Only the schools affiliated to Central Board of Secondary Education (CBSE) offer the courses in accordance with the Board's Scheme of Studies and the course structure. The courses are of two-years duration and span 6 major disciplines. Some examples of vocational education courses: dairying, farm machinery & equipment (Agriculture), accounting and auditing (Business and Commerce), computer technology, electrical technology, air conditioning and refrigeration (Engineering and Technology), X-Ray technician, health care and beauty culture (Health and Para Medical), and preservation of fruits and vegetables, food services and management (Home Sciences and Humanities).

Vocational training on the other hand broadly refers to certificate level crafts training (in India) and is open to students who leave school after completing anywhere from grades 8-12. Programmes administered under the Craftsmen Training Scheme (CTS) are operated by Industrial Training Institutes (ITIs) and Industrial Training Centres (ITCs). This scheme falls within the purview of the Directorate General of Employment and Training (DGET), under the Ministry of Labor and Employment (MOLE).

Proposed Education Model for India:

Based on the comparison of various education models across the world, the following education model is recommended for India:



At a higher level, the technical education and vocational training system in India produces a labor force through a three-tier system, as presented below:

- *Graduate and post-graduate level specialists* (e.g. Indian Institutes of Technology (IIT) and engineering colleges) trained as engineers and technologists.
- *Diploma-level graduates* who are trained in polytechnics as technicians and supervisors.
- *Certificate-level craft people* trained in ITIs as well as through formal apprenticeships as semi-skilled and skilled workers.

According to the Constitution of India, the central government and the state governments share responsibility for vocational training. The DGET (Directorate General of Employment and Training) is the nodal department for formulating policies, laying down standards and other technical requirements for vocational training. It also governs a number of specialized training-related institutions. The ITIs, both public and private, operate under the general guidance of the DGET.

Two bodies the Central Apprenticeship Council (CAC), a statutory body and the National Council of Vocational Training (NCVT), a non-statutory body operate as advisory institutions. The most important NCVT functions involve: establishing and awarding National Trade Certificates in engineering and non-engineering trades, prescribing standards for syllabi, equipment, space, duration of courses and methods of training; arranging trade tests and laying down standards of proficiency required for the National Trade Certificate; recognition of training institutions for the purposes of issuing National Trade Certificates and laying down conditions for such recognition. The State Councils for Vocational Training (SCVTs), as well as Trade Committees have been established to assist the NCVT. They advise the state government on training policy matters and are supposed to co-ordinate vocational training in each state.

Coming to curriculum, vocational training devotes 70 per cent of time to practical instruction while the rest is theory. The Central Staff Training and Research Institute (CSTARI) at Kolkata is responsible for preparation of draft curricula and their revision from time to time. The DGET's Curriculum Development Section coordinates this work. It scrutinizes draft curricula and obtains approval of the NCVT.

The periodicity of revisions depends on the technological changes taking place in industry in each trade. Generally, the introduction or revision of curriculum is based on recommendations made by NCVT. This should be done in consultation with relevant trade committees whose members are drawn from industry, technical institutions and DGET institutes.

Implementation of vocational education training for women:

The Vocational Education and Training is multi-sectoral in nature. Each ministry/department in Central as well as State Governments is responsible for manpower development in that sector. While some offer regular formal or non-formal courses, others draw from the general pool of educated and trained manpower either men or women. The higher secondary vocationalisation programme aims to develop skilled manpower through diversified courses to meet the requirements of mainly the unorganized sector and to prepare people for the world of work in general through a large number of self employment oriented courses, not precluding wage employment orientation of many courses. Through diversification into production and service oriented courses, it is desired to reduce the aimless pursuit of higher education and thereby reduce pressure from the tertiary education.

In 1989-90 there were more than 150 courses in different states which are grouped under the major areas of agriculture, business and commerce, engineering and technology health and paramedical, home science and humanities. The design consists of theory and practice relating to the vocational field, related subjects, language and general foundation studies which includes entrepreneurship. during that time a total of 168.680 students were enrolled in the first year of the two year programme. There are more than 5000 full time teachers teaching these courses. Under the Women's Vocational Training programmes, institutionalized skill training is being offered to women in basic, advanced & post-advanced skills.

Few words about the target group:

The women target group (for regular training) is:

✓ *For Basic skill training* (as under Craftsmen Training Scheme):- 14 to 25 years of age & Pass in 10th/12th class under 10+2 system, depending on the training area opted; For Advanced skill training: - women having National Trade Certificate (NCVT) in relevant trade (age up to 40 years);

✓ *For Post-advanced training:* women having Advanced Training certificate under Women's Vocational Training programme. Short-term need-based courses conducted mostly from June to September every year. Admission process at for a basic and advanced skill course is available in the leading newspapers and also in Employment News.

