
E-Content for B.Com (Hons.), Sem: II

Paper: Business Environment

Unit IV

Topic: The Problem of Selecting Appropriate Technology

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The Problem of Selecting Appropriate Technology

An Appropriate technology is a technological choice that is appropriate to the social and economic conditions of the geographical area in which it is to be applied, is energy-efficient, environmentally sound, and promotes self-sufficiency on those using it. In some perspectives, appropriate technology can be described as the simplest level of technology that can achieve the planned objective, whereas in others, it can refer to engineering that takes adequate consideration of social and environmental consequences.

Appropriate technology as a useful operational concept has gained increasing acceptance in developed as well as developing countries and also with governmental or non-governmental international organizations. However, despite the existence of efficient alternatives to technological choice in virtually all sectors of economic activity, inappropriate techniques continue to be used in many developing countries due to constraints on the demand, as well as on the supply side. It is agreed that increased funds and additional infrastructures alone are not sufficient condition for the selection of more appropriate technologies; what is needed is a healthy selective climate in which technological capabilities and commitment to socio-economic progress are interwoven.

The choice of appropriate technology is a challenging job for countries. It is not possible to suggest a uniform pattern of technology for all the countries as they differ in respect to factor endowments, level of income and capital formation, demographic patterns, institutional arrangements and stage of economic development. Therefore, it is possible to lay down certain considerations, which must be kept in mind, while making a choice of an appropriate technology in a country.

Appropriate Technology-Criteria for Selection

Technical Aspect	<ul style="list-style-type: none">•To consider technical knowledge and background of the people using it
Cultural Aspect	<ul style="list-style-type: none">•As per the need of social system in the society•Religious belief•Division of labour•Level of education and training
Geographical Aspect	<ul style="list-style-type: none">•Availability of resources•Location•Climatic condition
Economical Aspect	<ul style="list-style-type: none">•Local Economy•Effect of technology on income level and income distribution•Income disparity between different socio-economic groups
Environmental Aspect	<ul style="list-style-type: none">•Pollution free•Bio-degradable•Recyclable•Energy conservation

Problems of selecting an Appropriate Technology:

(1) Inadequacy of Capital:

For many underdeveloped countries it is not possible to adopt high priced modern technology as they lack required capital. So the adoption of new technology becomes difficult.

(2) Lack of Skilled Manpower

Sometimes in the absence of required knowledge and skill on the part of workers and those who are going to use the technology also creates a hindrance in adopting an appropriate technology.

(3) Resistance :

In many countries traditions and conventions still have a strong hold on their institutional set up so the people do not easily adopt themselves to the changed situations and thereby resists adoption of new technology.

(4) Illiteracy:

Majority of the population in underdeveloped countries is illiterate. It is difficult to familiarize them with new technology. It becomes difficult to adopt the technology which will be most suitable for the fulfilment of goals of production.

(5) Different Conditions:

Technology has been developed in developed countries to suit their needs and means. But, needs and means of underdeveloped countries differ from those of developed countries. Accordingly, many types of technology developed in advanced nations may not suit the underdeveloped countries.

(6) Problem of Obsolescence:

Innovation is a continuous process so the new technology develops very fast and the existing techniques become obsolete very soon. If not replaced on time, the countries would never be able to reap full benefits of the so called new technology. It is therefore desired that underdeveloped should develop their own technology themselves and avoid importing new technology.

(7) Lack of Competent Innovators:

Creation and adoption of new technology presupposes the existence of able innovators and lot of capital for the successful implementation of their programmes. But, there is not only the dearth of capital but also of the able innovators and entrepreneurs in few countries.

(8) Poor infrastructure:

An inadequate infrastructural facility also creates difficulty in selecting an appropriate technology.

(9) Capital Intensive

In developed countries, technology is mostly capital intensive. Scarcity of labour results in high wage rate in these countries. In contrast with the abundance of their man-power, underdeveloped countries need labour intensive technology. Capital intensive technology would not be much suitable for them.

(10) Policies and Regulations:

If the policies and regulations of the country are not favourable to the given technology it would not be possible to adopt it even though it's appropriate in terms of economy and benefits to the producer. So this also acts as a problem in selecting an appropriate technology.