Despite United Nations' efforts, inequality of access for girls and women to technical and vocational education (TVE) persists in India. Challenges of the 21st century with regard to ensuring equal access of girls (especially rural girls) to TVE include: increasing the participation of girls in TVE; overcoming gender bias and stereotyping in TVE from educational planning, students, parents, society, and employers; facilitating wage and self-employment for girls; and adopting strategies that take account of cultural, geographical, and ecological variations and also problems relating to poverty and ignorance. Proposed strategies include the following: (1) decentralized and non-restrictive educational planning; (2) an expanded program of nonformal, low-technology vocational training for rural girls; (3) gender-sensitive planning; (4) gender-inclusive curriculum; (5) gender-exclusive educational and vocational guidance and counseling for girls and their parents; (6) upgrading of syllabuses and instructional materials; and (7) creation of gender-sensitive support structures for working women. The Pandit Sunderlal Sharma Central Institute of Vocational Education in Bhopal has initiated projects to promote equal access of girls to vocational education, including production of videotapes promoting gender equality and vocational programs; research activities related to career aspirations of girls through vocational education; and seminars on economic empowerment of women. (KC)
Promoting Equal Access of Girls/Women to Technical and Vocational Education

Arun Mishra, Pinki Khanna, Nalini Shrivastava

UNESCO's policy to promote the equal access of girls and women to technical and vocational education is based on the Organization's normative instruments: the Revised Recommendation concerning Technical and Vocational Education (1974) and the Convention on Technical and Vocational Education (1989). As these instruments indicate, the continued persistence of inequality in this field calls for specific action in respect of girls and women taking into account their particular needs and the obstacles to be overcome.

CHALLENGES OF TVE FOR GIRLS IN 21ST CENTURY

The 21st Century would see a highly technological world in which the ever-advancing technologies will overwhelm our lives and workplaces. Even the traditional agrarian and rural sectors of developing countries will not be untouched by these changes where production techniques and services will acquire a degree of automation. At the same time the early part of the next millennium would, in all probability, see a sharp transition from low tech to high tech practices in production, services and in homes. A mix of the two may be experienced for some years to come, particularly in developing societies. The 21st century will also see equal participation of both the sexes in all walks of life. To expedite this process, conscious efforts on the part of present decision-makers would be highly necessary. The new developmental scenario of ecological sustainability would also have to be addressed. The trend of globalization of the world economy is expected to manifest itself fully in the very near future. The effect of changes in one country would be felt throughout the world and no country will remain isolated from others. The upheavals in the South East Asian economy, for instance, would send chills down the spine of Wall Street. The world would be an increasingly competitive market place where superior skilled human resource and technology would provide an edge to the competing nations. These in effect would set the parameters for the quality of TVE for all, and increasing participation of women alongside men, on a level playing field. While working women's continuing education and skill upgradation has to be high on the agenda, the secondary education as a step in life long learning may be seen as holding the key to the future challenges.

Secondary education having preparatory as well as terminal functions, is a critical stage for the future development of girls. It is largely accepted that TVE can equip women for the job market or self-employment, thereby increasing their self-reliance and self-confidence besides inculcating in them the capacity to take vital decisions about themselves and society at large. The major challenges that we face in the near future as regards ensuring equal access of girls and women to technical vocational education are:

Increasing Participation of Girls, specially rural girls in TVE
Presently, secondary education is available to a much smaller percentage of girls as compared to boys in most of the developing countries. This automatically reflects the percentage or absolute number of girls in the TVE system. In order for TVE to be really effective at the secondary stage and beyond, the girls must complete the primary cycle.

Also, forced by various socio-economic factors and practices, girls, specifically rural girls are busy during most part of the day either working to earn or caring for younger siblings. This results in a pathetically low enrolment of rural girls in school. Withdrawal of girls at puberty, early marriage, school location, physical facilities and hours of instruction have been identified as barriers to girls' education at secondary level in South Asia.

