12.5 Federal support to industry

The government has a multi-faceted program for industrial development. This program includes direct payments to industry which take the form of contracting its S&T requirements and in supporting, through contributions, worthwhile projects required by industry. The government also aims to provide a favourable climate for the private sector through tax, tariff, trade and procurement policies. The government also assists industry by providing, on a cost-recovery basis, testing facilities maintained in government laboratories.

Government contracts for R&D requirement were estimated at $189 million for 1986-87 with the Department of National Defence, EMR and the Department of Communications together accounting for 63% of the contracts.

Grants and contributions to industry were estimated at $276 million for 1986-87. The Department of Regional Industrial Expansion (formerly the Department of Industry, Trade and Commerce) accounted for 55%. Its two major programs were the Defence Industry Productivity Program (DIPP) to assist high technology industry in the defence sector, and the Industrial Regional Development Program (IRDP) which came into effect in 1983 and subsumed among others the Enterprise Development Program (EDP).

NRC, through its Industrial Research Assistance Program (IRAP) and the Program of Industry/Laboratory Projects (PILP), contributes $70 million to industry. The latter program is designed to assist companies in technology transfer from both government and university laboratories.

Payments for R&D in the natural sciences and engineering had a concentration of 28% in Ontario (excluding Ottawa) and 36% in Quebec (excluding Hull).

12.6 Federal support to universities

Total payments to universities were estimated at $611 million in 1986-87 with 87% in the natural sciences and engineering and 13% in the social sciences and humanities. Most of these payments (70%) were for R&D grants made by the three university granting councils: the Natural Sciences and Engineering Research Council (NSERC), the Medical Research Council, and the Social Sciences and Humanities Research Council (SSHRC).

NSERC was the largest of these councils with a 1986-87 budget of $326 million. Since 1981-82 NSERC's budget has grown by 61%.

The Medical Research Council budget was $165 million for 1986-87 and the SSHRC budget was $71 million. The Department of National Health and Welfare provided funds for a $10 million program for health research in universities.

The bulk of the funding in the natural sciences and engineering was going to universities in Ontario (35%) and Quebec (22%).

12.7 Provincial research organizations

Eight provincial governments have established research councils or foundations. Their primary objectives are to provide technical support to local firms and to assist in the development of provincial natural resources. In 1985 total expenditures were estimated at approximately $155 million with about 1,950 people employed. Although relatively small in comparison with other organizations, their impact on industries in their respective provinces is substantial. In aggregate these organizations receive about 37% of their funds as a grant from their own provincial governments. About 20% of their expenditures is derived from contract research on behalf of industry.

The Nova Scotia Research Foundation Corp. is a Crown provincial agency with control vested in a board of directors. Its 1985 expenditures were about $6.3 million. The foundation performs research in fermentation and microbial technology; in chemical engineering including research on arsenic removal, methane removal, food, coal and corrosives; in ocean technology; and in marine and ground geophysics.

The New Brunswick Research and Productivity Council, created in 1962, had a 1985 budget of $7.0 million. The Council's research includes: pest control and pesticide residue, fuel oil and coal, ore processes, mineral smelting, bed combustion of fossil fuels, nuclear reactors, oil rigs, and effects of chemical additives in the food industry.

The Centre de Recherche Industrielle du Québec, created in 1969, had a 1985 budget of $33.4 million. The centre operates research laboratories in both Quebec City and Montreal. It works closely with small- and medium-sized businesses covering various aspects of applied sciences in the creation of new processes and products. It stresses advanced manufacturing techniques and