ACTO
Amazon Cooperation Treaty Organization

PROJECT gefamazon
WATER RESOURCES AND CLIMATE CHANGE

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CLOSE – UP

ACTO and the GEF Amazon Project

The Amazon Cooperation Treaty Organization (ACTO) is an intergovernmental body that brings together the eight countries of the Amazon basin: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

This International Organization has its origins in the Amazon Cooperation Treaty (ACT), and was signed on July 3, 1978 to recognize the transboundary nature of the Amazon, reaffirm the sovereignty of the Amazon countries over their respective Amazon regions, and also to institutionalize and direct the regional cooperation process.

In 1995, the Amazon countries decided to strengthen the TCA, with the creation of the Amazon Cooperation Treaty Organization and a Permanent Secretariat in Brasilia, Brazil. The decision was implemented in 1998 when ACTO was officially established as a mechanism responsible for strengthening the cooperation process.

ACTO has as its highest instance the Meeting of Ministers of Foreign Affairs. It is supported by the Amazon Cooperation Council (ACC) and the Coordinating Commission for the Amazonian Cooperation Council (CCOOR).

In 2009, the Heads of State of Member Countries attributed the Organization with a "new and modern role as a forum for cooperation, exchange, knowledge and joint projection to face new international and complex challenges that arise ", as established in the Declaration of Manaus. Consequently, ACTO started a process of institutional re-launch.

Ambassador Robby Ramlakhan, Secretary General, ACTO

In this context, the Ministers of Foreign Affairs prepared a new ACTO Amazon Cooperation Strategic Agenda for the short, medium and long term, which contains regional actions to support national initiatives with a horizon of 8 years for its implementation. This Agenda was adopted at the Tenth Meeting of Foreign Ministers of the ACT, with the Lima Declaration of 2010.

This Agenda includes various activities, projects and programs in the areas of the environment, indigenous affairs, science, technology and education, health and tourism, transport, infrastructure and social affairs.

From the signature of the Amazon Cooperation Treaty to date, with the rise and full development of institutional capacities of ACTO, an untold story is recorded in the Amazon region, a model of South - South cooperation that will celebrate 35 years of existence in July of 2013.

The ACTO Secretary General, Ambassador Robby Ramlakhan, talks about the GEF

Amazon as one of the activities that ACTO executes in the Amazon basin.

Within the Amazon Cooperation Strategic Agenda of ACTO, what is the role of the GEF Amazon Project-Water resources and climate change?

SG/ACTO: First of all, we know very well that there cannot be life without water. Second, that the demand for fresh water is increasing continuously, but the resources are very limited and are stretched to the breaking point. Third, that variability and climate change can have serious effects on the provision of fresh water necessary to suffice our daily needs. Therefore it is of utmost importance that we abstain from actions that are detrimental to the supply of fresh water. The Amazon forest is the biggest tropical rainforest in the world and holds enormous quantities of fresh water. The ACTO envisages the protection and provision of fresh water in the Amazon Basin and has developed a joint program with the GEF, to reach this objective. The role of the GEF Amazon Project is to develop a Strategic Action Program (SAP) among the 8 Member Countries of the ACTO for an integrated and sustainable management of trans-boundary water resources of the Amazon Basin, and create a favorable environment for future implementation, through a comprehensive engagement process with the key stakeholders in the Basin. It will serve as a reference framework for efficient, integrated and comprehensive water resources management aimed at improving the quality of life of Amazonian populations.

Taking into account that ACTO is the Executing Agency of the GEF Amazon Project, can you tell us how the Member Countries of ACTO act and support this regional initiative?

SG/ACTO: The Project "Integrated and Sustainable Management of Trans Boundary Water Resources in the Amazon River Basin considering Variability and Climate Change" was adopted by the Member Countries in 2010. With this approval, they agreed to coordinate their actions in biodiversity and habitat protection, ecosystem conservation, erosion prevention, water quality protection and maintenance of a global dioxide (CO_2) sink, while providing a sustainable basis for human economic development within the Basin and reducing the vulnerability of peoples and ecosystems to extreme events. In this first stage, and in agreement with the policy of furthering South-South cooperation, ACTO negotiated a contract with the Brazilian National Water Agency, which has acquired much knowledge and experiences in water management. As a result, many technicians from the other Member Countries were trained in Brazil.

Finally, can you explain who will be the main beneficiaries from the activities of the GEF Amazon Project?

SG/ACTO: Due to its enormous extent and natural environmental complexity, the Amazon Basin is essential for the regional and global environment. Protection of this Basin, including the water resources, is crucial for mankind. Therefore, this project will benefit the world community in general and the Amazonian populations in particular.