In many developing countries, although there is a marked improvement in the women's status and role as a whole, gender disparities are still evident in the participation of females in TVE. Even in developed countries, despite several initiatives in the economic sector, it is disheartening to note that a very small percentage of employed females are in the Technical and Vocational fields. In many countries the participation rate is higher in primary and tertiary (mostly agriculture and services) sectors than in the secondary sector of industrial production.

Speaking specifically for TVE, countries like Mexico, Korea, Sweden, Turkey & Zambia have both legislation and national policies that provide for equal access to TVE for girls and women.

Removing the Gender Bias in TVE from Educational Planning, Parents, Society and Employers

Parental conservatism and apathy to any kind of job oriented education for girls often restricts their access to education in general and TVE in particular. Vocational education is still thought to be suitable only for boys, the ultimate "bread winners"- the role of girls being largely confined to home making and child rearing. If girls do opt for vocational courses, more often than not, conditioned by the structure created by the society, they choose fields traditionally stereotyped as suitable for females.

A gender stereotyping of vocational courses exists in schools since many countries even today adopt a restrictive policy in providing vocational courses to girls. As a common practice, only softer courses such as tailoring, dressmaking, cooking etc. are accessible to girls. Such discriminatory attitude forecloses all options for girls and prevents them from acquiring more modern technological and scientific skills.

It is also evident that a far smaller number of girls than boys opt for science and mathematics stream. This coupled with a relatively inferior quality of teaching of science and mathematics in most schools leads to weaknesses in these subjects. The lack of an adequate foundation in science and mathematics further circumscribes the girls' choices for courses requiring knowledge and application of science and technology.

The masculine image given to science and technology in the curriculum, text books and media and also irrelevance of curricular presentation in Science, Technology and Mathematics (STM) to girls views and experiences are often cited as constraints to access of STM education to girls in Africa and Caribbean. It has been observed that even in the countries where all types of courses are made available to girls, the number of girls opting for non-traditional courses is very low. Parental and societal bias regarding certain courses being suitable only for boys is the probable cause for this.
This results in a large percentage of females enrolled in TVE being still in traditional female-oriented trades. It is also noted that women's participation in technical jobs is considerably lower.

It is seen that most employers have rigid notions of gender-appropriateness and subtly discriminate against girls and even if the girls are employed, they are entrusted with jobs involving less skill and also paid far less than their male counterparts.

Discriminatory practices have been noted in hiring, wage and position level distribution in favour of males in most of the countries. It is sad to note that women, on an average, still earn little more than half of men's wages.

**Ensuring Positive Facilitation of both Wage- and Self-employment for Girls**

There are limited employment opportunities for girls, especially in rural areas. It becomes necessary, therefore, that entrepreneurship is inculcated among girls in order to lead them to self-employment.

Women also get easily displaced because of changing job skills. They are either pushed out or pushed down. There is therefore a need for continuous in-service training and upgradation of skills.

Social and sexual security at the place of study and work is a prerequisite to attracting greater numbers of girls. Ensuring a secure and congenial environment in schools and the workplace should therefore be one of the action points. The social conditioning of girls and parents is such that a self-venture for girls is often unthinkable. Girls are far too delicate and fragile for this! Adding insult to injury is the discriminatory nature of our financing and funding institutions and Government regulations. Girls are either not entitled to receive financial aid or the procedural requirements are far too complicated. Girls cannot hold collateral to land or property and so cannot extend surety for the finance being sought. Even parents are reluctant to stand guarantee for them because of the impending departure of their daughters after marriage. Simpler procedures of inducting girls in self-employment should therefore be laid down and practised.

On the matter of providing employment opportunity protection for girls and women, several countries like India, Mexico, Republic of Korea, Spain, Sweden, Turkey and UAE have legislation as well as national policies. South Africa is developing legislation and national policies to provide employment opportunity protection for girls and women.

