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OPEN-ENDED EXPERT WORKSHOP ON  
CAPACITY-BUILDING FOR ACCESS  
TO GENETIC RESOURCES AND  
BENEFIT-SHARING

Montreal, 2-4 December 2002

**COMPILATION OF SUBMISSIONS ON NEEDS AND PRIORITIES OF  
PARTIES AND INFORMATION ON EXISTING INITIATIVES ON  
CAPACITY-BUILDING FOR ACCESS AND BENEFIT-SHARING**

*Addendum*

**ADDITIONAL SUBMISSIONS BY GOVERNMENTS**

*Note by the Executive Secretary*

1. The present addendum to the compilation on needs and priorities of Parties and information on existing initiatives on capacity-building for access to genetic resources and benefit-sharing contains four submissions from Governments that were received after the circulation of the original version of the compilation and the first and second addendum thereto (UNEP/CBD/ABS/EW-CB/1/INF/2 and Add.1 and 2), namely:

(a) A submission dated 29 November 2002 from Cambodia on national needs and priorities on capacity-building for access to genetic resources and benefit-sharing (see pages 2-3);

(b) A submission dated 18 December 2002 from Indonesia on national needs and priorities on capacity-building for access to genetic resources and benefit-sharing (see pages 4-5);

(c) A submission dated 5 December 2002 from the Republic of Korea on national needs and priorities on capacity-building for access to genetic resources and benefit-sharing (see pages 6-8);

(d) A submission dated 19 December 2002 from the United States of America on international capacity-building activities for access and benefit-sharing of genetic resources by U.S. Government agencies (see pages 9-12).

2. The four submissions are reproduced herewith in the language and form in which they were received by the Secretariat of the Convention.

## **Capacity Building For Access to Benefit-Sharing Questionnaire To Assist In Determining Needs And Priorities of Parties**

**I. On the basis of the following list of key areas for capacity-building in relation to access to genetic resources and benefit-sharing:**

**A. Three top priority areas requiring capacity-building/strengthening in Cambodia to assist with implementation of ABS arrangements:**

- ⇒ Development of a national ABS policy including the development of a facility for the purpose of access and distribution of genetic resources and benefit-sharing.
- ⇒ Development of a database management system in relation to biodiversity for the purpose of enhancing CHM.
- ⇒ Development of a regional ABS policy.

**B. Three priority areas in which Cambodia has the most expertise and experience to share with others to assist in the implementation of ABS arrangements:**

- ⇒ Development of national research and development facilities in scientific and technical areas
- ⇒ Monitoring and assessment of capacity building initiatives

**II. For each of the following areas, please number (as appropriate) the suggested capacity building activities, by order of priorities:**

According to key areas suggested in the questionnaires, following areas are ranked based on the needs of the country.

- A. *Development of national ABS policy, administrative and legislative measures (1, 2, 3,4)*
- B. *Funding and Resource management (1, 2)*
- C. *Development of information systems for information management and exchange (1,2)*
- D. *Development of national research and development facilities in scientific and technical areas (1,2,3)*
- E. *Monitoring and assessment of capacity building initiatives (1,2,3)*
- F. *Valuation of genetic resources and market information, including production and marketing strategies (1,2,3)*
- G. *Assessment, inventory and monitoring of biological resources and traditional knowledge, including taxonomic capacity (1,2)*
- H. *Elaboration and implementation of contractual agreement on ABS (1,2,3,4)*

**III. For each of the key areas listed above, please indicate whether capacity-building have already been carried out or are being considered.**

The government of Cambodia has more or less done some parts of the priority action C and E. Others are being considered and are welcome for a financial assistance to get them done.

**IV. On the basis of needs and priorities established by Parties, the workshop will assist identifying the approach means of implementation and promote coordination among the various actors involved in capacity-building initiatives. What are your views on how best the following entities could facilitate capacity-building to assist Parties with implementation of ABS arrangements:**

1. The Secretariat,
2. GEF,
3. Inter-governmental organization,
4. Regional networks
5. NGOs,
6. Bilateral agreement/donors

**V. What other suggestions do you wish to make on capacity-building on ABS**

Measures related to a national or a regional ABS policy should be initiated by the country or a regional economy integration organization. Participation of a local community or a development country in the ABS should be given a priority.

