Peru is one of the ten most biodiverse countries in the world.

- 84 of the 117 planet's life zones are found in Peru.
- It ranks second on the list of bird diversity with 1,816 species.
- It contains 128 of the most important bird watching areas.
- It ranks fifth in mammal species with 515.
- It ranks fifth in reptile species with 418.
- It ranks fourth in amphibian species with 449.
- It ranks first in fish species with roughly 2000 found in the ocean and on the continent – 10% of the total number of world's species.
- It ranks eighth in flowering plant species with 25,000 described.
- It ranks first in butterfly species with 3,532.
- It shelters close to 10% of all orchids on the planet.

ENDEMIC SPECIES OF PERU:

- Birds: 115 species (6% of the total)
- Mammals: 109 species (27.5% of the total)
- Amphibians: 185 species (48.5% of the total)
- Butterflies: 58 species (12.5% of the total)
- Orchids: 300 – 350 species (1% of the total)

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DIVERSIDAD BIOLOGICA
COMISION NACIONAL

PERÚ, MEGADIVERSE COUNTRY

Peru is the third largest country in South America, after Brazil and Argentina, possessing an area of 1,285,216 km2 and a coastline that stretches for 3079.5 km. Split in two by the Andes Mountains, Peru's complex geography is home to 28 million people and an enormous diversity of landscapes, species, and cultures that rightly places it amongst the ten most biodiverse countries in the world.

Moreover, the second largest forest in all South America is found in Peru, granting to it enormous potential for carbon storage, climate change mitigation, ecotourism, and conservation of massive possibilities for developing new food, medicinal, and, by and large, industrial products.

Peru is a signatory of the Rio Convention on Biological Diversity, which the congress ratified in 1993 and, as a consequence, ordered the creation of the National Biological Diversity Commission as the multidisciplinary and cross sectoral body. Presiding over the commission is the National Council for the Environment (CONAM), and members include various governmental institutions, NGO's, universities, international organizations, and national experts.

In 1997, the government passed the biodiversity conservation and sustainable use act, the result being each ministry having to incorporate the issue of biological diversity in their sector programs and plans (agriculture, education, health, transportation, fishing, etc.).

Then, in 2001, the congress passed the National Biological Diversity Strategy in which laid out were national strategies and action lines for the conservation and sustainable use of Peru's native biological diversity as well as the equitable distribution of the benefits arising from the use of traditional knowledge, innovations, practices, and the intellectual property rights of genetic resources.

In 2004, a new law came into force in Peru, the Protection to Accessing Peruvian Biological Diversity and Indigenous Peoples' Collective Knowledge Law, a mechanism currently being implemented as part of the national policy in the fight against biopiracy.

Peru furthermore possesses elevated levels of genetic diversity and is one of the centers of origin for different crops and for plant and animal genetic resources. As well, it is the country with the most domesticated native species (128) and contains the greatest variety of potatoes, peppers, and corn (36 species) as well as Andean grains, tubers, and roots. For two of the four most important crops worldwide (wheat, rice, potato, and corn), Peru possesses important levels of genetic diversity for the last two.

It moreover boasts four forms of domesticated animals: the alpaca, domesticated form of the vicuña (Lama vicugna), the llama, domesticated from of the guanaco (Lama guanicoe), the Guinea pig, domesticate form of the Montane Guinea Pig (Cavia tschudii), and the Andean duck, domesticated form of the Amazonian duck (Cairina moschata).

Peru relies on and uses in large part its biodiversity. Out of the 25,000 plant species found in Peru, or 10% of the entire number of species worldwide and of which at least 30% are endemic, the population uses around 5,000 in different ways, among the most important being food (782 species), medicines (1400 species), decoration (1608 species), construction and wood products (618), fodder (483 species), and dyes and colors (134 species).

In Peru, you can find 84 life zones and 17 out of the 104 transitional zones present in the world, 8 biogeographical provinces, and 3 huge water basins that contain 12,201 lakes, 1007 rivers, and 3044 glaciers. Likewise, making up natural habitats for different Peruvian wildlife and plant species are vastly different ecosystems, like the extensive sandy areas along the coast, the frigid punas, the high diversity of the eastern slopes of the Andes, and the Amazonian jungles.

