

Natural sciences. In addition to research and experimental development, data are collected on five other classes of scientific activities in the natural sciences. These activities, often grouped as "related" scientific activities, include: scientific data collection, scientific information, testing and standardization, feasibility studies and scholarship programs. Data are also collected on personnel, sector of performance, object of expenditure, category of R&D, field of science and regional distribution of expenditures and personnel. Complete results are presented in the annual publication *Federal government activities in the natural sciences*, Catalogue No. 13-202.

Total federal government expenditures on activities in the natural sciences for 1974-75 were estimated at \$1,065.8 million, representing almost 5% of the total federal budgetary estimates (Table 9.2). Scientific expenditures were reported by 29 departments and agencies; 11 of them spent more than \$10 million on scientific activities in 1974-75. R&D accounts for almost 72% of the total 1974-75 current expenditures; with slight variations this proportion has held constant for the past 10 years. Scientific data collection — the gathering, processing, collating and analyzing of data on natural phenomena — is the principal related activity accounting for almost one half of the 1974-75 estimated expenditures for such activities. Table 9.3 shows federal scientific expenditure by type of activity and by major department or agency for the years ended March 31, 1975. Principal application of current expenditures by performer is given in Table 9.4.

In 1974-75 approximately 52%, or \$368 million, of federal government current expenditures was for work done within its own establishments. An estimated full-time equivalent of 25,908 persons employed by the federal government were engaged in scientific activities in 1974, 16,355 in R&D work. Employees in the scientific and professional category accounted for 6,838 man-years (Table 9.5).

Almost all payments to extramural performers of scientific activities go either to Canadian industry (50% of 1974-75 current extramural expenditures) or to educational and non-profit institutions (40%). Support of industrial R&D is provided principally through a group of special programs designed to develop a research capacity in Canadian industry by assisting current R&D work. Expenditures under these programs reached \$115 million in 1974-75. Support of research in Canadian universities and related institutions is also provided primarily through grants programs, with expenditures totalling \$135.6 million in 1974-75 (Table 9.6).

Human sciences. In 1971 Statistics Canada conducted an experimental survey of the human and financial resources of the federal government devoted to the human sciences. Such information had become necessary not only to complement data on the natural sciences but also because of the growing importance of these disciplines in policy decisions. The results of this experimental survey were published in *Federal government expenditures on the human sciences*, Catalogue No. 13-545.

The first annual survey of federal government activities in the human sciences was conducted in 1972 and covered most of the federal departments and agencies that have expenditures in these disciplines. As in the natural science survey the resources are measured in terms of two inputs: expenditures and manpower. Data were collected for the following activities: research, general data collection, scientific information, education support and operations studies. Complete results of this survey were published in *Federal government activities in the human sciences 1971-73*, Catalogue No. 13-205.

The latest survey indicates that federal departments and agencies expected to spend about \$306.9 million for activities in the human sciences during the fiscal year 1974-75. This amount represents the total federal financial support of human science activities, whether carried out within government establishments or supported in other sectors under the form of grants, contracts, scholarships or other agreements. Most of the resources, however, some 69%, are spent intramurally for activities performed by government employees. "General data collection" represents the largest activity in the human sciences supported by the federal government. Table 9.7 gives the breakdown of federal expenditures on the human sciences by category of activity and sector of performance.

Research constitutes the second most heavily supported activity with almost one third of the federal resources devoted to the human sciences in 1974-75. Research expenditures are about equally divided between intramural research and the support of research carried out in