

Environmental Input In Technical And Vocational Curriculum

Masood Nabi Khan

THROUGHOUT history people have been prompted by curiosity to investigate their natural environment. Population densities increase and consumption levels grow; resources available to provide for our needs continue to decline. Because of recent concerns regarding human survival. We have become aware of the finiteness of resources even the air we breathe and the water we drink.

We are realizing that problems such as over-population, deforestation, erosion, pollution and energy wastage do not only affect natural system, but have severe economic and social consequences. Especially in developing countries, serious economic and social problems have arisen, leading to natural resource degradation and depletion, and to environmental pollution from rapid industrialization and urbanization. It seems that after careful observation of overall pollution affects on the global atmosphere, some policy makers in a few countries have introduced environmental education courses in some of their education sectors. This creates awareness for the students about the causes of pollution and development of environmental sustainability.

We know technology has provided many answers to the challenges of life; on the other hand, industrialization and modernization have given rise to new environmental and socioeconomic problems, many of which seem insurmountable in developing countries, considering their resources and capabilities.

Now people have begun to see that introduction of effective environmental education course in technical and vocational education curriculum are not a luxury, but an essential part of human development, which is sustainable over the long term.

Technical, vocational and industrial education form a very important sector of education. Their curriculum should not be confined to mastery of skills and knowledge but also provide understanding of social, civic and ethical responsibilities of the community.

Students who will be trained to become technicians and workers in business and industry must become more aware of the worsening en-

vironment-related social and economic problems facing all countries, developed and developing, rich and poor alike.

Environmental education is very important for engineering technologists, technicians and skilled workers because they participate in many of the development and production processes which have the greatest impact on the environment. They are also frequently among the most vulnerable to highly polluted environments associated with their workplaces and homes, for that reason, "over the last twenty five years environmental education has attracted the interest of educators and practitioners throughout the world."

More recently, decision makers and educators have begun to see the connection between environmental quality and other aspects of development. They have called for a more sustainable development, which pays attention to linkages among environ-

mental social, technological and economic priorities.

So, it seems that environmental problems associated with industrialization and technological development have posed a major social challenge to those involved in technical and vocational education (TVE). Technical and vocational education graduates, students, teachers and policy makers are the prime actors in industrial and agricultural development in developing countries. They need special training to deal with the challenge of sustainable development. The mid level manpower, i.e. engineering technicians and technologists, can become instruments of change, given right kind of education, training and leadership for environmental sustainability.

If environmental education is incorporated into TVE curriculum it is not that the TVE students would be able to protect the country from all types of environmental pollutions overnight, but they will certainly be able to know in a very short time what the major environmental problems of the country are, their main causes and measures that need to be taken.