For extension services;

For training technicians and villagers in the operation, maintenance and repair, as well as the local fabrication, of equipment;

For promoting and encouraging establishment of energy related industries and the commercial production of equipment;

For operating schemes of financial incentives, subsidies and assistance for both adoption by villagers and commercial production and marketing;

For sustaining the programmes at the village level.

In many developing countries the requisite institutional apparatus is either non-existent or inadequate. The planning machinery, R and D structure, extension and training agencies, manufacturing capacity and community institutions will gradually need to be established, augmented and oriented, both technologically and culturally, to the new strategy of integrated energy development. This strategy will require an integrated institutional approach involving political will to support it consistently, institutional arrangements to implement it and involvement of the people in order to sustain it.

3.4.3 Financial Incentives/Disincentives

Any scheme to develop alternative energy sources to meet developing country needs may have to be supported by a deliberate policy of incentives and disincentives. On the one hand, use of renewable energy supplies may often need to be encouraged consciously through a scheme of incentives, subsidies and assistance, not only for the application of alternative techologies but also for the commercial manufacture of the requisite equipment. On the other hand, the continued use of conventional hydrocarbon based sources of energy may have to be deliberately discouraged through a rational scheme of disincentives.

Based on these related considerations, which necessitate a reorientation of the strategy for energy supply, the Governments of developing countries might devise overall energy policies that include the following objectives:

1.   Reduction of dependence on hydrocarbon imports;

2.   Enhanced energy development in rural areas;