

**PERU'S EXPERIENCE OF THE PROTECTION OF TRADITIONAL
KNOWLEDGE AND ACCESS TO GENETIC RESOURCES**

I. INTRODUCTION

1. Peru is situated in the west-central part of the South American continent and in the south eastern part of the Pacific basin. The conditions in this tropical and sub-tropical geographical area are of global importance from a scientific, economic and social standpoint and the region's marine eco-system has substantial hydrological potential; the Cordillera of the Andes; the Amazon basin with its considerable biological potential; and the Titicaca basin, the highest lake in the world.

2. This geographical setting places Peru among the ten countries with the most extensive biodiversity in the world, which are also known as "mega-diverse countries", because of their range of eco-systems, species, genetic resources and indigenous cultures with valuable knowledge.

3. Peru has the second largest forest area in Latin America (13 per cent of the Amazonian tropical forest) and the fourth at the global level. There are 11 eco-regions, comprising the cold seas, the tropical seas, the coastal desert, the dry equatorial forests, the tropical forests of the Pacific, the steppe, the high wet forests (high forests), Amazonian tropical forests (low forests), and the palm savannah. Of the 107 biozones recognized at the global level, 84 can be found in Peru. The wide diversity of eco-systems has led to the development of many groups of people with their own cultures and notable technological, culinary and cultural accomplishments.

4. Peru also has a wide diversity of species. It is estimated that there are approximately 25,000 species of flora, of which 30 per cent are endemic. Regarding fauna, Peru has the greatest diversity of fish in the world, it has the second largest number of species of birds and the third of amphibians and mammals. There are also a large number of micro-organisms, soil and seabed organisms.

5. The diversity of genetic resources means that Peru is one of the most important global centres for germplasm. Peru has the widest variety of potatoes, chili peppers, Andean grains, Andean roots and tubers. It has the second largest number of varieties of maize, a wide variety of fruit, medicinal, ornamental, and food plants and indigenous domestic animals. This great diversity of resources and favourable natural features gives Peru significant comparative advantages that allow diversified agricultural production throughout the year.

6. In addition to this natural wealth, mention should also be made of Peru's cultural diversity. 14 groups of languages have been identified, together with at least 44 distinct ethnic groups, of which 42 are in Amazonia. These aboriginal groups possess important knowledge about the uses and properties of species, the diversity of genetic resources (4,400 plants have known uses and there are thousands of varieties), as well as cultural and technical ways of managing their eco-systems. These indigenous and local communities are, however, increasingly threatened by the colonization of the

Amazonian forest and by the introduction of inappropriate technology. Recent studies have shown that 11 indigenous ethnic groups have disappeared since 1950. Consequently, the conservation of the natural habitat and cultural traditions are of the utmost importance.

7. Despite Peru's exceptional wealth of natural resources, these have not always been used properly to generate economic benefits and employment and provide funds to assist sustainable development, the people's welfare and progress in the country. This is due in part to the implementation of inappropriate policies, the lack of financial resources, problems related to the drugs traffic, critical poverty, insufficient technical experience and low levels of education. Consequently, there is growing recognition of the need for a joint effort by the Government, production sectors and civil society as a whole in order to put into effect appropriate policies to raise the people's standard of living and utilize natural and ecological resources in a sustainable way. The process of introducing environmental variables and factors into Peru's policies, both at the national, regional and international levels, has already begun through the enactment of appropriate legislation and active participation in the competent international forums.

II. NATIONAL LEVEL

8. The protection and sustainable use of biodiversity, genetic resources and traditional knowledge, are the subject of growing concern and a new approach by the Peruvian Government, with emphasis on global consideration of this issue, in order to bring society into harmony with nature through sustainable development and to include social aspects and environmental protection in economic activities. In order to provide an appropriate legal framework that will allow these objectives to be met, in recent years up-to-date legislation has been drawn up and enacted and a national strategy developed. The main legal instruments in this respect are: the Environmental Code – Legislative Decree No. 613; the National Strategy and the Law on the Conservation and Sustainable Use of Biological Diversity – Law No. 26839; the Law on National Protected Areas – Law No. 26834; the proposal on a Protection Regime for the Collective Knowledge of Indigenous Peoples and Regulation of Access to Genetic Resources. Mention should also be made of the Forest and Woodland Fauna Law – Law No. 27308 – and the Law on the Sustainable Use of Medicinal Plants – Law No. 27300.

9. In addition, special constitutional mandates on the sustainable use of natural resources, environmental protection, the development of Amazonia and the integral development of groups originating in Amazonia have been added to Peru's political constitution. Provisions on "ecological crimes" have also been included in the new Penal Code. In the early 1990s, two decentralized public authorities were created (the National Institute for Natural Resources – INRENA – and the National Environmental Council – CONAM), whose task is to promote and conserve natural resources and sustainable development.

