Australian Government
Department of the Environment and Heritage

Understanding the *Nationally Consistent Approach for Access to and the Utilisation of Australia's Native Genetic and Biochemical Resources* (NCA)

Adoption

On 11 October 2002 the 14 Commonwealth, State and Territory Ministers of Australia constituting the Natural Resource Management Ministerial Council endorsed the *Nationally Consistent Approach for Access to and the Utilisation of Australia's Native Genetic and Biochemical Resources* (NCA).

Background

Natural Resources Sovereignty and the Convention on Biological Diversity (CBD)

Until 1993 genetic resources were commonly considered the 'common heritage of mankind' and their utilisation for new products was largely undertaken without regard to the communities from which the source material was drawn. Thus major discoveries based on natural resources (sometimes involving the use of Traditional Indigenous Knowledge) resulted in no benefits flowing back to the country or community providing that material.

One such example is the antibiotic Erythromycin, which was ultimately derived from a Philippine soil sample. Another is the anti-rejection drug Cyclosporin A. This was developed from a soil fungus found in a sample taken from a nature reserve in what is now Norway's Hardangarvidda National Park. 1997 sales revenue for Cyclosporin based products amounted to US$1.2 billion[1]. Norway has no share in this.

In 1993 the 'common heritage of mankind' doctrine ended when the newly ratified CBD affirmed nations' sovereign rights over their natural biological resources, including their genetic resources. Under the Convention, in return for facilitating access to this material, countries are entitled to a fair and equitable share in the benefits that flow from the utilisation of those resources. This is the third of the three objectives of the Convention, the other two being, the conservation of biological resources and the sustainable use of biological resources. The third objective has proved to be the most difficult to implement.

[1] Page 163, Biodiversity and Traditional Knowledge, Edited by Sarah Laird and published by Earthscan Publications Ltd 2002.

Nevertheless, countries continue to place great importance on finding a way to establish an international market in the commercialisation of genetic resources under the Convention. This urgency is best understood by reference to the economic value of biodiversity to industry. For example, in relation to the pharmaceutical industry, in 1998 the value of sales of pharmaceutical products derived from genetic resources alone was US$75 billion - out of total sales of US$300 billion.[2] Most of these products were developed from material collected before the CBD came into being or before nation states began to implement CBD effective regulatory frameworks.

Australia's Response to the CBD

Australia controls approximately 10% of the world's natural genetic and biochemical resources. Most of that material has yet to be evaluated for its commercial potential, indeed, a significant portion of Australia's biota still has to be described. As a megadiverse country, Australia therefore stands to gain considerable economic, social and environmental benefits from its utilisation.

Furthermore, controlling access to genetic resources and thereby sharing in the flow of benefits from the utilisation of genetic resources will help to conserve biodiversity by correcting the market failures that contribute to its erosion. Briefly, these market failures arise because the values of biodiversity, including resources for use in agriculture and medicine, environmental services, and existence values, result in diffuse and longer term benefits, whereas land use patterns which destroy biodiversity often bring immediate benefits to local communities.[3]

By controlling access, governments can attempt to channel these diffuse and longer term benefits into more immediate and tangible ones and hence increase market and community incentives for biodiversity conservation.

Development of a Shared Goal

This was reflected in the development of Australia's *National Strategy for the Conservation of Australia's Biological Diversity*, which states at Objective 2.8:

> "Ensure that the social and economic benefits of the use of genetic material and products derived from Australia's biological diversity accrue to Australia."

To pursue this goal, the Department of Environment and Heritage (Environment Australia), as lead Commonwealth (federal) agency for CBD implementation, initially undertook action in four areas:

- firstly, it played a significant role in international negotiations leading to the development and adoption by the CBD of world's best practice guidelines for access to genetic resources(CBD COP6 DecsionVI/24 – the Bonn Guidelines);
- secondly, it has developed a legal framework to manage access to and the use of genetic resources in Commonwealth (federal) areas. This will be introduced by regulations under section 301 of the *Environment Protection and Biodiversity Conservation Act 1999*;

[2] Ibid, page 246-247.

[3] K Day-Rubenstein and G B Frisvold, 'Genetic Prospecting and Biodiversity Development Agreements' (2001) 18 *Land Use Policy* 205, 205

- thirdly, it integrated genetic resources management into Australia's National Biotechnology Strategy; and
- fourthly, it has worked with Australian State and Territory Governments and with other involved Commonwealth departments and agencies to establish a common approach to genetic resource management.

Key aspects of the Nationally Consistent Approach for Access to and the Utilisation of Australia's Native Genetic and Biochemical Resources (NCA**)**

The NCA:

- complements action by all Australian Governments to conserve biodiversity;
- identifies the policy principles of a nationally consistent approach;
- identifies practical considerations to be taken into account in applying the agreed principles;
- is consistent with governments' obligations under the National Strategy for the Conservation of Australia's Biological Diversity;
- supports the ecologically sustainable use of biodiversity;
- provides greater certainty for industry and researchers;
- requires the introduction of terms and conditions of access to Australian resources that Australia would be prepared to meet if introduced by other countries;
- respects indigenous biodiversity knowledge and its holders;
- requires consultation with stakeholders and indigenous peoples; and
- is flexible while encouraging cooperation between jurisdictions.

