

COMMITTEE IV
Modernization, Appropriate Values and
Education

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MODERNIZATION AND LIFELONG EDUCATION

by

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1. Introduction

The debate on the process of modernization, and its influences on man and society has been going on for a long time in practically every community and country. As a result of more frequent contacts among the people of different countries, it has attained an international dimension in the past several decades. Of course, the debate has taken different forms in industrially developed and developing societies, in the Eastern and Western European countries, and in countries having different religious and cultural backgrounds. However, in practically all these countries there are certain common issues under discussion, apart from those that are unique and specific to individual countries and cultures.

One of the issues of common and universal concern pertains to the management of modernization. During the past several decades, unprecedented advancements have taken place in science and technology. This new technological culture has produced new capacities and new promises in the lives of the people. But such a rapid modernization has also produced questionable influences on human values, social relations, ecosystems, and many other such aspects concerning man and nature.

The field of education is connected in multiple ways with the processes and products of modernization. Education is also closely related to such issues as stability and change in values, socio-economic development, and quality of human life. It is evident that education in

such a broad context cannot be conceived narrowly as formal schooling provided in the first phase of one's life; it has to be a lifelong process.

The purpose of this paper is to examine the phenomenon of modernization, value change and stability, and other related issues in developed as well as developing countries, and consider the implications of all these for lifelong education.

This paper will specifically emphasize the nonformal and informal processes and structures for both horizontal and vertical learning for youth, adults and the elderly - without neglecting the formal system of primary, secondary and higher education encompassing the age cohorts of 0 - 12 and 13 - 20 years which will be treated by others under two separate papers. The formal system will be subsumed under the broader concept of lifelong education.

2. Promises and Problems of Modernization

The process of modernization is as old as human history. Human beings have always tried to innovate and change for the better. Thus, the essence of modernization is to attain a better and higher quality of life for individuals and their collectives including the family, the local community and the larger society. Has the process of modernization always resulted in improving the quality of individual and collective life? This is a key question and has become more critical, and perhaps more baffling, in recent times than ever before. This question, therefore, calls for an indepth analysis and, if possible, an appropriate response.

The process of modernization through innovation and change has no doubt many promising features. For example, ever since man gave up

nomadic life and settled down for farming land, he has modernized agriculture, has increased productivity, and has brought about many changes in a variety of agro-based activities in order to ensure survival of the large masses of people. Although the goal of supplying adequate food to all people inhabiting this globe is not yet fully achieved, if what has been achieved so far in the realm of agriculture through 'green revolutions' is examined in terms of feeding increasing numbers of people compared to earlier times and transporting food across the world, the progress accomplishment should be judged as simply stupendous.

Coupled with the developments in food and nutrition are those in medicine and sanitation which have resulted in the last few decades in spectacular increase in life expectancy, sharp decrease in infantile mortality, and great reduction in the death of women in pregnancy. The developing countries are also getting advantage of the advancements in these fields as time passes.

The progress in the field of communications technology in the past few decades is nothing short of being miraculous. For example, the television as a means for mass media has already become a powerful tool for mass communication covering in its radius, a number of localities and even a whole country if it is of a small or medium size. The availability of television has already become universal in developed countries, and is increasing fast in developing countries. But when the television is hooked up with a satellite communication system, its coverage encompasses, not just more adjoining countries but also different regions of the whole globe. In this context, the term mass media - in its original meaning and capacity of coverage - used in connection with TV is inadequate to describe the new phenomenon. The television set, in

this situation, becomes a tool of, what may be called, mega media. For instance, when Prince Charles married Lady Diana at St. Pauls Cathedral in London in 1981, it was estimated that some 500 million people saw the ceremony live on TV. The total population of the world at that time was estimated at around 4,500 million. This meant that one-ninth of the entire world population could receive one single message live through mega media. Furthermore, when a final football match was played between West Germany and Italy in 1982, it was estimated that large masses of people, not only from Europe but also from Africa, Asia, Latin America and the Arab region watched it live. The estimated number of viewers of this event rose to some 1,500 million! Thus, the developments in the modern tele-communications technology has reached a stage where, for the first time in the history of mankind, it is possible to transmit a single message live at the same point in time to practically all human beings living anywhere in the world.