A. ENVIRONMENTAL AND NATURAL RESOURCES CODE

10. The Environmental and Natural Resources Code (Legislative Decree No. 613) was enacted on 7 September 1990. It is the first comprehensive domestic legal instrument on the environment and it sets out the major objectives, policies, principles and provisions for the implementation of the action programmes essential for sustainable development in Peru. The Code states that Peru's ecological and biological systems and its genetic diversity are to be considered part of the national heritage and that their protection and conservation are of social interest. Other important features of the Code are the provisions on scientific research, the use of clean technologies, the precautionary principle, the establishment of protected areas and nature reserves, greater participation by civil society, NGOs and interest groups such as indigenous and local communities in the development of environmental policies, environmental dissemination and education, and safety measures concerning the discharge of contaminants and toxic waste. The Code also promotes the use of local clean technologies of the

indigenous communities (Article 29). A number of amendments have been made to the Code since 1990 in order to adapt it to new situations and requirements. The latest updating was on 20 January 1998.

B. NATIONAL STRATEGY AND LAW ON THE CONSERVATION AND SUSTAINABLE USE OF BIOLOGICAL DIVERSITY

11. The national strategy elaborated in 1994 has the following objectives: (a) to conserve the biological diversity of the essential ecosystems, species, genes and ecological processes on which the survival of species depends; (b) to promote fair and equitable sharing of the benefits arising out of the utilization of biological diversity; (c) to promote education, the building of human and institutional resource capacity, the exchange of information, scientific research, and the transfer of technology; and (d) to promote Peru's economic development on the basis of sustainable use of biological diversity and the promotion of active participation by the private sector. The national strategy recognizes that the conservation and sustainable use of biological diversity calls for a comprehensive approach that includes all sectors of civil society. In order to achieve the objectives set, a number of measures have been adopted, for example, the development of projects and action programmes, quantification of the national heritage, classification of the major ecosystems and principal ethnic groups, dissemination of information and training of technical staff. The CONAM is the national body responsible for putting the national strategy into effect.

12. The Law on the Conservation and Sustainable Use of Biological Diversity – Law No. 26839 – was enacted on 8 July 1997 in order to put into effect the principles and definitions in the Convention on Biological Diversity. It also underlines the importance of the national strategy as the major tool for implementing the Law. It states that all Ministries, decentralized public bodies and other competent bodies must introduce and implement the requirements laid down in the national strategy. Another important aspect of the Law is the recognition of the value of the knowledge, innovations and practices of farming and indigenous communities for the conservation and sustainable use of biological diversity. It therefore includes the principle of the fair and equitable sharing of the benefits arising out of traditional knowledge and the use of biological diversity, as well as prior informed consent for their utilization.

C. LAW ON NATIONAL PROTECTED AREAS

13. The Law on National Protected Areas – Law No. 26834 – was enacted on 17 June 1997 with the aim of providing a legal framework for the establishment and management of protected natural areas. Since 1961, a number of protected natural areas have been established, including the following: the National Park and Biosphere Reserve of Manu, the National Reserve of Pacaya-Samira, the National Mangrove Sanctuary of Tumbes, the Reserve Zone of Tambopata-Candamo, the National Park of Huascarán, the Nature Reserve of Paracas, the National Reserve of Pampa Galeras, the National Sanctuary and Lagoons of Mejía, the National Reserve of Lomas de Lachay and the National Sanctuary of Ampay. The establishment of national protected areas has greatly contributed to the conservation of many species, several of them in danger of extinction or virtually extinct. In order to develop and implement appropriate action programmes, in 1999 a Master Plan for Protected Natural Areas was approved and the National Strategy for Protected Natural Areas was adopted.

D. PROPOSED PROTECTION REGIME FOR THE COLLECTIVE KNOWLEDGE OF INDIGENOUS PEOPLES AND REGULATION OF ACCESS TO GENETIC RESOURCES

14. In recognition of the importance of having an appropriate legal framework to protect the traditional knowledge of the indigenous peoples and of regulating access to genetic resources, in 1996 the Peruvian Government set up a Multilateral Committee to conduct studies and draw up draft legislation. The Committee was composed of fifteen national bodies with competence in various

sectors, including officials dealing with intellectual property, the environment, research and development, public health, trade and industry, agriculture and fisheries. The first draft was terminated in May 1998. Broad consultations were then held with the private sector, NGOs and sectors representing indigenous communities. This process yielded a number of constructive suggestions and recommendations which proved very useful for the new text of the draft, which was published in the official journal "*El Peruano*" of 21 October 1999. A new round of consultations then took place and led to a revised version of the proposal for the Protection Regime for the Collective Knowledge of Indigenous Peoples and Regulation of Access to Genetic Resources, which was published in the official journal "*El Peruano*" on 31 August 2000.