## NEEDS AND PRIORITIES OF CAPACITY BUILDING FOR ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING IN INDONESIA

1. The areas where identified as current priorities for capacity-building related to access to genetic resources and benefit sharing are :
  - a. Establishing national framework for protection of traditional knowledge associated with genetic resources including :
    - (1) Formulating national regulation related to access to genetic resources and benefit sharing
    - (2) Establishing national institution which has responsibilities for management of access to genetic resources and benefit sharing
    - (3) Establishing systems on access to genetic resources and benefit sharing
  - b. Increasing awareness at all level government, local government, indigenous and local communities
  - c. Training of trainer for officials at level of central and local government
  - d. Bridging communication between traditional tribes with investor
  - e. Developing capacity to do valuation of genetic resources with commercial value and IPR of traditional knowledge in associated with genetic resources
  - f. Establishing model for benefit sharing
  - g. Demonstration project for access to genetic resources and benefit sharing
  - h. Inventory and documentation of genetic resources and traditional knowledge
  
2. The areas in which Indonesia has the most expertise and experience to share with others to assist in the implementation of access and benefit-sharing arrangements

### *Development of national research in scientific and technical areas*

3. For each of the key areas list above, please indicate whether capacity building initiatives have been already carried out or are being consideration

Capacity building initiatives have been carrying out :  
Formulating national regulation related to access to genetic resources and benefit sharing

Capacity building initiatives are being consideration :

- a. Establishing national institution which has responsibilities for management of access to genetic resources and benefit sharing
- b. Establishing systems on access to genetic resources and benefit sharing
- c. Increasing awareness at all level government, local government, indigenous and local communities
- d. Training of trainer for officials at level of central and local government
- e. Bridging communication between traditional tribes with investor
- f. Developing capacity to do valuation of genetic resources with commercial value and IPR of traditional knowledge in associated with genetic resources
- g. Establishing model for benefit sharing
- h. Demonstration project for access to genetic resources and benefit sharing

- i. Inventory and documentation of genetic resources and traditional knowledge
4. On the basis of needs and priorities established by Parties, the workshop will assist in identifying the appropriate means of implementation and promote coordination among the various actors involved in capacity building initiatives. What are Indonesia views on how best the following entities could facilitate capacity building to assist Indonesia with the implementation of ABS arrangement :
- a. The Secretariat → providing moduls related to access to genetic reources and benefit sharing
  - b. The GEF → funding for capacity building activites such as development national framework related to genetic reosurces and benefit sharing and development model for benefit sharing
  - c. Other bilateral and multilateral donors → funding for capacity building activities in transfer technology such as conducting training of trainer at all levels
  - d. Intergovernmental organizations → assisting in developing of appropriate national framework including regulation, institution, and system on access to genetic resources and benefit sharing
  - e. Regional Networks → exchange of experiences and informations
  - f. Non-governmental organizations → training education for local and indigenus communities; assisting in negotiation skill relating to access and benefit sharing to local and indigenus communities
  - g. Private Sector/Industry → technology transfer to the provider of genetic resources and collaborative research with research institutes or universities
  - h. Scientific/Academic Institutions → inventories, research and development of technological options of genetic resources, including taxonomic capacity
5. What other suggestions do you wish to make on capacity building on access and benefit sharing
- a. Establishing system on access to genetic resources and fair and equitable sharing of benefit
  - b. Strengthening capability of local and indigenus communities to do negotiation with users of genetic resources
  - c. Strengthening the capacity of local and indigenus communities to enable them to benefit from the use of their traditional knowledge related to genetic resources

Capacity-Building for Access and Benefit-Sharing  
Questionnaire To Assist In Determining Needs  
And Priorities of Parties

Republic of Korea's Submission

The purpose of this questionnaire is to identify the needs and priorities of Parties and stakeholders in the implementation of access and benefit-sharing arrangements.