Peru also gathers within its borders a large diversity of cultures. There are 14 language families and at least 44 different ethnic groups, of which 42 are located within the Amazon. These indigenous peoples guard important knowledge regarding the use and properties of different species, diversity of genetic resources, and techniques for managing them. For example, you can find, in one hectare of a traditional potato crop on the Titicaca plateau (Puno), three species and ten varieties of potato. These are more than all the species and varieties grown in North America combined.

PROTECTED NATURAL AREAS

SUMMARY

Since 1961, Peru has established sixty-three protected natural areas (PNA) nationwide in nine different management categories. If their territories are added together, they cover 14% of the country, and 6.44% of their total area is classified as strictly protection areas with the rest falling within the IUCN category VI listing, including community based reserves that are co-managed by the State and native communities.

The sixty-three PNA's form the National System of State Protected Natural Areas (SINANPE), which is run by the Office of Protected Natural Areas of the Institute of Natural Resources (INRENA), a decentralized body belonging to the Ministry of Agriculture.

It is impossible to count the number of ways in which PNA's contribute to Peru's sustainable development. The fact that 2.7 million Peruvians receive water from 16 of the PNA's is just one of the important direct benefits. Per year, these people consume 255,000,000 m3 of water, valued approximately at 81 million dollars. Along the same lines, 60.81% of all hydroelectric power in Peru is generated from water found within PNA's, a figure that is worth roughly 320 million dollars annually.

Listed in the indirect benefits of PNA's are the tourism potential and their capacity for carbon storage. Forest types within the PNA's vary from tropical rainforests on the Amazonian plain, 10.5 million hectares of these, to 5.4 million hectares of tropical montane rainforests. Bearing in mind that these forests have the capacity to store 243.18 tons/ ha of carbon, PNA based tropical rainforests would be able to store 3.901 million metric tons of carbon. The potential value of the carbon storage service would be 127 million US dollars.

MAP OF THE NATIONAL PROTECTED AREAS SYSTEM

Source: INRENA, 2008

VISION AND STRATEGY

By 2020, SINANPE wishes to attain its financial sustainability, effectively taking advantage of the resources generated by the environmental goods and services from the PNA's it protects. It will accomplish this through sharing the management with the INRENA, local management committees, private enterprise, and regional and city government and by creating synergies through participatory land use planning processes, taking into consideration national and regional programs that lend a hand in the promotion of biobusiness that is founded upon the principles of social and environmental responsibility.

ACHIEVEMENTS

- The State has improved SINANPE's governability through incorporating different management tools (concessions, permits, licenses, administration contracts), institutionalized participatory forums (coordinating councils and management committees), and the passage of specific laws (special community based reserve administration regime) for promoting and strengthening participation in SINANPE management.
- The twenty-nine management committees not only empower the local population and the public and private sectors to take part in PNA's, but they are also linked together through a network that is improving the unity and coherency of the system.
- The SINANAPE is setting up and strengthening sub-national conservation systems that include regional, city, and private conservation areas as well as other forms of in situ conservation as part of regional land use.
- A broad participatory and decentralized process for bringing the SINANPE national strategy up to date has just concluded, the results of which shall soon be approved of.
- Officials have set the boundaries for different ecological corridors:
  1) The Podocarpus Tabaconas – Tablon Binational Biological Project (Peru and Ecuador), an attempt at conserving the Andean tapir and the spectacled bear.
  2) Vilcabamba – Amboro Biological Conservation Corridor (Peru and Bolivia), which encompasses 30 million ha and seventeen PNA's.
  3) Northern Montane Forests Corridor (Peru and Ecuador), an area of nearly 10 million hectares.
- Other forms of in situ conservation have begun to be consolidated, using different legal frameworks, such as conservation or ecotourism concessions and others.

CHALLENGES

- To get the State to invest in the SINANPE at least 350 million dollars over the next 10 years. PNA's will contribute roughly 10 billion dollars to the Peruvian economy over that time period, but it is necessary for the State to close the investment gap.
- To consolidate into the SINANPE all areas that should be under its jurisdiction through including city conservation areas as the express declaration of a policy for decentralization, citizen participation, and environmental governance.
- To complete the process of PNA territorial regularization in order that land use be defined and that clear land rights be established.
- To provide the SINANPE human resources, in sufficient numbers and quality, to guarantee its stability.
- To conduct biological research projects, to improve networking, and to encourage greater knowledge dissemination and education for the implementation of a transnational strategy.
- To set in motion a standardized monitoring system that employs precise impact indicators as a management tool.
- To appraise the goods and services rendered by the PNA's for the purpose of laying out payment schemes that link providers with users. There are now just five out of the sixty-three areas that have sustainable funding plans.
- To encourage the striking of public-private alliances between communities and the private sector under the supervision of respected and well known entities.