15. The proposed legislation is ambitious and comprehensive. The objectives of the legal framework for the protection, conservation and sustainable development of genetic resources and traditional knowledge are: (a) to ensure that both the Peruvian State and indigenous peoples receive fair compensation for the use and commercial exploitation of these resources; (b) to promote national and foreign private investment, as well as scientific research, to develop new resources and knowledge; (c) to prevent the irrational exploitation of the resources.

16. The proposed Protection Regime for the Collective Knowledge of Indigenous Peoples recognizes that the traditional knowledge of the indigenous peoples helps to conserve and make sustainable use of the components of biodiversity. It establishes a "*sui generis*" system to give adequate protection to those possessing traditional knowledge. The proposed Regime recognizes the indigenous people's ownership and associated rights over their traditional knowledge, as well as their right to decide on how it should be used. A voluntary register is to be set up within the National Institute for the Defence of Competition and the Protection of Intellectual Property (INDECOPI). The text also states that indigenous peoples may enter into "knowledge licensing contracts" which specify the terms for the use of their knowledge. One requirement for access to knowledge that is not within the public domain is prior informed consent by the people possessing the knowledge. An innovative and extremely important feature of the Regime is the creation of a Fund for the Development of Indigenous Peoples, which will receive 0.5 per cent of the sales resulting from the marketing of products developed on the basis of traditional knowledge, even if it is within the public domain.

17. The Regulation of Access to Genetic Resources lays down the following requirements: (a) a firm or laboratory making an application must submit it to the national competent authority¹, attaching a proposal for access; (b) the applicant, a national support institution (research centre, university, etc.) and a resource provider (the State, indigenous peoples, research or conservation centres, etc. must participate in the project); (c) the following are some of the minimum conditions for access projects: (c.i) the participation of Peruvian professionals in the collection and research activities, (c.ii) an undertaking to transfer the knowledge acquired from the access-related activities, (c.iii) a commitment to keep the national competent authority abreast of the progress and results of the research, and (c.iv) a commitment to pay the national competent authority 5 per cent of the value of the transaction agreed between the resource provider and the applicant and 2.5 per cent of the gross profit margin obtained from commercial exploitation of the resources or their by-products; and (d) the creation of a Fund for the Conservation and Development of Genetic Resources financed from the aforementioned resources.

18. In drawing up this legislation, the interests of various government sectors and civil society were taken into account. After the legislation enters into force, an intensive information dissemination campaign will have to be initiated because the vast majority of potential beneficiaries do not have any access or only limited access to normal channels of information. In view of the

¹ The National Genetic Resources Committee – CONARGE – composed of representatives of the Ministry of Fisheries, Ministry of Agriculture, INRENA, the Peruvian Institute of the Sea (IMARPE), and the National Agricultural Research Institute (INIA).

objectives outlined, it is also extremely important to ensure that the legislation is implemented as a whole and to establish monitoring mechanisms to ensure full compliance with it.

III. REGIONAL LEVEL

19. At the regional level, two legal instruments in particular should be mentioned: the Andean Community Common System for Access to Genetic Resources² (Decision No. 391) and the Amazon Cooperation Treaty.³ It should also be pointed out that on 14 September 2000 the new Andean Common Industrial Property Regime (Decision No. 486) was adopted to replace Decision No. 344 and it will enter into effect on 1 December this year. Article 26 on patent applications includes a requirement on submission of the agreement on access to the genetic resource or the licensing agreement or authorization to use traditional knowledge. Article 26(h) in particular states that, "where applicable, a copy of the access agreement, where the products or processes for which a patent is being sought have been obtained or developed from genetic resources or their by-products and if any of the member countries is the country of origin", and Article 26(i) states: "where applicable a copy of the document attesting to the licence or authorization to use traditional knowledge of indigenous, Afro-American or local communities in member countries where the products or processes whose protection is being sought have been obtained or developed on the basis of such knowledge and if any of the member countries is the country of origin, pursuant to Decision No. 391 and its amendments and regulations in force". In addition, bearing in mind regional experience and the current legal framework, the member countries of the Andean Community proposed the inclusion of issues related to the protection of traditional knowledge and access to genetic resources in the work programme of the Negotiating Group on Intellectual Property of the Free-Trade Area of the Americas (FTAA).

A. AMAZON COOPERATION TREATY

20. The Amazon Cooperation Treaty was signed in 1978 and was the first regional initiative aimed at protecting the environment and promoting sustainable use of the Amazon basin. The Treaty states that the use and exploitation of natural resources is a sovereign right of each State in its respective territory. In order to preserve the ecological balance and conserve species through the rational use of the Amazon's flora and fauna, the member countries agreed the following: (a) to promote scientific research and the exchange of information and technical experts in order to enhance knowledge of the flora and fauna in their respective Amazon territories; and (b) to establish an appropriate system for the exchange of information on environmental conservation policies and measures in their respective territories.