Implementation strategy:

The Vocational Training Programmes at basic skill level are jointly implemented by the Union Territories/State Governments and the Central Government, as per description given below:

▪ Vocational Training Programme for women: State Sector the vocational training is organised through a network of Women ITI/private women ITIs/Wings in General ITIs, which are directly under the administrative control of the respective State Governments. Training facilities are being offered in 43 engineering & 24 non-engineering basic skill courses under the craftsmen training Scheme. Training seats sanctioned per unit of is limited to 16 seats and the Training programmes are scheduled as August- July. Directorate General of Employment & Training, Ministry of Labour, lays down policies and standards of training, prepares curricula, and conducts trade tests and awards certificates.

▪ Vocational Training Programme for women: Central Sector: Institution Network: The Women's Vocational Training Programme at Directorate General of Employment & Training, Ministry of Labour is implemented through a network of 11 Institutes - National Vocational Training Institute For Women & the Regional Vocational Training Institutes For Women (RVTI).

Training areas:

The NVTI/RVTIs provide skill training at three levels:

- Basic skill training - August to July;
- Advanced skill training - October to May and
- Post-advanced training - March, July & November.

The Women's Vocational Training Programme at Directorate General of Employment & Training, Ministry of Labour has 11 specialized institutes for women vocational training. These institutes are:

- National Vocational Training Institute (NVTI) for Women, Noida
- Regional Vocational Training Institutes For Women (RVTI), Mumbai
- Regional Vocational Training Institutes For Women (RVTI), Bangalore
- Regional Vocational Training Institutes For Women (RVTI), Calcutta
- Regional Vocational Training Institutes For Women (RVTI), Jaipur
- Regional Vocational Training Institutes For Women (RVTI), Indore
- Regional Vocational Training Institutes For Women (RVTI), Allahabad
- Regional Vocational Training Institutes For Women (RVTI), Vadodara
- Regional Vocational Training Institutes For Women (RVTI), Hissar
- Regional Vocational Training Institutes For Women (RVTI), Tura
- Regional Vocational Training Institutes For Women (RVTI), Thiruvanthapuram,

The various streams of vocational education or training are almost divided into two groups first at entry level and second at advance level.

Entry Level Programmes for women are :

- Typewriting (English/Hindi) VIII or X class pass from a board
- Stenography (English/Hind) X
- Secretarial (English/Hindi Medium) X
- Electrical Technician VIII or V Class pass with 2 years experience in Electrical Trade
- Electronics (Radio/TV/Tape Recorder Mechanic) X or VIII pass with two years experience in the trade.

- Refrigeration & Air Conditioning (VIII pass)
- Plumbing (VIII or V Class with experience)
- Beauty Culture (VIII pass)
- Library Assistant (VIII pass)
- Cutting/Tailoring & Dress Making (literate)
- Jan Swasthya (X pass)

Programmes at advance Level:

Details of programmes levels are:

- Electronics;
- Instrument Mechanic;
- Computer Operator & Programme Assistant (COPA);
- Architectural Draughtsman ship;
- Desk Top Publishing;
- Dress Making;
- Embroidery and needle work;
- Secretarial Practices;
- Hair & Skin Care;
- Fruit & Vegetable Preservation; etc.

At post advanced level, facilities have been created by the government for training in:

- Instructional skill (Pedagogy),
- Entrepreneurial skill (Business Services), and Supervisory skills (Supervisory Techniques & Practices).

Government Initiatives:

▪ National Vocational Qualification Framework: To stimulate and support reforms in skills development and to facilitate nationally standardized and acceptable, international comparability of qualifications, a “National Vocational Qualifications Framework” is being established by the Central Government. Central Advisory Board of Education (CABE) has resolved to set up an inter-ministerial group which would also include representatives of State Governments to develop guidelines for such a National Framework. The unified system of national qualification will cover schools, vocational education and training institutions and higher education sector. NVQF will be based on nationally recognized occupational standards which details listing of all major activities that a worker must perform in the occupation or competency standards a detailed listing of the knowledge, skills and attitude that a worker should possess to © 2010 - 2011, Symbiosis Page 6 © 2010 - 2011, Symbiosis Page 7 perform a task written by the particular employment-led sector skills council.