**RECOMMENDATIONS TOWARDS FUTURE STRATEGIES**

In order to promote equal access of girls and women in TVE, it is imperative that policy and programme interventions should give primacy to needs-based vocational education to girls and women in non-traditional occupations. The strategies to be adopted for effecting this have to keep in view the cultural, geographical and ecological variations as also the problems relating to poverty and ignorance. At the same time it is also important that TVE addresses the current unemployment and low economic potential of women in the context of low-tech skills of the developing world. Some of the proposed strategies are:

**Decentralized and Non restrictive Educational Planning**
The cultural and geographical variations across any country call for decentralisation of educational planning keeping in view the socio-cultural and economic parameters of the area. The vocational and occupational components have to be designed in accordance with the availability of resources and job opportunities in the region. NGOs and women's groups active in the area should be involved in the task. A totally non-restrictive policy in TVE should be adopted. As a matter of policy, all TVE courses should be made available to girls and boys on an equal basis. Also, elimination of illiteracy, universalisation of elementary education and minimization of the dropout rate in the age group of 6 to 14 would draw many more students to secondary and post secondary levels. This would demand a much-expanded system.

**Expanded Programme of Non-formal, Low-Tech Vocational Training for Rural Girls**

A very formal, rigid system of education prevailing in several other countries restricts the participation of rural girls. A more flexible delivery system, such as non-formal and open learning should be put in place or expanded. Flexibility of school timings according to the suitability to local living pattern would encourage a greater number of rural girls to participate. Practical subjects like animal husbandry, cattle care, soil conservation, agriculture, social forestry, food preservation, etc. may be added to courses offered in rural areas. In a bid to keep abreast with the global technological advancements and demands thereof, one should not forget that rural areas may not at the moment be conducive to courses suitable to the industrial world. It would be wise to design both high-tech and low-tech courses depending on their relevance. This is especially true for developing countries and the agrarian economies of Asia, Africa and Latin America.

**Gender Sensitive Planning, Gender Inclusive Curricula and Gender Neutral Educational and Vocational Guidance and Counselling Services for Girls and Their Parents**

Strengthening science and mathematics teaching in all girls' schools along with overcoming the shortage of science and mathematics teachers would go a long way to equipping them with academic competence to take up TVE. Participation of girls in non-traditional courses must be ensured. Efforts in this direction would include provision of adequate hostel facilities, employment of female teachers in girls' schools especially in rural and semi-urban areas, adoption of a non-restrictive policy in offering technical vocational courses, provision of incentives, etc. Many girls and also their parents are largely unaware of the various TVE courses, their relevance to life, the job opportunities, their employability potential, ways and means for setting up a self-venture etc. Having access to guidance and counselling services would convince them about the importance of TVE and would alleviate misgivings regarding the future prospects. All educational planning must be sensitive to both genders without any prejudice. Unless the sensitivity towards girls and their issues reflects in the planning, the implementation of TVE is bound to be all the more tilted away from them. The curriculum should also exhibit respect and concern for girls, their specific aptitudes, capabilities, constraints etc.

**Periodic Upgradation of Syllabi and Instructional Materials**

In order to serve the rapidly changing needs and demands of the area and employment scenario in developing countries, it is imperative that our syllabi and instructional materials continue to be relevant to the present day context and also have some element of future requirements incorporated in them. For this they should be periodically upgraded.

**Creating a Gender Sensitive Support Structure for Working Women**
Services of the mass media may be utilised for public awareness about the importance of bringing women in the mainstream of life and economy. Success stories of women engaged in work: self or wage should be publicised. This would lend credence to the potentialities of women and accord greater acceptance of their contribution to the nation's work force. Provision of support to working women in the area of domestic services and childcare in particular would enable them to give their best to the system since their duties of home making and child rearing are of prime concern not only to them but also to the society as a whole.

In order to increase participation and retention of girls in the job market, it is imperative that employers are sensitive to the female gender. A sense of concern along with an attitude of respect and non discrimination towards girls would give a joyful work place, a place full of confidence, trust, mutual respect and benefit to all concerned. The performance and contribution of girls would soar to new heights in a conducive work environment which would help not only the employer but also the society and nation as a whole.

Strict and honest enforcement of social and labour legislation must be effected so as to ensure basic employment benefits to women. Unless the policy of 'equal work equal pay' is followed in letter and spirit, the work scenario will continue to discourage women in joining the workforce.