- I. On the basis of the following list of key areas for capacity-building in relation to access to genetic resources and benefit-sharing, please indicate:
  - A. The three top priority areas requiring capacity-building/strengthening in your country to assist with the implementation of ABS arrangements
    - 1) Development of national research and development facilities in scientific and technical areas
    - 2) Assessment, inventory and monitoring of biological resources and traditional knowledge, including taxonomic capacity
    - 3) Development of national access and benefit-sharing policy, administrative and legislative measures
  - B. The three areas in which your country has the most expertise and experience to share with others to assist in the implementation of access and benefit-sharing arrangements.
    - Not applicable to Rep. of Korea because it is the just beginning stage of research on genetic resources.

- II. For each of the following areas, please number the suggested capacity building activities, by order of priority:
- A. Development of national ABS policy, administrative and legislative measures
    - 1) Human resource development of Governments and stakeholders for participant in decision making and implementation
    - 2) Institutional strengthening
    - 3) Public education and awareness
  - B. Elaboration and implementation of contractual agreement on ABS
    - 1) Human resources development of Government and stakeholders, through education and training
    - 2) Public education and awareness of relevant stakeholders
    - 3) Establishment of necessary scientific and information management facilities
    - 4) Information exchange mechanisms to learn from others experiences
  - C. Development of information systems for information management and exchange
    - 1) Development of human resources
    - 2) Establishment of information systems and management facilities
  - D. Assessment, inventory and monitoring of biological resources and traditional knowledge, including taxonomic capacity
    - 1) Development human resources through education and training
    - 2) Institutional strengthening
  - E. Valuation of genetic resources and market information, including production and marketing strategies
    - 1) Carrying out of research, inventories and national case studies on endemic genetic resources
    - 2) Establishment of relevant national institutions
    - 3) Human resources development with respect to production and marketing strategies

- F. Development of national research and development facilities in scientific and technical areas
  - 1) Institutional strengthening
  - 2) Technology transfer
  - 3) Human resources development
- G. Funding and resources management
  - 1) Institutional strengthening
  - 2) Human resources development
- H. Monitoring and assessment of capacity building initiatives
  - 1) Human resources development
  - 2) Institutional strengthening
  - 3) Development of instruments, tools and indicators

III. For each of the key areas listed above, please indicate whether capacity-building initiatives have already been carried out or being considered.

- National research program and fundamental facilities

IV. On the basis of needs and priorities established by Parties, the workshop will assist in identifying the appropriate means of implementation and promote coordination among the various actors involve in capacity-building initiatives. What are your views on how best the following entities could facilitate capacity-building to assist Parties with the implementation of ABS arrangements:

- Scientific/Academic Institutions
- Intergovernmental organizations

V. What other suggestions do you wish to make on capacity-building on access and benefit-sharing

- It is necessary to widen the applicable category of capacity-building on access and benefit-sharing for the countries of which research capability on genetic resources is under development or less developed.



## **International Capacity-building Activities for Access and Benefit-sharing of Genetic Resources by U.S. Government Agencies**

The United States Government is a world leader in capacity-building activities on access and benefit-sharing of genetic resources, especially in developing countries and countries with economies in transition. U.S. Government agencies for years have been carrying on a wide variety of such activities. This paper highlights some of the many capacity-building activities carried on by U.S. agencies and indicates sources for obtaining additional information.

### U.S. Agency for International Development (USAID)

USAID pioneered and now supports one of the most comprehensive biodiversity conservation programs of any bilateral donor. USAID has contributed to safeguarding biological diversity by its efforts to (1) improve the management of biologically significant areas, (2) promote the sustainable use of biological resources, and (3) support the conservation of genetic diversity. USAID works closely with local communities and governments to help them change policies, institutions, incentives, and other factors to give people using the land the authority and incentive to manage their own resources sustainably, and to enable host country non-governmental organizations (NGO) and government agencies to provide conservation-related services. USAID has supported sustainable natural resources management and biodiversity conservation in over 60 countries over the last nine years. See [www.usaid.gov/environment/imprcons.html](http://www.usaid.gov/environment/imprcons.html).

