

- (i) forest management - many private firms in Canada are capable of providing the full range of forest management services. Some have been active internationally, particularly in the area of forest inventory studies (CIDA has financed such studies in over 20 countries). Many forestry students from other countries have gained their technical training in Canada. Forestry research is a very active area for governments and private institutions, particularly forest regeneration. The International Development Research Centre has supported research into the special problems and opportunities of tropical forests. Considerable practical expertise is available in the forest products industry, and a number of Canadian companies manufacture and distribute machinery for cutting, preparing, loading and transporting wood, including a very advanced mechanical tree harvester.
- (ii) rapid silvicultural/biomass production techniques - the Ontario Ministry of Natural resources in cooperation with the Federal Government has developed a strong capability in the area of hybrid production using fast growing species such as hybrid poplar. 5000 acres of plantations are already under development and a major expansion of the program is planned. This will coincide with the selection of Canada to lead the IEA group on research in rapid silvicultural techniques and the establishment of a Biomass Technology Institute in Ontario.
- (iii) wood burning stoves for heating, cooking - most Canadian equipment concentrates on heating rather than cooking. However the Brace Research Institute has developed a series of very inexpensive, efficient cooking stoves that burn sawdust, wood or dung, suitable for many developing country conditions.
- (iv) combustion boilers - Canada is a world leader in the engineering, design and construction of energy recovery facilities using wood waste, and this expertise is increasingly being put to use in conversion of other biomass fuels. There are three major manufacturers who are already very active internationally.
- (v) gasification - Canada has developed an advanced fluidised bed gasifier which is undergoing its first full-scale commercial trial at a plywood