A SUMMARY OF INNOVATIVE EXPERIENCES GAINED BY PSSCIVE

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, India initiated a number of projects to promote equal access of girls to vocational education. These include production of video films, which promote gender equality. The films are titled "Vocational Education - The Steps Forward", "Quest for Career", "Foundation for Vocational Education" and "Horticulture - A Challenging Career Option".

In all the films, considerable footage has been devoted to encourage girls to view themselves as career persons and attempts have been made to downplay gender bias. Interviews with successful women entrepreneurs have been shown to create new role models. Self-ventures of vocational graduates have been shown to instil confidence among the younger girls.

The PSSCIVE has also produced six video snippets, which are advertisement films on various themes of vocational education. Women empowerment is the concept carefully interwoven in the themes of these films. Attention has also been paid to the fact that motivating the students was not enough, their elders' i.e., parents and in-laws should also be sensitised. The scripts addressed these target groups also.

A project is also in progress to develop print intervention materials for students, with special focus on girls to encourage increased participation in TVE. The societal perception in India, and also in most developing countries, about girls has not changed appreciably. Marriage is a priority and is favoured by society over career and economic empowerment. Girls' education is also mostly viewed not as a means to make them empowered but to groom them better for the market of marriage. It was, therefore, realized that carefully designed programmes should be taken up to intervene against this attitudinal discrimination. Two types of print materials are being developed - motivational and informative. The target group covers society as a whole, specific address is made to parents to sensitise them to view girls as career persons. Deliberate attempts have been made to remove gender bias in courses for girls.
The Institute has also initiated a number of research activities such as "Career aspirations of girls in urban and rural societies vis-à-vis vocational education". The PSSCIVE is making efforts to develop linkages with the industry sector. To start with, a programme of developing networking with the end users was taken up in Gujarat State of India, wherein, industry and bank representatives were taken to schools offering 'Food Preservation and Processing'. The visiting representatives were often surprised by the confidence level of girls and agreed to employ them. Thus a beginning in developing an element of faith was made.

Women's equality and empowerment has been given a high priority in PSSCIVE publications. The PSSCIVE organised a National Seminar in 1997 on "Economic Empowerment of Women through Vocational Education" with a view to emphasizing the role of Vocational Education in women empowerment and to identify areas where women need to be empowered and the role of various agencies in promoting this cause. This seminar addressed various issues related to women empowerment and vocational education. Another National Seminar was organised recently on "Overcoming Constraints in Economic Empowerment of women". The main objective of this seminar was to frame ideas and recommendations as to how the barriers to Economic Empowerment could be reduced. Experts have suggested some very specific responsibilities which need to be taken up by various agencies like Government, Educational Institutions, NGOs, Department of Police, the Judiciary etc. in order to help girls and women in overcoming several barriers which they encounter during the process of their Economic Empowerment.

SUMMARY

Some of the major challenges that we face in the 21st century with regard to ensuring equal access of girls and women to TVE are:

- Increasing the participation of girls especially rural girls in TVE, removing the gender bias in TVE from educational planning, parents, society and employers. Besides, facilitating employment for girls is also a major challenge.

- In order to be able to meet these challenges, it is imperative that specific strategies are adopted keeping in view the cultural, geographical and ecological variations as also problems relating to poverty and ignorance. Some of the proposed strategies are:

  - Decentralised and non-respective educational planning, expanded programme of non formal, low-tech vocational training for rural girls, gender sensitive planning, gender inclusive curriculum and gender exclusive educational and vocational guidance and counselling services for girls and their parents, periodic upgradation of syllabi and instructional materials and creation of gender sensitive support structure for working women.

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal has initiated some projects to promote equal access of girls to vocational education. These include production of video films and video snippets for promotion of gender equality and popularisation of vocational programmes. Through these films an attempt is made to sensitize people about the need to encourage access of girls and women to TVE. The Institute is also engaged in research activities related to career aspirations of girls vis-à-vis vocational education. The role of vocational education in effecting economic empowerment of women is also addressed by the Institute through national seminars and meetings.
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