In 1981, it was estimated that fire losses covered 5.1 million hectares, still more than in 1980. Both years substantially exceeded totals for all the previous years as recorded for the provinces back to 1918, and for Yukon and Northwest Territories since 1946.

During these two most severe fire seasons, in terms of fire starts, area burned and suppression expenditures, forest fire-fighting agencies in west-central Canada did not have enough aircraft and other equipment to cope with the problem. Help had to be obtained from other parts of the country and on several occasions from the United States.

To deal with increased hazards caused by such factors as climate changes and insect blights, the Canadian Interagency Fire Centre (CIFC) opened for business in Winnipeg on June 1, 1982. The Canadian Forestry Service, Parks Canada, Indian and Northern Affairs, the Yukon and Northwest Territories and nine provincial governments have shared in the costs of establishing and operating this

joint national undertaking.

CIFC's immediate objective is to provide operational fire control services to member agencies that will gather, analyze and disseminate fire management information, ensuring economical sharing of resources. The centre will also develop programs to actively promote, develop, refine, standardize and provide services to member agencies to improve the level of forest fire management in Canada.

In April 1983 Environment Canada announced federal government plans to purchase 20 water bombers over the next four years to help provinces

meet peak fire season needs.

An apparent surplus of timber exists in Canada although shortages of softwood are emerging in all regions, which could be overcome in part by more intensive forest management and silvicultural techniques. Greater utilization of individual trees and of certain hardwood species could extend the resource. The estimates of wood volume in Table 8.1 include over 2 billion cubic metres on 375 000 km² of forest land reported as economically inaccessible.

8.1.3 Forest administration

The provinces own 90% of the forests that are not reserved for special purposes such as national parks. The federal government owns or administers about 85 million hectares, but most of this land is in Yukon and Northwest Territories and is largely unsuitable for commercial timber production. Federal ownership in the provinces is only about 800 000 ha and mostly in national parks and military reserves. Indian lands account for 2.4 million hectares.

The Constitution Act, 1867 specifies that the provinces have direct responsibility for management of their public lands and the timber and wood on them. The federal government has major or shared jurisdiction over many policies and activities related to forest resources: fiscal management, regional development, industrial efficiency, research and development, trade and tariffs, transportation and environment. At least six federal departments have a major interest in forestry.

Canadian forestry service. The principal federal agency is the Canadian forestry service (CFS) of Environment Canada. Its objective is to promote the wise management and use of forest resources, through headquarters attention to forest policy and economics, and research and operational programs conducted by two national forestry institutes and six regional forest research centres. Areas of activity include: forest protection, forest management, tree improvement, forest statistics and the environmental aspects of forestry.

A government reorganization announced in January 1982 provided for the transfer of responsibility for joint federal-provincial forestry agreements from the regional economic expansion department to Environment Canada, giving the CFS a key operating

role in forestry.

The Canadian forestry service underwrites about half the cost of two private research organizations. Forintek develops, processes and preserves solid wood products. The Forest Engineering Research Institute of Canada (FERIC) develops better and

cheaper methods of harvesting wood.

Following the announcement of a federal unemployment insurance job creation program in March 1982, CFS initiated discussions with several provinces to develop joint agreements for the stimulation of employment among thousands of forest sector workers laid off because of the most severe weakness in wood products markets since the depression of the 1930s.

The energy, mines and resources department becomes involved in forestry through its responsibility for plans and policies relating to energy, and for the Canada Centre for Remote Sensing (CCRS). Wood and mill waste has potential for energy development, and CCRS is engaged in research on remote sensing technology, which has innumerable applications in forestry.

Provincial forestry programs. All provincial forest land with the exception of minor portions in national parks, federal forest experiment stations, military areas and Indian reserves (except in Newfoundland) is administered by the respective provincial

governments.

The provincial forest services have traditionally concentrated on silviculture and forest protection while the federal government tended to focus on silviculture (by way of cost-sharing agreements) and on forestry research. The private sector has concentrated on projects related to timber production, such as inventory, working plans and roads, giving less attention to forest renewal and protection.

The provincial governments now pay for most forest renewal on their Crown lands, either through direct expenditures, or payments to industry for work under tenure agreements or indirect payments.