

PART I



Summary

Part I gives a brief description of the importance of biological diversity and its contribution to sustainable development, and how timely launch of the Commonwealth Science Council's BDGR Programme in 1986 has addressed this issue. Chapter 1 describes the current scenario of the loss of biodiversity and the multitude of responses of different groups of people in developed and developing countries. International efforts to conserve biodiversity are described including those related to the convention on biodiversity recently signed by 170 governments at Rio de Janeiro in June 1992.

The genesis of the CSC's BDGR programme lies in the work done on an under-exploited plant, *Chenopodium*, and in the recommendations of the Kendrew Report. The project has two phases. Phase I consists of the study, use and conservation of under-exploited plants; Phase II comprises expansion of the programme to include both vertebrates and invertebrates, and micro-organisms. While the plan of work under Phase I has been well established, the activities to be undertaken during Phase II remain to be delineated at the operational level.

The structure, thematic programmes and components of the BDGR project are described in Chapter 2. At the operational level the BDGR programme has four processes, namely: (a) interactive dialogue; (b) adaptive transfer of technology; (c) negotiations; and (d) field work at national level. The role of national and regional co-ordinators is also given in this chapter. Development of the two phases of the programme derives strength from its interlinked thematic key components of biodiversity, genetic resources, and tropical forest ecology. Details of activities which have been instrumental in implementing the processes of the programme have been given. These comprise holding of workshops and training courses, preparation of technical documentation, country reports and project proposals, and development of networks.

Activities undertaken in the BDGR programme have resulted in indigenous capacity building. Details of this are in Chapter 3. A programme has been developed on sustainable tropical forestry for the Government of Guyana. Several international collaborations and co-operations have been initiated. Operational models developed within the programme have been used for the implementation of medicinal plants projects, and steps have been taken to establish appropriate computerised databases of relevance to the programme, e.g. the ILDIS database. Training manuals and guide books have been prepared in the area of conservation biology, ethnobotany and investigation of traditional herbal medicines.

Chapter 4 gives the future directions of the programme. These are in line with the UNCED convention, i.e. the conservation of biological resources to ensure sustainable development for the survival of the human race on this Earth. The essential change suggested in the future direction of the BDGR programme is to enlarge its scope and include micro-organisms and animals. Main recommendations for future programmes include: (i) compiling a *materia medica* of ethnobotanical knowledge by involving local people in the gathering of this information; (ii) development of *in situ* and *ex situ* protected areas, national parks, gene banks, botanical gardens and museums as repositories of rare, threatened or endangered germplasm; and (iii) development of the required technology and methods for using local biodiversity on a sustainable basis. Specific actions are proposed together with an indication of an appropriate time frame and estimated costs for undertaking such action.