

#### 4. Recognizing the importance of academic research and development

### B. ISSUES

#### i) Review Mechanism Committee on S&T

A strong proposal for such a committee was made in the 1977 Lamontagne Senate Report: A Science Policy for Canada.

This was also a major recommendation of the Task Force on Federal Policies and Programs for Technology Development.

It has been suggested that the first task of such a Parliamentary Committee might be to assess existing Federal R&D activities.

#### ii) Contracting-Out of Federal R&D Requirements and Facilities

It has been proposed that the Federal government require individual departments to contract-out more of their R&D needs to industry and universities. Also, consideration might be given to allowing government laboratories to retain the revenues earned by selling specialized R&D services to industries at home and abroad. This approach is followed in a number of European countries.

#### iii) Improve Management of Government R&D

Some Federal laboratories might benefit from a greater degree of industry and provincial government involvement in their management. This might help to make laboratory programs more relevant to industrial needs and provincial priorities. A substantive strengthening of the external boards connected to most federal laboratories has been recommended by many government-initiated studies.

#### iv) Technical Assessment and Approval

Initial consultations with industry representatives generated a suggestion to establish a central Federal S&T authority responsible for the review and approval of all proposals for R&D expenditures before they receive authorized funding. This suggestion is similar to ones made in both the Wright and Lamontagne Reports.

#### v) Co-ordinated Federal & Provincial R&D Efforts

In addition to participating on the external boards of Federal R&D laboratories, Provincial governments might co-ordinate their R&D activities with relevant Federal laboratories operating within their province. Guidelines for such cooperation might be outlined within the framework of ERDA sub-agreements.

### A. BACKGROUND

Universities play a critical role in helping Canada meet the technology challenge. Their basic research keeps Canada in the forefront of important scientific advances around the world, and provides the strong scientific base from which new technologies can be developed. Most importantly, however, they produce highly qualified scientists, engineers, and technically literate managers — the future leaders of governments, industries and institutions. Canada is lagging in its development of these human resources (Appendix E). *Academic R&D plays a vital role in the training of highly qualified personnel.*

However, restricted budgets, increasing enrollments, and rapidly escalating research and operating costs have placed universities in a *critical financial crisis*. Canadian universities are operating with roughly half the resources per student of world-class American and European universities. This threat could seriously erode our university R&D effort, thereby reducing the quantity and quality of specialized human resources.

The recognition and resolution of this impending crisis should be a high priority for both Federal and Provincial governments. Financing and support agreements may have to be re-negotiated with the bilateral intention of providing adequate stable, long-term funding and leadership for our universities.