On the other hand, the television, which can become a tool of mega media to reach millions and even billions of people at a time, when 'married' with a VCR instead of a satellite, becomes an individualized and personalized media! The advent of video has created new possibilities in the lives of individuals and families. It is growing into a new type of familial media providing greater flexibility and opportunities to people compared to the 'traditional' TV. Further advancements, when the TV will be coupled, for instance, with a centralized data source and computer systems, are in the offing.

Many more examples of promising developments by way of modernizing transport systems, housing, roads, musical instruments, art and art materials, photography, computer systems, mining and off-shore drilling,

textiles, printing processes and many other aspects of individual life, economy and society as a whole can be cited and elaborated upon.

But all these spectacular, and often glamorous, examples present only one side of the total picture. All developments in the name of modernization are not without undesirable and damaging side-effects. In fact, some of the consequences of modernization in recent years have already resulted in formidable global problems and issues which call for serious attention. To cite a couple of examples:

- (1) It has now been universally recognised and viewed with great concern that some of the recent industrial developments have produced an adverse effect on ecology of the environment and in some cases even an irreparable damage. The pollution of air and water have already reduced the quality of human life (and that of other living organisms), almost threatening the very survival of life on this planet.
- (2) Modernity has come in conflict with many personal, social and cultural values. It has created contradictions in the lives of people. Instead of improving the quality of life by achieving inner peace, happiness, equality and social justice, there is a tendency among the members of modernizing societies to suffer from consumerism, obsession for materialism, impersonal and self-centred attitudes and thus becoming the victims of tension, anxiety, alcoholism, family disruptions and unhappiness.

Again, many more examples of problems resulting from modernization, such as energy crisis, increased nuclear armaments and threat of war, population explosion, and structural unemployment can be mentioned.

All these are indeed very serious consequences for all modernizing individuals and states. They tend to nullify some of the gains of modernization, and may ultimately impoverish rather than enrich and improve the quality of human life. In such a paradoxical situation, some of the questions to be tackled are:

- How to cope with the new means and processes of modernization at different stages of one's life cycle?
- How to participate meaningfully and constructively in making critical judgment about the desirability or otherwise of a given technological development in the context of the quality of life?
- What kinds of abilities, skills, insights and attitudes are necessary to profit from new developments in technology, medicine, art and other domains of life, and simultaneously to reduce, if not eliminate, their undesirable consequences?
- How to protect good traditional values and yet adopt new values for better life?

3. One of the Responses: Lifelong Education

The questions stated above as examples are in a way educational questions. It may however be clarified at the outset that educational inputs by themselves cannot amicably resolve the paradox of modernization.

The issues involved in the problems of modernization in relation to man, society and nature are, in fact, socio-political, historical, cultural, economic and ethical in character. Therefore, an eclectic approach is necessary to deal with these problems with foresight, wisdom and skill.

Education in this context should be a broad-based and lifelong process and not confined to just formal schooling provided in the first phase of one's life, as stated earlier. No doubt, the period of schooling plays an important role for initiating certain skills, attitudes and knowledge, but education has to be continued further through nonformal and informal processes of learning and development in order to make it adequately strong, comprehensive and multi-dimensional, enabling it to contribute to the resolution of the issues involved in the processes of modernization. Education, thus conceived, is lifelong education in response to the needs of modernization. Lifelong education can, presumably, play not only a direct role by way of developing competences such as foresight, wisdom and skill as stated above, but also an indirect role because the other approaches, namely socio-political, ethical, etc. as mentioned earlier are all having strong educational components, especially when education is broadly defined.