21. Since it was signed, the Amazon Cooperation Treaty has carried out an active programme of economic and ecological zoning, reassessing and restoring traditional knowledge and techniques of the indigenous and local communities, as well as cooperation in developing products of commercial value.

22. Peru chaired the Pro-Tempore Secretariat of the Amazon Cooperation Treaty from 1994 to 1997. During this period, a large number of seminars and workshops were organized and they helped to enhance contacts among specialists and enabled the compilation of valuable information and national experience. Several regional projects of great importance in a number of areas were submitted to member countries, for example: soil regeneration, administration of fisheries resources, institutional training, training of human resources, and economic and environmental zoning. One of

²The Andean Community of Nations (originally called the Andean Pact or Cartagena Agreement) is a sub-regional social, political and economic integration agreement adopted in 1969 and its members are Bolivia, Colombia, Ecuador, Peru and Venezuela.

³Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

the major achievements during this period was the development of the "Criteria and Indicators of Sustainability in the Amazon Forest", also known as the "Tarapoto Proposal". A number of consultations with the public and private sectors and NGOs were held in Bolivia, Colombia, Ecuador, Peru and Venezuela. These showed that there was widespread support for the proposal.

B. ANDEAN COMMUNITY

23. Recognizing the importance of the conservation of biological diversity for the environment and pursuant to the provisions of the Convention on Biological Diversity, in 1996 the member countries of the Andean Community adopted the Andean Common System for Access to Genetic Resources. The main objectives of the Common System are the following: (a) to create the conditions for just and equitable sharing of the benefits derived from access; (b) to lay down the bases for recognition and utilization of genetic resources, their by-products and their intangible components, especially in relation to indigenous, Afro-American or local communities; (c) to promote the conservation of biodiversity and the sustainable use of genetic resources; (d) to promote the strengthening and development of scientific, technological and technical capacity at the local, national and subregional levels; and (e) to reinforce the negotiating capacity of the member countries.

24. The aim of the provisions in the Common System is to promote regional and international cooperation so as to achieve the conservation and sustainable use of genetic resources, as well as fair and equitable sharing of the benefits derived from biodiversity. Ways of harmonizing systems for the protection of intellectual property with the objectives of the Convention on Biological Diversity are also proposed through equitable access to genetic resources and sharing of the benefits.

25. The Common System introduces a novel and very interesting concept, namely, *intangible components*, defined as "knowledge, innovation or individual or collective practices, of actual or potential value, that are associated with genetic resources or their derivatives or the biological resource containing them, whether or not protected by intellectual property regimes". Although some sectors have expressed concern at the possible legal impact of the concept of *intangible components*, because knowledge that is not protected by the existing intellectual property regimes would be removed from the public domain, this concept has rightly been included in order to give local and indigenous communities legal protection against misappropriation of their knowledge and to facilitate negotiation of access contracts.

26. As far as the traditional knowledge of indigenous, Afro-American and local communities is concerned, the Common System recognizes its historical contribution to the conservation, development and sustainable use of biological diversity and genetic resources. Article 7 states that "pursuant to this Decision and supplementary domestic legislation, the member countries recognize and uphold the rights and decision-making authority of indigenous, Afro-American and local communities, over their knowledge, innovations and traditional practices associated with genetic resources and their derivatives".

IV. CONCLUSIONS

27. Peru is a multi-faceted country with special geographical and natural resources that give it a great wealth of genetic resources, biological diversity and hydrological resources. It also has considerable human resources and broad ethno-linguistic and cultural diversity. Peru has started to take practical measures to utilize this potential wealth. In recent years, substantial progress has been made in the legislative framework for the conservation of the environment, regulating access to genetic resources and the protection of traditional knowledge, and this is reflected in the enactment of domestic legislation on the conservation of natural areas and in the ratification of relevant international treaties. Nevertheless, this responsibility should be shared between the public and

private sectors at the national level; and between countries which provide and countries which use genetic resources and traditional knowledge at the international level.

28. It should be stressed that the efforts being undertaken by many countries, including Peru, to put into effect the principles laid down in Agenda 21 of the United Nations and in the Convention on Biological Diversity should be accompanied by the development of an international regulatory framework and appropriate implementation measures in order to give effect to the intellectual property rights of local and indigenous communities and regulate access to genetic resources.

29. International recognition of traditional knowledge would give those possessing it the legal possibility of asserting their rights outside their own countries and would result in economic benefits. It would also limit misappropriation and unauthorized exploitation of this knowledge and would provide alternatives that would take into account at the international level, *inter alia*, the aspects related to the protection of new plant varieties in Article 27.3(b) of the TRIPS Agreement, as well as the obligation to respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities provided in the Convention on Biological Diversity.