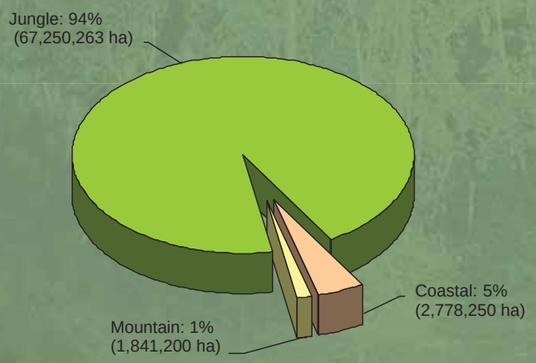
FOREST DIVERSITY

SUMMARY

With close to 72 million forested ha and roughly 7.1 million deforested ha, Peru occupies second place on the list of Latin American countries with greatest amount of forest coverage and ninth in the world. 80% of the forested territory is categorized as production or protection forest lands, yet, in economic terms, these are an untapped potential since forest activity accounts for just over 1% of Peru's Gross Domestic Product.

Peruvian forests are not just the tropical ones found in the Amazon, but also the dry forests on the coasts and the remnants of native mountain forests that are as fragile as or even more so than their Amazonian counterparts and are incredibly endangered. Nevertheless, most of the attention and action has been centered on the Amazon, particularly in terms of selective logging since the woods with the highest commercial value (cedar and mahogany) are found there.

Natural Forests of Peru: 71,869,713 ha



The main pressure exerted on forest biological diversity is caused by deforestation carried out for change of land use purposes, i.e. agriculture and livestock raising. As of 2000, the amount of deforested area in the Peruvian Amazon was calculated to be 7,172,554 ha (9.25% of the total area of Amazonian forests and 5.6% of the country's total) with the most affected departments being San Martin and Amazonas and there the most affected forest type being montane. In these forests, the density of trees runs from 370 to 700 trees per hectare and diversity between 90 and 150 species. On the other hand, density in the dry forests is much less with a total of no more than 100 trees per hectare.

Forests on the Amazonian plain take 25 years to regenerate, time sufficient enough just for restoring half of a mature forest's biomass. They also contain between 450 and 750 trees per hectare and account for a diversity in tree species between 126 and 275.

Without taking into account deforested areas, there is still more than 70 million hectares of natural forests, primarily tropical ones in the Amazon, and some 10 million hectares to be reforested, mainly in the mountains and on the coast.

One thing is true: forests contain more than just timber. Fruits, flowers, seeds, resins, palm trees, and even the scenery are just some of the non timber resources found in forests. Likewise, they offer important environmental services (also called "ecosystem services") that have direct influence upon environmental protection, recuperation, and improvement. Some of the most important are water cycle regulation, erosion control, water purification, and contamination reduction.

STRATEGIC VISION

As a result of its forest awareness and culture, Peru has set the following goals for 2021: maintaining and managing its forests, increasing its forest plantation development, and preserving ecosystems that equitably generate wealth and wellbeing, everything accomplished on a permanent basis and in harmony with nature (2002 National Forestry Strategy).

ACHIEVEMENTS

The following concern conservation, sustainable use, and benefits sharing:

- The country has established mechanisms for responding to threats to its forest biological diversity, such as the Forest Roundtable, National Forestry Strategy, the National Multisector Strategy in the Fight against Illegal Logging, and the National Reforestation Plan.
- The National System of Protected Natural Areas has under its protection 16,044,332 ha of tropical forests that include species and their genetic variability, ecosystem services, and other associated benefits.
- Current forest law promotes conservation and sustainable use of forests and makes access to forests easier through granting different types of timber and non timber forest concessions, like those for conservation, ecotourism, and logging. There are also other mechanisms like forest permits and the ability to establish local forests.
- Forest management plans for native lands contain special considerations that are more flexible so as to simplify their share of the benefits.
- In the Pacaya Samiria National Reserve, sustainable use of biological diversity is being promoted through managing resources like fish (paiche and silver arowana) and turtles (yellow spotted Amazon River turtle).