### National Park Service (NPS)

The United States has considerable experience as a provider of genetic resources. The NPS conserves many special and rare plant, animal and microbial genetic resources. Yellowstone National Park with its geysers and other unique sites has attracted much attention. With assistance from the World Foundation for Environment and Development (WFED), a U.S. NGO, the NPS is revising its access and benefit-sharing policy. The NPS and WFED have been sharing with others their experiences in developing such a policy, including at the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD) and at the World Summit on Sustainable Development (WSSD). Further information about the Yellowstone experience can be found at [www.nps.gov/yell/nature/thermophiles/biopro.html](http://www.nps.gov/yell/nature/thermophiles/biopro.html). The U.S. Government has submitted detailed information about the NPS's successful approach to access and benefit-sharing of genetic resources in both the World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO).

### Smithsonian Institution

The Smithsonian Institution is a world leader in, among other things, taxonomy and systematic biology. It plays a key role in the CBD's Global Taxonomy Initiative. The National Museum of Natural History's Department of Systematic Biology has worked with a worldwide network of colleagues to conduct research programs to explore the diversity of our natural world through field studies in over 120 countries. The observations and collections of biological specimens are an important resource for the Smithsonian Institution's staff and foreign partners. See [www.nmnh.si.edu/sysbiology](http://www.nmnh.si.edu/sysbiology). The Smithsonian Tropical Research Institute in Panama helps build our understanding of

key biological diversity and ecological principles (see [www.stri.org](http://www.stri.org)). These units, with the National Zoological Park and the Smithsonian Environmental Research Center, all provide training for taxonomists, systematists, ecologists, biologists, anthropologists, and decision makers from around the world. The Zoo's Monitoring and Assessment of Biodiversity education and training programs transfer information and technologies to scientists, resource managers and decision-makers around the world. To date SIMAB has trained more than 400 individuals from over 40 countries (see [www.si.edu/simab/training.htm](http://www.si.edu/simab/training.htm)). The Smithsonian is a partner with all of the major biological diversity informatics initiatives (GBIF, IABIN, ALL, NABIN) to make sure that its data resources are available for scientific and management analyses worldwide. Through formal classes, internships, fellowships, field work and collaborative research, Smithsonian researchers provide training and capacity building in all parts of the world.

#### National Institutes of Health (NIH)

In 1993, the NIH initiated the International Cooperative Biodiversity Group (ICBG) grant program, which seeks to use the process of discovery and development of new drugs from natural products to build scientific and economic capacity relevant to human health and biodiversity conservation. The projects funded under the ICBG framework train foreign scientists, enhance their laboratory and field research capacity, and develop their technical tools and policy models that enhance inventory, collection and analysis of biodiversity and sustainable harvesting of medicinal plants. To date, institutions in 12 countries in Latin America, Africa and Asia have participated in the program, and about 3,000 foreign scientists have received some form of training. Since 1987, the NIH's National Cancer Institute (NCI) has sponsored approximately 100 foreign scientists from over 30 countries in training in such areas as drug discovery, collection, screening and bioassay-guided natural product isolation. Also, the NCI has developed and shared with others bilaterally and at multilateral fora a model access and benefit-sharing agreement. For more information on the NIH and the NCI, see [www.nih.gov](http://www.nih.gov).

#### U.S. Department of Agriculture (USDA)

From 1990 through 2001, USDA conducted or supported 127 plant explorations to 47 countries. These collaborative explorations, which always included host-nation participants, were conducted following guidelines in USDA's Code of Conduct for Plant Exploration, which had a major influence on the development of the Food and Agriculture Organization's International Code of Conduct for Plant Germplasm Collecting and Transfer. The foreign partners benefited from the training in collection and genetic research associated with these plant explorations. USDA has provided developing countries and countries with economies in transition technical assistance in, among other things, genebank database design, development and management, enhancing plant diversity conservation infrastructure, field survey techniques, and ecogeographical information management. See [www.ars-grin.gov/npgs](http://www.ars-grin.gov/npgs). During the last decade, USDA distributed, free of cost and use restrictions, an average of about 37,000 plant genetic resource samples every year mainly to developing nations or nations with economies in transition. These samples constitute very valuable and significant benefits to recipient nations, where many are already incorporated into crop breeding programs. Furthermore, USDA has been providing its genebank management software and database (GRIN) free-of-charge to genebanks in developing nations, and trained personnel from those nations in its use. See [www.ars-grin.gov](http://www.ars-grin.gov).