▪ National Skill Development Policy 2009: The National Skill Development Policy 2009 has proposed the following features for the framework:

- Competency based qualifications and certification on the basis of nationally agreed standards and criteria;
- Certification for learning achievement and qualification;
- A range of national qualification levels based on criteria with respect to responsibility, complexity of activities, and transferability of competencies;
- The avoidance of duplication and overlapping of qualifications while assuring the inclusion of all training needs;
- Modular character where achievement can be made in small steps and accumulated for gaining recognizable qualification;
- Quality Assurance regime that would promote the portability of skills and labour market mobility;
- Lifelong learning through an improved skill recognition system; recognition of prior learning whether in formal, non-formal or informal arrangements;
- Open and flexible system which will permit competent individuals to accumulate their knowledge and skill through testing & certification into higher diploma and degree;
- Different learning pathways academic and vocational that integrate formal and non-formal learning, notably learning in the workplace, and that offer vertical mobility from vocational to academic learning;
- Guidance for individuals in their choice of training and career planning;
- Comparability of general educational and vocational qualifications at appropriate levels; and
- Nationally agreed framework of affiliation and accreditation of institutions.

Problems faced:

Problems faced in vocational education for women are:

- More stress on traditional courses.
- Do not cope with changing technology
- Inadequacy of infrastructure in vocational institute.
- No provision of flexibility in learning.
- More stress on theory than practical approach.
- Lacking of streamlining of institution and job market.
- Lacking of trained manpower in vocational institute.
- Still unorganized sector are powerful in comparison to vocational education.

There have been other signs of lacking. As against the target laid down in the revised policy of diverting 25% of senior secondary students to the vocational stream by year 2000, only 10% of students opted for the vocational stream. The government-run vocational training system in India has a total annual training capacity of about 28 lakh (2,800,000) students. But most curricula 'followed' at institutes imparting vocational training have little relevance for wage or self-employment.

Some 17 ministries and departments are involved in the provision and financing of vocational education and training in India with total annual training capacity of about 28 lakh (2,800,000) students. But as with many matters managed by our governments, the vocational training system is full of superlatives and potential on the one hand, and inefficiency on the other.

Strategies for the promoting vocational education Training women & youth:

The follows Strategies can be used training and vocational education policies:

Improving co-ordination: In many countries, vocational skills provision involves a number of other government bodies, in addition to ministries of education. The diversity of public providers sometimes leads to duplication and poor efficiency. Establishing co-ordination mechanisms and structures is an attempt to address this issue.

- Increasing and improving private providers: In countries such as the Philippines, private institutions already provide for the vast majority of vocational education students. However, even in these countries, further steps are required to enhance the contribution of the private sector to the overall training system. In addition to offering credit to private providers, the development of quality control measures, including accreditation procedures and qualification frameworks, are essential to fostering a favourable environment.
- Introducing new funding methods: The voucher programmes, implemented in countries like Australia and the Philippines, have significantly changed matters as there is now more competition among providers and more choice for students. Competitive tendering is increasingly used to improve efficiency when allocating public funds.
- Promoting dual forms of training: Attempts to introduce dual forms of vocational training help to bring delivery closer to the workplace. Many countries have recently introduced different apprenticeship programmes, and these attempts to enhance youth transition may lead to significant changes in the provision of vocational pathways in the future.
- Formulating lifelong learning policies: As a part of lifelong learning, more consideration is being given to policies that allow holders of vocational qualifications to move on to higher education programmes.
- Skilling: Although not always clearly expressed, the concern for up skilling, broad-skilling and multi-skilling seems to increasingly inspire the debate on technical and vocational reform. Primarily viewed as contributing to both the productivity of the workforce and the international competitiveness of the economy, these trends are also likely to improve the transition of young people to work and their participation in lifelong learning. There is also a greater awareness of the need for vocational education to provide general skills.

■ **Offering non-formal education courses:** A growing number of initiatives have been implemented to provide non-formal training for those who leave school without job skills. Through such courses, learners can re-enter mainstream technical and vocational education programmes. Many countries in Africa and Asia, have successfully initiated specific training programmes for the informal sector. Given that the informal economy plays an important role in absorbing a young, low qualified labour force, targeted training programmes can be instrumental in protecting disadvantaged youth from poverty. However, experience also shows that training alone is insufficient to improve productivity in the informal sector. Broader interventions are required to implement effective integrated support packages, including services such as microcredit and marketing support. Understanding the exact nature of youth unemployment and getting the right combination of structural factors are crucial to formulating successful policies. Besides achieving an effective combination of vocational education strategies, experience shows that countries also rely on labour market programmes. This pattern illustrates that improving youth transition processes and employment prospects requires a close articulation between education policies and labour market policies.

Conclusions:

It is globally believed that career and technical education (CTE) is increasingly important for women and girls seeking to earn their way in a competitive marketplace. Survey states, "to achieve economic self-sufficiency for all women", there is a need of advocacy for programs that provide women with education, training, and support for success in the work force, including nontraditional occupations." It further states that Government would have actively work to strengthen educational programs for strengthening the vocational education, to improve post secondary education access, career development and earning potential of women and girls.