The following concern a favorable institutional and socioeconomic environment:

- Peru now has a legal framework for protecting the knowledge, innovations, and traditional practices that will guarantee a fair and equitable share of the benefits arising from genetic resource use.

The following concern knowledge, evaluation, and vigilance:

- Peru has increased the level of research (forest ecology, wildlife, and forests valuation) in order to improve understanding on forest biological diversity.

Forests also are valuable sources of proteins. It is estimated that, in the Amazon, annual consumption of fish and game meat surpasses 70,000 tons and 15,000 tons respectively. Take, for example, the jungle city of Iquitos, whose approximate population of 350,000 people every year eats 9000 tons of fish and every month 12 tons of aguaje palm fruits (Mauritia flexuosa).

CHALLENGES

- To implement an ecosystem approach and to influence a change of priorities in policies that are concerned with forest conservation.
- To improve forest management, especially in terms of native lands that account for 12 million ha of Amazonian forests.
- To implement national plans and strategies, like the Strategy in the Fight against Illegal Logging, the National Reforestation Plan, and regional forest plans that are being driven by the regional governments themselves.
- To minimize illegal logging, primarily in protected areas
- To manufacture forest products for positioning in the global market
- To promote the organized use of non timber forest resources through different mechanisms, like wildlife management concessions, and the capitalization of different resources apart from timber, palm trees, and others.
- To improve understanding of forest biological diversity, the status of conservation, and potential use (populations, stands for harvesting, etc.)
- To raise awareness in the population at large, with particular emphasis on urban populations, through conducting campaigns and to make people feel proud of the country's wealth in forests.

AGROBIODIVERSITY

SUMMARY

Peru is one of the centers of origin and diversity for crops, like potatoes, corn, and tomatoes that are staple foods for many countries in the world today. For ten thousand years, Peruvians have been domesticating plants and animals, ingeniously creating and recreating new varieties for the development of an ancient culture that was able to transform obviously arid and mountainous terrain into long term productive and sustainable farmland.

Among the most noteworthy plants man domesticated along the coast and in the Peruvian Andes are the potato, ulluco, cassava, sweet potato, butter bean, bean, oca, chili pepper, pumpkin, gourd, wild cucumber, lucuma, quinoa, cotton, and corn. And in terms of animal domestication, there is the Muscovy duck on the coast and the llama, alpaca, and Guinea pig in the highlands. In the Amazon, through plant management and use, families learned to cultivate their own gardens and are continuing the process of domestication even today. This vast amount of diversity feeds and cures an immeasurable number of the world's inhabitants, fertilizes their crops, and stimulates industrial development.

After the Rio Convention on Biological Diversity, Peru began the gradual development of different strategies and plans of action, the much needed legal and management framework for setting in motion activities that promote the conservation and sustainable use of its agrobiodiversity, and the required care for granting access to and for distributing the benefits coming from its associated genetic resources as well as for protecting traditional knowledge linked to that biodiversity.

Different institutions are involved in these processes. The National Council for the Environment (CONAM) completely supports the legal framework, the National Institute for Agricultural Innovation (INIA) energizes in situ and ex situ conservation programs and their development, the Peruvian Amazon Research Institute (IIAP) carries out and encourages Peruvian Amazonian natural resource inventory, research, evaluation, control, sustainable use, and industrialization, and the National Institute for the Defense of Competition and Protection of Intellectual Property (INDECOPI) protects all types of intellectual property and is the administrative authority for granting rights to plant breeders.

STRATEGIC VISION

Peru has planned that, by 2010, conservation and sustainable use of its agrobiodiversity will contribute to improving the food security and increasing the quality of life of all Peruvians, especially for native communities and local farmers. It will, furthermore, contribute to the country's economic development through goods and services obtained from its biodiversity, generate useful information for germplasm conservation, increase the value of traditional knowledge and practices, and promote participatory research and the protection of its intellectual property rights on the valuable agricultural germplasm pool.

