Role of Universities in Socio-economic Development

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The International Commission on Education for the 21st Century declared that education throughout life should be based on four pillars: learning to know, learning to do, learning to live together, and learning to be. The universities have a duty to carry out research that should contribute to solving the most serious problems facing developing countries. The universities in developing countries can serve a critical function in the realization of Mission Development Goals. The universities must span the social and material gaps between creative individuals with innovative ideas and the application of technology for economic progress and social betterment, on the other. The university also will serve as a bridge that carries the traffic of social and economic development.

A university is an institution of higher education and of research, which grants academic degrees. It also provides both tertiary and quaternary education. University is derived from the Latin word universitas, meaning corporation, since the first "modern" (medieval European) universities were simply groups of scholars

The globalization of economies and professional services and the rapid growth and in-depth transformation of information and communication technologies have resulted in increased demands for specialized professionals in every endeavour of life capable of sustaining high standards, calling for an increased appreciation of the role of higher education in the development and advancement of societies and for a revision of training and working methods of higher education graduates. From the crucible of social change movements with democratic commitments to equality, opportunity, and dignity each country understood higher education's powerful potential when put to service for social cause.

Objectives of Higher Education

Higher education is essential for any country to achieve sustainable and global development. It is also essential for the enhancement of citizens' participation in public life, for social mobility, and for the achievement of harmony, justice, and just and comprehensive peace, at both internal and international levels, on the basis of the respect for human rights, active participation of citizens, and mutual respect.

The essence of higher education should aim at the following: (a) to educate well-aware, autonomous and responsible citizens committed to national and universal principles, capable of dealing with the challenges of the Century and of lifelong learning, (b) to provide highly trained professionals to meet the needs of government, the professions, and the productive and service sectors, (c) to provide expertise to assist in economic and social development, and in scientific and technological research, (d) to help conserve and disseminate national and regional cultures, drawing on the contributions from each generation, (e) to provide critical and detached perspectives concerning the strategic options and to contribute to human renewal by active contribution to the production of scientific knowledge, taking into account ethical issues, and addressing planetary challenges (such as population growth, peace, environment, etc.), (f) to undertake research and scholarship which contribute to the understanding, the anticipation and the solving of the most serious problems of the Region.

The developing countries should devote determined efforts to improve general education as to ensure that graduates of this level of education master the essential competencies needed for life, including those necessary for the pursuit of higher education endeavours. Higher education institutions should actively participate in the efforts leading to improvement of pre-university education.

The developing countries and their higher education institutions should adopt specific national and institutional plans of action in order to increase the participation in higher education of disadvantaged groups at all levels and in all disciplines, particularly females and the citizens under strenuous conditions due to occupation or blockade. They should work in co-operation with regional and international agencies in order to provide learning opportunities to deprived students and to permit them enrolment in higher education institutions within their countries.

Role of Universities in fulfilling Societal Concerns

Indian universities play an important role in socioeconomic and cultural development through their many functions in the fields of the arts, humanities, social

Sciences and economics as well as in science and technology. With its 8,000 colleges and universities, India, for example, looks to higher education as one vehicle for defining its national identity and charting economic development. Higher education often functions as the place where volatile, socially divisive differences can be resolved, or at least understood more fully. Their primary role is to provide a high quality education, appropriate to the needs and potential of the student and the demands of society, as economically as possible. Indian universities have a very good record in education, as shown by the employability of their graduates at home and abroad. The second most important role has always been the generation of original knowledge, technology and skills through research, especially public good research. While product development is more the province of industries, they have been aided both directly and indirectly by university research. The quality of research in Indian universities has improved over the past decades as evidenced by the number of refereed publications and their citations in international journals and the emergence of Centres of Excellence over a period of time. Transfer of the results of academic research into industry has become progressively more important in the last twenty years by means of Technology transfer to companies through collaborative R&D projects, provision of technical services, consultancy and information.

Higher Education and Productivity

Higher education is an important contributor to technological capability and technical change in industry. The higher the level of education of the work force the higher the overall productivity of capital because the more educated are more likely to innovate, and thus affect everyone's productivity. In other models a similar externality is generated as the increased education of individuals raises not only their own productivity but also that of others with whom they interact, so that total productivity increases as the average level of education rises.

Higher Education and Income

There is also a positive feedback from improved education to greater income equality, which, in turn, is likely to favour higher rates of growth. As education becomes more broadly based, low-income people are better able to seek out economic opportunities. Education may affect per capita income growth via its impact on the denominator, i.e., population growth.

Higher Education and Gender Disparities

Greater education of parents, perhaps of mothers, tends to improve the treatment of children, especially the daughters. The gap between the education of sons and daughters is smaller when parents are more educated. More educated men and women tend to invest more in their own health and the health of their children. Indeed, education may be the single most important personal determinant of a person's health and life expectancy. Education of the poor helps improve their food intake not only by raising their incomes and spending on food but also by inducing them to make better, healthier, choices.