It is probably because of this potential of lifelong education that the Edgar Faure Commission formulated its very first recommendation pertaining to this idea. It states:

We propose lifelong education as the master concept for educational policies in the years to come for both developed and developing countries. (1)

It is important to note that the International Commission viewed this idea as a "master concept". Furthermore, the Commission found this concept as valid and relevant for designing an appropriate education

for technologically more advanced as well as less advanced countries. Elaborating this major recommendation further in the global context, the Commission asserts:

The various applications of this idea will of course differ greatly. We may even say ... that it could be applied in as many different ways as there are countries in the world ... But we remain convinced that the question of lifelong education, the decisions to take and the paths to follow in order to achieve it are the crucial issues of our time, in all countries of the world, even in those which have yet to become fully aware of this idea. (2)

In the past decade or so, the concept of lifelong education, in its new perspective, has evolved further as a guiding and organising principle for an appropriate education for the future. This is not surprising because history has shown that when civilizations develop fast and cross a certain threshold level of growth, the need and significance of lifelong learning is recognised as a necessary and appropriate education in order to cope with these developments. The Egyptian, Roman and Chinese civilizations are a testimony to this phenomenon. In Islam, Prophet Mohammed and his followers have recognised lifelong education stressing the extension of learning "from the cradle to the grave". More than three thousand years ago, when the Hindu civilization reached a high peak of excellence in various fields of human development like medicine and surgery, astro-physics and mathematics, art and sculpture, literature and music, a definition of an ideal human being was formulated, which says yāvat jeevam adheeyate vipraha (A person with highest competences and composure is the one who continues learning as long as he lives).

Of course learning is natural for human beings at any stage in life, and there is always a need to learn something new on account of factors such as changing social roles and physiological growth with age. Thus,

some form of lifelong learning always exists, whether it is recognised or not, in all societies. But it is also clearly evident that it has not been equally effective everywhere in producing a desired quality of life. It takes on a new perspective when it is called upon to act as a response to some phenomenal developments like the new communications technology and other forms of modernization witnessed in recent times.

During the past few years, the concept of lifelong education, in its new perspective, has attained a special significance and wider acceptance at a conscious and conceptual level in different parts of the world. The concept is being examined on a global scale for its application as a guiding and organising principle of appropriate education for the world of tomorrow. The reasons for this evolution are summarised in the following paragraphs:

One of the reasons for this phenomenon is that for the first time in human history there has emerged a world-wide realisation, appreciation and concern about the quality of life of all people, no matter which part of the globe they inhabit. There are also other significant reasons associated with this phenomenon. The changes occurring during the lifespan of an individual today are much more profound and rapid than ever before. The explosion of knowledge in science and unprecedented advancements in technology have created a pressing need for recurrent learning both in general and in vocational aspects of life. Many of the spectacular technological innovations in transport, communication, agriculture, medicine, textiles and other fields are being diffused rapidly and they call for the acquisition of new knowledge, skills, and values. The far-reaching changes that are coming about in quick succession in economic, social, ecological and political life call for a high degree of adaptability to new situations. The increasing rate of obsolescence of knowledge and skills witnessed in practically all areas of human endeavour also demands continuing intellectual growth. On account of these and other similar factors and forces, lifelong education has attained more significance than ever before.

The construct of lifelong education is viewed as a solution to meet the growing demands of the modern world. It is also perceived as a potent instrument to keep up and accelerate

all-sided development by the creative participation of individuals in a changing society. Above all, it is viewed as a means of attaining the highest form of self-realisation. (3)

The concept of lifelong education, like genuine modernization, places a great stress on the attainment of higher and better quality of life for all. Thus, the concept is largely based on scientific humanism. For achieving some of the highest goals of human life it advocates the use of a variety of situations and structures for learning and development during the stages of childhood, youth, adulthood and old age. The following statement giving a working definition and a brief elaboration clarifies this position:

Lifelong education is a comprehensive concept which includes formal, nonformal and informal learning extended throughout the life-span of an individual to attain the fullest possible development in personal, social and professional life. It seeks to view education in its totality and includes learning that occurs in the home, school, community, and workplace, and through mass media and other situations and structures for acquiring and enhancing enlightenment. In this context the concept of lifelong education provides a new perspective to all educational goals, activities and structures, emphasizing the all-round development of the individual over the whole life-span. Lifelong education is not just preparation for life, it is an integral part of life. Learning and living are closely intertwined, each enriching the other. Thus, lifelong education becomes a continuous quest for a higher and better quality of life. (4)

In order to examine the goals, content and processes of lifelong learning in the context of modernization, it becomes necessary to consider not only the life-cycle of an individual but also the life-space where he lives, learns and enriches the quality of his life. To derive practical implications for such continuing education of adults and elderly people, it is helpful to consider certain characteristic features and principles of lifelong education. For example:

(1) Principle of Totality

Lifelong education encompasses all desirable learning acquired throughout the life-span and through people, media, materials, etc. that constitute learning environments in the home, school, workplace (during adulthood), and in the community. Thus, the education (E) of a given learner (L_i) in its totality is a function of educational environment (EE) available in different life-spaces, i.e.,

$${}^T_{0E}L_i = f(EE_H, EE_S, EE_W, EE_C)$$

(2) Principle of Integration

As an adult leaves formal school and undertakes an occupation, he continues learning several things at his workplace through his fellow workers, superiors, and the entire work environment. Simultaneously, a kind of horizontal learning occurs in the community environment and at home through family members, celebrations in the home, mass media, etc. depending on particular situations in the home (which often vary on account of several factors). The outcomes of horizontal learning are either reinforcing or complementary or even conflicting. All these need to be harmonised in certain ways, enhanced and inter-linked. Similarly, there is vertical learning taking place at successive life periods which also should be carefully articulated in order to profit maximally from the learning outcomes. The unity and integration of both horizontal and vertical learning is an important feature of lifelong education.

(3) Principle of Flexibility

Learning should not be time-bound or place-bound or restricted by some other constraints such as age, formal credentials, etc. Flexible, alternative and multiple opportunities for learning in both general and vocational fields should be created through which people can learn by adopting the modalities of self-learning, inter-learning, and guided learning. The learning opportunities should be created through formal, non-formal (e.g., adult learning centres for illiterates and neo-literates) and informal arrangements and structures. Thus, learning begins with the beginning of life and ends only with the end of life, and it occurs through various situations and structures according to the needs and priorities of children, youth, adults and the elderly.

There are a few other principles of lifelong education, but space would not permit to mention all of them and discuss their inter-relationship. It is, however, considered desirable to mention a few examples of goals and content of lifelong education in the context of the concept of modernization.

4. Some Implications: Goals, Content, Learning Processes

As the situations vary significantly between developed and developing countries (and even among certain developing countries), it is difficult to work out specific implications of the process of modernization for goals and content of lifelong education. On the other hand, one might argue that some sort of modernization goes on in practically every

country, and hence, from the standpoint of process, the difference is one of degree only. Furthermore, the reciprocal relationship that exists between the concept of modernization and lifelong learning is valid in the context of any country or culture. Under these operational parameters, a few suggestions concerning goals, content and processes of lifelong education in relation to the problems and promises of modernization are briefly presented below.

For the concept of lifelong education to be reasonably effective in acting as a response to the movement of modernization, some of the goals of learning that should be aimed at by the youth, adults and old people are given here as illustrations:

One of the goals should be to develop understanding and insight into the nature, sources and processes of modernization. This should also include the understanding of the relationship between modernization and tradition; modernization and poverty as well as backwardness; and economic and technological modernization vis à vis modernization in art, literature and culture.