ACHIEVEMENTS

- The country does have a National Agrobiodiversity Program, produced through a participatory, inclusive, and decentralized process and currently possesses one project ready to be implemented.
- Researchers have evaluated the different agrobiodiversity components through conducting inventories and studies on diversity and variability, setting up a germplasm pool, and evaluating suitability of use (nutritional, functional, bioactive, and medicinal properties), done in participation with universities, government institutions, and international centers.
- The Junin and Huancavelica Regions are stimulating the creation of Agrobiodiversity Zones that have been set aside specifically for conservation and sustainable use of domesticated native species. The Cajamarca, Cusco, and Puno Regions are also involved in the initiative, and the five have established an interregional commission for such purposes.
- Through the IIAP Floodable Forest Program, scientists have recorded some of the traditional knowledge of Amazonian indigenous peoples that will be used for later negotiation processes on their use by third parties.
- Presently being used is a National Registry of Native Crops.
- CONAM has in place the In Situ Conservation and Monitoring Information System, a result of its project titled "In Situ Conservation of Native Crops and their Wild Offshoots", carried out between 2001 and 2005 with involvement of two government institutions (INIA and IIAP) and eighteen NGO's.
- Networks surrounding agrobiodiversity have been formed, such as the Science and Technology in the Andes Coordinating Mechanism, a space where NGO's can join forces with farming communities in the northern highlands (Piura and Cajamarca) and central highlands (Huanuco and Huancavelica) for promoting in situ native crop conservation with stress placed upon three significant aspects: 1) biology (genetics, seeds, and wild offshoots) and its immediate space (the field), 2) ecology (the wider setting – micro watersheds), and 3) the culture (farmers as conservationists and local knowledge). This network has participated in the aforementioned project, "In Situ Conservation of Native Crops and their Wild Offshoots", having given special attention to five native crops – potato, corn, bean, cassava, and sweet potato.

CHALLENGES

- To reinforce economic, cultural, and genetic valuation of species found within the domain of agrobiodiversity, promoting civil society awareness raising on its benefits, and supporting market development in terms of its goods and services.
- To support inventories, appraisals, and monitoring of agrobiodiversity components and trends, to promote conservation and use of traditional technology, and to encourage practices and technology favorable to agrobiodiversity .
- To fuel implementation of the National Agrobiodiversity Program.
- To promote the application of policies and a legal framework that stimulates and provides incentives for the conservation and sustainable use of agrobiodiversity.

CLIMATE CHANGE

SUMMARY

In the case of Peru, its huge geographic and climatic diversity and complex geological and geodynamic makeup are not just the origin of its extraordinary biological diversity, but also place the entire country at risk . Mudslides, frosts, floods, landslides, and droughts are gradually intensifying. Its location places it on the list of countries most affected by severe El Niños. Changes in temperature and precipitation patterns affect ecosystems, in particular fragile ones, and alter biodiversity. Resulting from these changes will be negative impacts on agriculture and fishing, which will, in turn, damage food security. One of the most important aspects of climate change is deglaciation. Studies estimate that by 2060, only those glaciers above elevations of 6000 meters will survive. Already in 2001, glaciers in the White Mountains (world's tallest tropical mountain chain) had retreated 22%, a quantity of water equal to the amount of water all Peruvians drink in one decade. As a consequence, there will be negative impacts on hydroelectric power generation and water storage since these two depend directly on the country's climatic conditions.

Therefore, climate change places all development processes in jeopardy and is a threat to ecosystems and other elements of Peru's biodiversity.

STRATEGIC VISION

By 2021, Peru will be using different strategies for conserving its biodiversity. Peru will be incorporating compensation mechanisms for ecosystem services, and for adapting economic activities to improve the use of natural resources so as to mitigate impacts on biodiversity caused by climate change.

ACHIEVEMENTS

- The country already possesses preliminary studies and analyses on its vulnerability to climate change that were prepared so leaders can take the needed policy measures for increasing the nation's defense.
- One adaptation measure for coastal vulnerability is Peru's modern satellite observation capability (ocean and continental) with systems similar to TOGA and CLIVAR. As well, at least fifty scientists have been trained on oceanic, atmospheric, and hydrologic modeling.
- The country has installed biological corridors for keeping ecosystems from fragmenting (Vilcabamba – Amboro Biological Conservation Corridor between Peru and Bolivia).
- Since 2006, the country has been using a multi-investment decision making system, which was developed in Peru.
- The deforestation rate during the first decade of 2000 had dropped from 260 ha/ year (what it was in the 1990's) to 150 ha/ year (INRENA - CONAM - PROCLIM).
- The State is promoting agroforestry systems as one intervention strategy for forest regeneration.
- There are sub national forest strategies (San Martin Region) that include implementation of avoided deforestation techniques, like REDD and CDM (multispecific farms with native species), as climate change adaptation mechanisms.
- Habitat conservation will reduce carbon dioxide atmospheric emission levels. In Peru, there is roughly 70 million hectares of forest cover of which 18 million are located in protected natural areas and possess carbon storage capacity of 3,901,600,000 mT.
- Conservation of queñual trees (Polylepis sp.) and other extreme weather resistant crops will contribute to reducig impacts on the nation's food security supply.