Higher Education and Trade

Some countries have successfully combined openness and investment in learning and education, forming a virtuous circle: openness creates demand for education, and learning and education make a country's export sector more competitive. Knowledge accumulation influences a country's trade performance and competitiveness. sustain any kind of knowledge accumulation, a country has to be outward-oriented and a significant exporter. A World Bank study found that economic growth rates in a sample of 60 developing countries during 1965-87 were especially high where there was a combination of a high level of education and macroeconomic stability and openness (Tilak, 1989). The impact of trade openness on long-term growth thus depends on how well people are able to absorb and use the information and technology made available through trade and foreign investment

Universities and Socio-economic development: The pursuit of Central Institute of Fisheries Education towards Blue revolution

The Central Institute of Fisheries Education (CIFE), Mumbai an accredited Deemed university under the Indian Council of Agricultural Research, New Delhi was established on 6 June 1961 as a Government of India Institute with the assistance from FAO/UNDP with a mandate to impart post-graduate education and training largely to the in service fisheries personnel of the country so as to provide the trained manpower support to the fisheries developmental activities. The most outstanding contribution of CIFE in national development is the generation of scientific and technical manpower which has helped in triggering off a silent blue revolution in terms of increased fish production, productivity and enormous business. Manpower developed by the Institute is also catering to the

personnel needs of the R&D programmes of various research institutes, universities and state departments of the country related to development of fisheries and allied disciplines. From inception till date, under the various academic programmes organized at CIFE, a total of over 4500 students including over 100 foreign students (mostly from neighbouring Afro-Asian countries) have completed their studies so far.

B. Research Achievements

Important research achievements of CIFE

The important research achievements of CIFE includes development of carp hatchery models, backyard hatchery technology for giant freshwater prawn, breeding and culture technology of penaeid prawns, demonstration of culturing brackishwater fishes and prawns in ground saline water ponds of Haryana State and Rajasthan, identification and isolation of biotoxins / bioactive substances from catfishes and molluscs for use as analgesics, wound healing and possible use as antineoplastic compounds in human beings, development of immunodiagnostic kits for disease diagnosis and management in fishes and prawn, estimation of standing stock and MSY of commercially important marine fishes, use of artificial seawater in giant freshwater prawn hatchery, user-friendly package for culture of live food organisms and formulated aquafeed, breeding and culture of Macrobrachium rosenbergii, the giant fresh water prawn, use of ozone as disinfectant in aqua hatcheries and Development of immunodiagnostic kits for bacterial and viral diseases of fish and shrimps.

C. Extension Activities and Achievements

The main extension activities of the institute include conducting Short Term Training Programmes and need based capsule/vocational training programmes on various technologies related to fisheries and allied disciplines, Fishery Advisory Services, Technical assistance, Demonstration programmes and Creation of mass awareness about the potentials of fisheries through fisheries exhibitions, Matsya Melas, Aquafarmers' meets, radio talks, TV programmes and developing appropriate audio-visuals for popularizing fisheries technologies in the country.: CIFE has been instrumental in the overall development of the fisheries by means of providing generating meaningful employment, socio-economic upliftment with specific reference to resource poor fisherfolks, children and women. The fisheries awareness programmes, advisory services had generated a positive impact at the mindset of the fishers.

Fisheries are now regarded as one of the developing sector involved in the socio-economic upliftment of the rural population of the country. It also helps in the generation of the employment i.e. providing scope for the "RIGHT TO WORK" and on the process contributing to the mobilisation of the resources. Besides, pisciculture is an activity in which the women also has the accessibility in this profession and accordingly women also form an important group. This has been the focus of CIFE.

CIFE has been instrumental in making fisheries as potential area to overcome the burning un-employment problems particularly for the rural youths and thus calls for taking up people's participation programme, i.e., mass awareness programme. This is presently being covered under "Extension and Training" programme by participating in Exhibitions and also various specific training programmes.

Actions and Strategies

The recent spectacular growth in the economy has amply demonstrated, it is the very availability of highly educated and skilled people that is now the principal factor driving economic and social development in our increasingly knowledge-based society. They are thus in a stronger position to contribute to the broader goals of national development. In order to achieve the social and economic development goals the universities should be addressing the following:

- Analyzing and reviewing macroeconomic, microeconomic and sector policies, as well as their impact on poverty, employment, social integration and social development.
- Defining distinct goals and targets, including a timeline if possible, for the university's involvement and participation in social and civic activities and programs.
- Strengthening implementation and monitoring mechanisms, including arrangements for the participation of civil society and community organizations in policy-making, implementation and collaboration with the university.
- Providing resources through such measures as small grant programs, technical and other administrative support for initiatives taken and managed at the community level;
- Developing planning and policy-making procedures that facilitate partnership and cooperation between universities and society.
- Developing innovative sources of funding, both public and private, for social and civic programs, and creating a supportive environment for the

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