Another important goal for mature people like young adults and the elderly is the critical understanding and analysis of the impact of scientific and technological modernization on social, political and ethical values. As Soedjatmoko observes:

It has always been true that knowledge and power can be used for good and evil - and have been used for both. The problem is that in the Age of Science, the ethical questions that have arisen from humankind's slowly growing mastery of the forces of nature have been treated as residuals of progress. The failure to resolve these residual problems has not been permitted to stand in the way of further "progress" - even when the so-called residuals dwarf the intended effects of the results of scientific work. The ultimate manifestation of this effect is the development of nuclear weapons. (5)

The problem of preserving certain ethical and social values for good life and changing others required to pursue modernity and progressive action is one of the most critical aspects of learning and modification of one's life-style.

Yet another significant goal is to develop coping skills for the management of modernization and change. On the one hand, it is necessary to make critical judgment about the changes in life coming in quick succession, and to be ready to accept worthwhile changes with a cautious optimism, and on the other, to avoid and even oppose in acceptable ways those changes that are likely to damage the quality of personal life or that of the collective.

These and other such goals of lifelong education need to be achieved in relation to some of the critical content areas that have recently emerged from the problems as well as promising features of modernization. A few examples are stated below:

- (1) Recent disequilibrium in the environment and eco-system and the need to take action by citizens and nations for environmental protection.
- (2) Population explosion, rapid urbanisation and changes in the demographic structure. Education and quality of life of the elderly. The number of old age people is fast increasing in all regions. In the European Region, the number of those aged 75 years and over, which was about 18.5 million in 1950, had risen to more than 42 million by 1980; an increase by 127 per cent.⁽⁶⁾

- (3) Problems of threat of war and nuclear arms. Need for disarmament and peace. Economic, social and cultural consequences of arms race, research for destruction rather than betterment of life, and huge military expenditures. The global annual expenditure in this field is close to one trillion US dollars. But money is scarce for development projects like the eradication of illiteracy among some 850 million adults above the age of 15, or the eradication of certain diseases, or the appropriate care of the aged people.
- (4) Energy crisis. Its impact on the economy of developing countries. Need to search for alternative energy sources. Need to develop skills, attitudes and habits for reducing the consumption of energy.
- (5) Unemployment due to automation and robotization. Poverty, malnutrition and health problems.
- (6) Some promising developments in the fields of telecommunication, transport, medicine, food production, longevity and education.

All these, and some more issues that can be added to the list, have direct or indirect bearing on the positive and negative consequences of modernization. They call for urgent attention at all levels and in all countries of the world. They need to be studied, analysed and appropriate action taken individually as well as collectively at the national and trans-national levels.

In order to study them at various levels, some of the processes based on the principles of lifelong education appear to be very relevant. Some of them have been stated earlier. For example, a good amount of self-learning and self-directed learning would be necessary on the part of the individuals. At the societal level, the process of inter-learning, dialogue and public debate through media or otherwise would be essential. Appropriate use of mass media and mega media, which themselves are the outcomes of the new technological culture, could prove extremely valuable in generating new awareness and positive action among the masses, if the problems stated above are taken seriously by the political and economic powers. Integration of learning that occurs in different life-spaces through the formal, nonformal and informal processes of horizontal learning would help in the attainment of the goals stated earlier as examples and in fostering necessary attitudes and understandings for better progress. Even for illiterate adults, many of these goals and content areas have been found relevant, and also feasible for them to master through horizontal learning. For example, in adult literacy centres, it has been found possible to discuss the problems of population, environment, peace and value crisis, and the participants have shown great interest and ability to handle them meaningfully.

5. Conclusion

Although the principles of lifelong education raise some optimism to deal with the problems and issues of modernization, a good deal of research and reflection are yet necessary to put the ideas into action on a world-wide scale. The difficulties on the way are formidable. The will to take genuinely positive and constructive action, with humanitarian considerations, on the part of those who possess the power of

wealth or military weapons does not seem to be strong enough. But history tells us that whenever crisis comes the human genius rises to the occasion and takes action in the right direction for survival and progress. This has mainly happened so far throughout history at the local and national levels. But in the present situation the crisis to be faced is of a global scale. The whole humanity is at the crossroads of a new and better quality of life and the total annihilation of life and culture on this planet. Will the human genius succeed in choosing the right direction this time?

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