CHALLENGE

- To implement, in Peru, the CDB Biodiversity and Climate Change Program, especially the terms related to adaptation measures, in order to provide continuity to the sustainable use of different biodiversity elements that Peruvians depend upon.
- To implement climate change mitigation measures, bearing in mind Peru's comparative advantage because of its natural forests.
- To stress the execution of the following issues of the National Climate Change Strategy:
  1) Identification of areas and sectors most affected by climate change.
  2) Calculation of climate change costs as well as of adaptation and mitigation measures.
  3) Production and implementation of local level adaptation proposals.
  4) Production of adaptation measures and alternatives for particularly affected sectors (water, energy, agriculture, and forestry).
- To conduct research on how climate change will impact ecosystems and how their services can contribute to reducing global warming.
- To reduce current pressures on ecosystems and biodiversity brought about by human activity (unsustainable natural resource use, land use changes, and habitat fragmentation) in order that ecosystems can better resist climate change.
- To conserve genetic resources in situ and ex situ.
- To recover traditional knowledge that will contribute to the understanding of changes in how biological diversity and ecosystems work.
- To improve cropland management through different levels of land use planning processes.
- To keep agrobiodiversity in situ through establishing Special Management Areas for Agrobiodiversity Conservation.
- To restart the duties of the Peruvian Wetlands Conservation and Sustainable Development Program since these areas are one of the main forms in which carbon is stored.

ENVIRONMENTAL FUNDING

SUMMARY

In terms of natural resources and environmental funding, the Peruvian government allocated 0.31% of the 2005 national budget to natural and renewable resources preservation programs and 0.05% to environmental protection programs. Funding for the SINANPE, which is part of the natural resources programs, was 0.023% of the Gross Domestic Product and 0.11% of the total export value. In other Latin American countries, governments spend much more on the environment than does Peru. Take, for example, Chile, which allocates 1.86% of its national budget, and Costa Rica with 4.5% (UNEP, CEPAL, 2002. Cited by F. Leon, 2007).

There are other funding sources to be added to the amounts assigned by the State, these being monies from international cooperation, primarily German, Spanish, French, Swiss, and others. The main environmental funds operating in the country that are linked to biodiversity conservation are the FONANPE – National Fund for State Protected Natural Areas (monies that are handled by PROFONANPE and destined to finance the SINANPE), the FONAM – National Environment Fund, and other funds from such institutions as the World Bank, Global Environment Facility (GEF), United Nations Development Program (UNDP), the Nature Conservancy (TNC), World Wildlife Fund (WWF), and the Andean Development Corporation (ADC).

The economic cost in Peru of environmental degradation, which has an impact on biodiversity conservation, as calculated by Larsen and Strukova (2006), was measured to be 8.2 billion PEN or the equivalent of 3.9% of the 2003 GDP. Furthermore, the poorest people are the ones most affected. This environmental study of Peru uncovered the following high cost problems associated with environmental degradation: inadequate water storage, sanitation and hygiene, urban air pollution, natural disasters, lead contamination, air pollution in closed environments, and degradation of cropland (World Bank, 2007).

STRATEGIC VISION

To increase the promotion of different funding instruments that will contribute to financing sustainable management and conservation of natural resources and biodiversity through looking for synergies between conservation and development as part of decentralized management.

ACHIEVEMENTS

- The FONAM has entered into an agreement with the Global Mechanism of the United Nations Convention to Combat Desertification in order to identify investment opportunities in projects that will contribute to the fight against desertification in the country.
- Peru has in its possession carbon storage studies of its protected natural areas. Estimated figures are 3.901 billion metric tons or the equivalent of $127,357,032, and this amount is to be sold in potential markets that are now being discussed during the implementation of the second phase of the Kyoto Protocol.
- The PROFANANPE handled 93.2 million dollars from 1995 to 2005, an amount that financed a good part of the system of protected natural areas, yet it is still not enough to cover all the system's needs.
- "Compensation for ecosystem services" pilot programs are being implemented, and this issue is being incorporated into environmental law, which is seeking to define concepts, scope, and guidelines for their execution.
- There are efforts underway to encourage public investment in environmental management projects and others dealing with natural resource management and conservation.

