

## ANALYSIS

This section of the report analyzes the current status of Canadian aquaculture, including jurisdictional agreements, regulatory framework, production statistics, and research and development requirements. It identifies the benefits that can be derived from aquaculture in Canada, as well as the requirements for and the constraints to its development.

### A. *Overview of Aquaculture in Canada*

Since 1967, world aquaculture production has increased ten-fold from 1 million tonnes to 10 million tonnes in 1984. From annual average growth rates of nearly 40 percent in the late 1960's, world aquaculture production increases are now in the order of 6 percent annually. Aquaculture experts have predicted that world aquaculture production could reach 15 million tonnes by the year 2000 based on an annual average growth rate of 2 to 3 percent. However, given the increasing interest in aquaculture worldwide, this is a conservative forecast. Worldwide aquaculture production could reach the level of 15 million tonnes much earlier than the year 2000 if the growth rates experienced since the early 1980's continue uninterrupted. In 1984, world aquaculture production represented just under 10 percent of total world fish production. The comparative figure for Canada is about 1 percent.

The growth of Canadian aquaculture, unlike that in other parts of the world, has been slow and irregular. For example, in 1975, total aquaculture production was reported at around 5,000 tonnes for all species. This was at the time substantially higher than production in Norway. By 1980, however, when Norwegian Atlantic salmon production reached just under 10,000 tonnes, Canadian aquaculture production had dipped to around 4,000. This decrease is explained by a declining production of freshwater trout and oysters, which then constituted the bulk of Canadian aquaculture production. In addition, the extension of the Exclusive Economic Zone to the 200 mile limit led to substantial investment in the traditional fisheries at the expense of aquaculture development. Over the past three years or so, however, there has been a renewed interest in aquaculture and its extension to other species such as salmon and mussels has resulted in Canadian production reaching an estimated 11,000 tonnes valued at over \$32 million in 1986, as shown in the following table.