

3. Increasing reliance on new and renewable sources of energy, with priority to suit local climates environments and resource potentials;
4. Concerted efforts to improve local knowledge of the availability and reliability of existing and new types of renewable energy installations with potential for local application and manufacture;
5. Technological adaptations and innovations, with special attention to the experience of other developing countries and to local raw materials, through continuous R and D.

3.4.4. The Technological Dimension

Apart from the well-known large scale hydro electric projects, the problem becomes one of

- (a) identification of available technologies,
- (b) testing them for suitability to local situations and for acceptability in relation to their economic and social costs and
- (c) ensuring that the technological capacity exists to operate, maintain and repair the hardware involved and to manage resources within the environmental constraints that may exist and taking advantage of local environmental opportunities. The technological problems of adaption and innovation to match the available technologies and hardware with local circumstances may prove to be a serious constraint in many instances. However, these problems will need to be divided into manageable proportions and priorities established in terms of what is available for immediate application and what needs further R and D. The essential distinction between the generation of energy from non-conventional sources and its actual application must constantly be kept in view so that an excessive preoccupation with the problems of developing energy supplies from alternative sources will not overshadow the equally important technological problem of creating the necessary conditions for application of the type of energy thus made available.

A related technological problem would be fabrication of the requisite equipment. Among the salient considerations here would be: local availability of materials, indigenous manufacturing and design capacities, the degree of requirement for site-specific adaptations of the equipment and the comparative economic advantage of local regional production.