Specific Issues

Ecologically Sustainable Use

The NCA provides that the collection of native biological material is undertaken in an ecologically sustainable and ethical way.

Impediments to Investment

Australia is a developed country with a mega biodiversity, but to date business investment in biodiscovery has been hampered by the absence of legal frameworks providing certainty to the biotechnology industry. Major pharmaceutical companies point out that legal certainty of the provenance of biological discoveries is an essential prerequisite to the massive and sustained investment needed to develop new products. The Australian biotechnology industry and State Governments have also pointed to the absence of legal frameworks as inhibiting investment in Australia.

The NCA establishes a common basis for new or revised legislation in all Australian jurisdictions and by so doing provides certainty to industry. Commonwealth regulations applying in Commonwealth areas will be seen to implement the NCA. At least one state jurisdiction has commenced preparation of legislation to give effect to the NCA while other jurisdictions are reviewing or developing their existing legislation and policy positions.

Australia's Comparative Advantages

Positive perceptions about Australia's approach to the utilisation of its genetic and biochemical natural resources will encourage domestic and foreign biodiscovery investment into Australia and focus attention on Australia's comparative advantages, namely its:

- mega biodiversity;
- well established system of commercial and intellectual property law;
- honest and stable public administration;
- intended legal frameworks to facilitate access; and
- strong scientific and research base offering collaborative opportunities.

The NCA was drafted with these advantages in mind when providing a basis for commonality in the legal frameworks to be introduced or revised by jurisdictions.

World's Best Practice

The effectiveness of early overseas legislation among Andean Pact countries and in the Philippines suffered because it was perceived as prescriptive and did not adequately allow outcomes to be determined by market forces. Today, over 100 countries are developing access legislation. To assist them, the CBD has developed world's best practice guidelines - the *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilisation* (Bonn Guidelines). The Bonn Guidelines provide for a more flexible and practical approach.

Many aspects of the Bonn Guidelines are consistent with the recommendations of the Australian Government's own earlier national *Inquiry into Access to Biological Resources in Commonwealth Areas* (the Voumard Report 2000). In part, this reflects the high degree of congruence between the Bonn Guidelines and existing policy and legislative approaches among Australian jurisdictions and also reflects the positive role Australia played in the development and adoption of the Guidelines.

The NCA makes adoption of the Bonn Guidelines explicit in its Preamble in which all Australian Governments state their acceptance of the invitation by the CBD to apply the Guidelines. The connection is further reinforced by including key elements of the Guidelines among the features of the NCA. The Bonn Guidelines were adopted by the CBD at its 6th Conference of Parties in the Hague on 19 April 2002.

Australia is likely to be among the first developed, megadiverse countries to introduce legal frameworks for managing genetic resources and there is growing international interest in Australia's approach from other governments, industry and the scientific community. The publication of the NCA will add to this interest.

Building on Earlier Policy Work

The NCA builds on the earlier work of the Commonwealth State Working Group established by the Australian and New Zealand Environment Conservation Council (ANZECC) in 1994 and which reported to First Ministers in 1996 on action required to establish a Nationally Consistent Approach. Little substantive action was taken in response at that time. Since then there has been a renewal of interest following recent advances in biotechnology and an increasing appreciation of the value and extent of Australia's genetic resources.

Integration of the NCA with Other Policy Authorities

Policy authorities that support the NCA are the:

- 3rd Objective of the Convention on Biological Diversity (CBD);
- National Strategy for the Conservation of Australia's Biological Diversity; and
- National Biotechnology Strategy (Commonwealth).

In addition the NCA incorporates consistency with the:

- National Competition Policy;
- *Trade Practices Act 1974;*
- *Native Title Act 1993;* and
- Intergovernmental Agreement on the Environment.

Indigenous Biodiversity Knowledge

The NCA quotes the obligation set out in the National Strategy for the Conservation of Australia's Biological Diversity to ensure that the use of traditional biological knowledge in the scientific, commercial and public domains proceeds only with the cooperation and control of the traditional owners of that knowledge and to ensure that the use and collection of that knowledge results in social and economic benefits to the traditional owners. Accordingly, the NCA provides as a principle, that governments recognise the need to ensure the use of traditional knowledge is undertaken with the cooperation and approval of the holders of that knowledge and on mutually agreed terms. In addition, the NCA provides that any framework must be developed in consultation with indigenous peoples.

Support for Non-commercial Scientific Research

The NCA establishes as a principle the obligation to facilitate continued access for non-commercial scientific research, particularly taxonomic research. The document also provides that equitable sharing of benefits between access providers and applicants may include agreement to share research outcomes with the provider or to make research outcomes available to the public through publication or related activities as alternatives to the negotiation of a legally binding benefit-sharing agreement between the access provider and the person, institution or corporation seeking access.

The inclusion of these provisions reflects the importance placed on avoiding barriers to non-commercial scientific research, particularly taxonomic research.

Attachment: Extract from NRM Communiqué