Based on the description presented above, following conclusions can be drawn:

○ Specialisation, tracking, and educational outcomes: Decisions about the structure of the schooling system are fundamental issues of education policy. Should schools specialize on vocational education, or should there be streaming (or tracking) within otherwise comprehensive school systems? The evidence is mixed. The debate is not helped by a tendency to obscure the distinction between specialized schooling and tracked schooling. Overall, the benefits of comprehensive education and late streaming/tracking seem to relate mainly to potential improvements in equity of educational achievement. Whether this is attained at the expense of the level of achievement seems to be undecided. The disadvantages of abandoning effective vocational schooling relate to the worsened labour market outcomes for the less able and disadvantaged children. For countries in transition, this adverse effect may be especially important. Therefore it is not advisable to dispense with specialised schooling, but rather to strengthen the inadequate vocational school systems and ensure that pathways to higher levels of education are built into them.

○ Transition from school to work: apprenticeship or school-based vocational education?: Apprenticeship systems have advantages in enabling lower ability students, and minorities to access the labour market. However, for women there are dangers of being locked in to traditional female occupations and for the schoolbased vocational education seems to offer advantages. The lesson appears to be to implement policies which encourage women to take up nontraditional apprenticeships, and to continue to offer school-based alternatives to those who feel they could benefit from them. However, these should be well organized and resourced, and should not be lengthened to delay labour market entry. Providing school-based vocational education may furthermore reduce school drop-out rates.

○ Career and occupational mobility: labour market outcomes. Occupational mobility can be improved by effective school-based vocational education. If returns to such education are sufficiently high, they can incentivise mobility. Whether or not returns to school-based vocational education are higher or lower than general education is disputed. In developed economies, there appears to be little difference in properly measured rates of return. In less developed and transition economies, returns from different types of education may differ. Recent evidence from Egypt suggests that returns to vocational education are higher than returns to general education. Apprenticeships may impart skills that are too firm-specific, and may inappropriately limit occupational mobility.

○ The Importance of Life-long learning: While occupational mobility is needed for countries undergoing structural change, it should be noted that too much mobility can also be harmful to the skill retention, especially for women. Special attention should, therefore, be given to providing complementary opportunities for retraining and for lifelong learning to all workers, but especially to women, to encourage and support the desired degree of mobility in the labour market.

References:

1. Kumar, Vipin; Kumar, Naresh; Kumar, Neelam (2009), "Pattern of Enrolment at Different Educational levels", in the theme "S&T Human Resource" of India Science & Technology 2008 Published by NISTADS.
2. World Bank. (2006). Skill Development in India: The Vocational Education and Training System. Draft.
3. Selected Educational Indicators 2004-05, Ministry of human Resource Development, Government of India, 2007.
4. Manpower Profile 2008, Yearbook of institute of Applied manpower Research, New Delhi, 2008.
5. Annual report 2005-06, University Grant Commission, 2007.

6. Assessment Survey Education Research (ASER).
7. SAS Global Coordinates Repository, SAS Metadata.
8. ArcGIS Resource Centre, Georeferencing and coordinate systems, <http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#/00v2000000q000000.htm>.
9. Converting Geographic to Cartesian Coordinates with GEOD. <http://www.usyd.edu.au/su/agric/acpa>.
10. <http://www.mapmyindia.com>, accessed on 13/12/2012
11. Study of students' attendance in primary and upper primary schools, Rresearch, Evaluation and Studies unit technical support group, Ed CIL, Government of India.
12. Eswaran, S and Singh, A., (2008) Teacher Absence in Primary Schools: A Study, All India Primary Teachers' Federation, New Delhi.
13. Pathan, A. M. (2008), "Declining Interest in Basic Sciences", Educational News Today, Monday, Sep 15.
14. Jayaraman, K. S. (2007), "Indian Science is in Decline", Nature, Vol. 445, pp. 134-135.
15. OECD Science, Technology and Industry Outlook 2006, OECD 2006.
16. Garg, K.C. and B.M. Gupta (2003), "Decline in Science Education in India? A Case Study at +2 and Undergraduate Level", Current Science, Vol. 84, pp. 1198 - 1201.
17. The World University Rankings 2010, www.timeshighereducation.co.uk/world-university.../top-200.html.
18. University Grant Commission, Annual Report for different years, New Delhi.
19. Innovation in Science Pursuit for Inspired Research (INSPIRE) (2008), Department of Science & Technology, GOI, New Delhi.
20. "Attracting Talented Students to Maths and Science" (2008), National Knowledge Commission, New Delhi.

...