CHALLENGES

- To set policies that benefit the national population and that are based upon the principles of sustainability, democracy, decentralization, equality, and participation, utilizing planning, organization, and later implementation of environmental services payment schemes through local government.
- To establish synergies as international conventions are being executed, such as the United Nations Framework Convention on Climate Change (where laid out are baseline study methodologies and CDM monitoring) and the United Nations Convention to Combat Desertification.
- Inter and intrainstitutional integration where responsibilities (research, funding, market search, environmental education, awareness raising, and training) are shared by the main stakeholders and competent institutions.
- To reach the point where research and market development promotion, as part of ecosystem service management, are autonomous and sustainably funded.
- To arrange an intelligent funding model that will raise the level of investment to benefit and reach a rate of $35 of investment to every $1000 of benefit (at the moment, it stands at $1 of investment for every $1000 of benefit).
- To make existing funding objectives different in order that duplication is avoided and that interinstitutional efforts are coordinated and effective, in accordance with scope and objectives.
- To develop an environmental tax system with the Ministry of Economy and Finance where the cost of recovering environments and ecosystems damaged by different productive/ economic activities is paid for by the enterprises involved.
- To produce a legal and institutional framework that will be responsible for developing goods and services gotten from ecosystems, a process that includes participatory research, awareness raising and environmental education campaigns, methodological systematization and validation, and payment scheme control and follow up, according to the case, scope, and promotion.
- To push for national companies involved in ecological certification to provide environmental certification as well for those cases that have to do with global services in order to lower validation and/ or certification costs and to guarantee the profitability of ecosystem goods and services.

SUMMARY

The purpose of biotrade is to encourage the sustainable traffic of goods and services coming from native biodiversity while applying the principles of environmental, social, and economic responsibility within the framework of the Convention of Biological Diversity.

Since Peru is one of the world's most megadiverse countries, the government created the National Biotrade Promotion Program (PNBP) in 2002, allying this with the UNCTAD Biotrade Facilitation Program in order to promote the sustainable use of natural capital.

The PNBP assists in the consolidation of sustainable business ventures and promotes it at the same time. The following sectors have been given priority in the national program's strategy:

- Andean and Amazonian fruits
- Medicinal plants
- Non timber forest products
- Andean grains and tubers
- Aquaculture
- Ecotourism

The PNBP is supported by the interinstitutional work of public institutions, the likes of the MINCETUR – Ministry of Foreign Trade and Tourism, PROMPERU – Commission for the Promotion of Peru for Exports and Tourism, the IIAP – Peruvian Amazon Research Institute, the CONAM – National Council for the Environment, and the main trade unions linked to biotrade.

The different strategies of the PNBP are:

- Developing competitive products
- Promoting and accessing markets
- Promoting research and innovation
- Strengthening policies and institutions

STRATEGIC VISION

By 2020, Peru will be an internationally recognized country in conservation and sustainable use of biodiversity through increasing the competitiveness of its biotrade related chains in order that they be able to place on the market quality products with high added value so the agents involved in the production processes reap the benefits and hence contribute to biodiversity conservation.

ACHIEVEMENTS

- Peru has increased the quality and sustainability of the value chains for natural ingredients.
- Management tools for implementing biotrade and best practices in sustainable use of biodiversity have reached the hands of those involved in the sector.
- Projects for acknowledging the importance of and managing Andean and Amazonian biodiversity have been carried out collaboratively with different actors, such as the governments of Germany, Finland, and Switzerland, as well as the Andean Community of Nations.
- Trade opportunities for native biodiversity goods and services have been opened up, applying an inclusive approach, and niche markets have furthermore been identified.

CHALLENGES

- To position biotrade as one tool in energizing rural development and poverty reduction.
- To include biotrade in protected natural area management.
- To increase the quality of national biodiversity based products.
- To direct product research and development efforts towards the demands of the markets.
- To prepare a differentiation strategy for Peruvian biotrade products in target markets.
- To promote eco-efficiency in biotrade related enterprises.