

Science and Technology for Development - II

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However, the Third Five Year Plan (TFYP) envisaged that science and technology should evolve process for socio-economic development of the nation. But how the process could be accelerated was not clearly spelt out. Resource allocation was also not adequate. Science and Technology, therefore, did not play its due role during the Plan period.

TECHNOLOGY BASED PLANNING

Realising the critical role technology can play in socio-economic development the government has accepted technology as an important critical variable. It has already been decided that the Fourth Five Year Plan (FFYP) will also incorporate a technology plan along with traditional economic plan. In the productive sector (particularly industry) no amount of economic planning will do without supporting technology planning. During the FFYP integration of technological considerations in national planning will receive high priority. For such integration some necessary steps are.

- i) Setting of a Vision and Broad objectives
- ii) Acceptance of technology as a strategic variable
- iii) Establishment of technology assessment mechanism at all levels

iv) Identification of technological gaps

v) Government intervention in the form of legal, fiscal and financial policy instruments.

vi) Establishment of review monitoring and feedback mechanism

Technology based development needs an institutional agreement for absorption, adaptation and improvement of imported technology as also innovations for trade. What this arrangement should be will need very careful consideration.

With a view to realising the untapped potential of science and technology the National Council of Science and Technology (NCST) and the Consultative Committee on Transfer of Technology have in the recent past taken a number of important decisions. Some of these

are :

1. National Centre for Technology Development and Transfer. The feasibility for establishment of such a centre is being studied by consultants commissioned by the Planning Commission. If found feasible this could be the institutional arrangement for transfer of technology.

2. Formulation of a Technology Plan. With the assistance of the Asian Development Bank a medium term technology plan covering three thrust sectors—Small Scale Engineering Industries, Food Processing and Electric and Electronics—has already been prepared. Based on the experience of this exercise Technology Plan covering other sectors will be prepared in a phased manner.

3. Assessment of Technological needs and capabilities. At the preliminary stage Committees will be formed headed by concerned Secretaries for assessment of technological

part of developed countries to transfer high technologies required by developing countries to solve emerging problems.

b) The technologies are not given on favourable terms. More often the recipient government is not in a position to choose as the source of financing is tied assistance.

c) Allocation to UNDP for development of Science and Technology in developing countries is inadequate.

d) The conditions for transfer of technology are at times unacceptable.

e) The International Code of Conduct on the Transfer of Technology has not yet been finalised mainly due to lack of enthusiasm of the developed countries.

HOPE FOR THE FUTURE

Since the adoption of the Vienna Programme of Action in 1979 there has been perceptible change in the developing countries who have accepted technology based planning as a strategic variable for social change. Technology need no longer remain a dream for the poor. It is time that the developing countries have access to the Master Key for development—Technology.

(PID Feature)

needs and capabilities in the priority areas.

4. Formation of a Committee for Review of Technological needs and capabilities.

The Committee will be located in the Science and Technology Division. The main function of this Committee will be to recommend appropriate policy instruments after reviewing existing technology related policies.

5. Creation of a Permanent Co-ordination Cell in Science and Technology Division. The main functions envisaged for this unit are :

a) Publication of a Technology Schedule

b) Preparation of an inventory of technologists in the country

c) Preparation of an inventory of technologies developed by various R&D organisations of the country.

6. Creation of a Technology Evaluation Unit in the

Planning Commission
7. Allocation of 1.1% of GDP for R&D activities

The President had declared early this year that allocation for Research and Development activities will be raised from the current level of about 0.2 percent to 1.1 percent of the GDP over the next five years. The modalities are being worked out by a Task Force.

8. Separation of Establishment from Research Budget. This decision given by the ECNCST has been partially implemented. It is expected that from 1990-91 all R&D institutions will have separate budget for research and development activities.

PROBLEMS OF TRANSFER OF TECHNOLOGY

Problems faced by developing countries with regard to transfer of technology are more or less similar. Some of these problems are :

a) Unwillingness on the