### U.S. Patent and Trademark Office (USPTO)

USPTO provides training and technical assistance to governments to increase the awareness of the importance of intellectual property rights (IPR) and help them to protect genetic resources and obtain benefit-sharing. Its Visiting Scholars Program for officials from around the world fosters a better understanding of international intellectual property obligations and norms and, using the United States' system as an example, provides information on the patentability requirements for biotechnology inventions, including DNA sequences, plants and animals. USPTO recently has conducted training sessions on patents and biotechnology in Asia and Latin America. It also has held training seminars in Africa and Asia that were, in part, directed at the use of material transfer agreements and technology transfer systems. In addition, USPTO prepared a paper for the June 2001 TRIPS Council that described in detail how contracts could be used to meet Contracting Parties obligations under the CBD and explained how provisions of the TRIPS Agreement were supporting such contractual provisions. At the TRIPS Council in late 2002, the U.S. delegation submitted a paper on an access regime that drew on the National Park Service experience and suggested that a similar regime could be adapted to the legal structures of other countries to regulate access to genetic resources and traditional knowledge and to ensure benefit-sharing. For general information about USPTO and its activities see [www.uspto.gov](http://www.uspto.gov).

### USDA Forest Service (USFS)

USFS shares its impressive wealth of expertise in sustainable forest management and biodiversity conservation with other governments through its international programs. It operates a variety of programs that, directly or indirectly, help build capacity with access and benefit-sharing of genetic resources. These programs include forest monitoring/remote sensing/GIS, forest health/invasive species, migratory species/habitat management, watershed management, protected areas/ecotourism, forest products, and sustainable forestry practice. USFS works with partners in Latin America, Africa, Asia and Europe. For more details, see [www.fs.fed.us/global/aboutus/tc/welcome.htm](http://www.fs.fed.us/global/aboutus/tc/welcome.htm).

### National Science Foundation (NSF)

NSF funds basic research at U.S. universities, including research on biodiversity, biological resources, and human interactions with the environment. The results of all research funded by NSF are made freely available to the world scientific community. Large numbers of students from other countries, who are enrolled in U.S. universities, receive advanced training in science and engineering through participation in research projects supported by NSF. The NSF-funded Plant Genome Research Program involves a collaborative effort of scientists from Asia, the Americas, the Middle East, Australia and Europe. See [www.nsf.gov/bio/dbi/dbi\\_pgr.htm](http://www.nsf.gov/bio/dbi/dbi_pgr.htm).

### U.S. Geological Survey (USGS)

Through its Biological Informatics Program, the USGS develops and applies innovative information technologies and practices to the management of biological data, information and knowledge resulting from worldwide research to increase the value to our researchers and other customer groups. These innovations address all facets of the life-cycle of biological information, from collection, organization and description, through

discovery, retrieval, analysis and application, to dissemination and disposition. Program objectives are advanced through establishing partnerships with other government and non-government science organizations. The USGS shares its expertise and information technologies with countries in the Western Hemisphere through the Inter-American Biodiversity Information Network (IABIN), a regional initiative to promote compatible means of collection, communication, and exchange of biodiversity information relevant to decision-making and education using the Internet. See [www.iabin-us.org](http://www.iabin-us.org). Further, the USGS is a founding member and leading contributor to the Global Biodiversity Information Facility (GBIF), which seeks to make the world's biodiversity data freely and universally available. GBIF works cooperatively with and in support of several other international organizations concerned with biodiversity. These include the CBD's Clearing House Mechanism and the Global Taxonomy Initiative and regional biodiversity information networks. See [www.gbif.org](http://www.gbif.org). For more information on the USGS see [www.biology.usgs.gov](http://www.biology.usgs.gov). International resources available through the U.S. National Biological Information Infrastructure can be assessed at [www.nbi.gov/geographic/international/index.html](http://www.nbi.gov/geographic/international/index.html).