ILLUSTRATIVE DROP

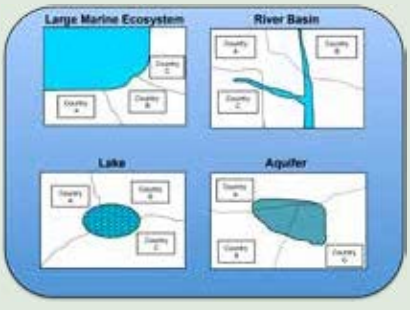
What is the Global Environment Facility- GEF?

- It is the largest public financer of projects to improve the global environment.
- Since 1991 the GEF has contributed with grants of USD$ 10.5 billion, providing USD $ 51 billion in co-financing more than 2,700 projects in more than 165 countries, among other contributions.
- The GEF is the Financing Agency of the GEF Amazon Project, it provided USD $ 7 million.

What does International Waters mean in the GEF context?

- …International Waters for the GEF are transboundary water systems.
- These include:
  - River basins where water flows from one country to another.
  - Lakes Basin multinational.
  - Groundwater resources shared by several countries.
  - Large Marine Ecosystems (LMEs) shared by more than one nation.

Example:



… And what are Transboundary Waters? ….

….They are Water systems shared by more than one country.
Transboundary Waters cover:

Transboundary Waters Resources where the boundary between two or more sovereign countries is formed by a LME, a river or an international lake.

Successive Resources of Waters where an international river (aquifer/groundwater) flows from a sovereign state to another.

Source: GEF IW Learn

News from Component I

Achievements for the Institutional Cooperation in the Amazon basin

Strengthen the institutional capacity of the eight countries that share the Amazon basin for cooperation in water resources management is one of the major tasks of the GEF Amazon Water resources and climate change Project.

The activity "Institutional Cooperation in the Amazon Basin," part of the Project Component I- "Understanding the Amazonian society" is in charge of consultant Yerko Montero, MBA in Political Sciences, Master in Diplomacy and International Relations at the Diplomatic Academy "Rafael Bustillo" in Bolivia.

Lic. Yerko Montero, GEF Amazon Project Consultant

There has been a significant progress in the institutional analysis of Water entities in the eight Member Countries of ACTO and the identification and evaluation of institutional coordination mechanisms has been achieved for the protection of water resources at national and regional levels in the Amazon basin.

The mapping of national institutions responsible for water resources management, including an assessment of organizational and human resources, as well as infrastructure and financial requirements has been achieved.

In the same way, proposals have been made for the formation of National Inter-Ministerial Coordination Committees for Water Resources Management in the Amazon River Basin to create Mechanisms for Communication and Information Exchange, and thus, strengthen institutional linkages between the countries.

The information shared by the countries establishes a picture of the current situation of the national institutions, their achievements and main challenges concerning water resources management in the Amazon basin.

News from Component II

Advances in the knowledge of Amazonian aquatic ecosystems

The project "Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin, considering the Variability and Climate Change" was designed by consensus of the 8 ACTO Member Countries to formulate a Strategic Action Program (SAP).

Of its Five components, the Second seeks to "Understand the natural resource base of the Amazon basin." One of its activities is "Improving the knowledge of Amazonian aquatic ecosystems", which is in charge of Cleber Alho, Consultant, PhD in Ecology from the University of North Carolina, and Postdoctoral in Ecology and Museology from the National Museum of Natural History of the Smithsonian Institute of Washington, United States.

The study of the Amazonian aquatic ecosystems is carried out in different specific areas (hotspots) and will serve as a guide to be replicated by the Project throughout the Amazon.

Dr. Cleber Alho from the GEF Amazon Project explains below how this research progresses.

What are the areas that you identified to study the Amazonian aquatic ecosystems?

C.A.: I'm studying the aquatic ecosystems of the Xingu River headwaters, the Negro River and the Tocantins River region, altered by the Tucuruí Hydro Power Plant. The objective of the field works in these areas will improve the knowledge and management of the aquatic ecosystems in hotspots, taking into account fishes and fishing.

It is important to clarify what is a specific area or hotspot?

C.A.:It is a priority area for conservation,

Dr. Cleber Alho, GEF Amazon Project Consultant

Conversion of land for grain cultivation on the banks of the river: environmental threat that impacts Amazonian aquatic ecosystems.

that uses two criteria: species endemism, it means the tendency of some living beings to live in a particular area, and the degree of environmental threat. Some endemic species are restricted in their geographical distribution, but they are more susceptible to extinction face to the environmental changes caused by humans. The degree of environmental threat is defined by the degree of habitat loss, this occurs when the area loses at least 70% of its original structure, where endemic species are found.

Can you give us an example in the Amazon region?

C.A.:Sure, in the waterways along the Xingu River basin, 142 species of fishes were cataloged, of which 36 are endemic, they only live there. This region is under a strong impact of the expanding use and occupation of lands, with deforestation and intensive cultivation of grains, especially soy, as well as the conversion of native vegetation into grass for cattle. These environmental threats have impacted the aquatic ecosystems, with the alteration and loss of fish's natural habitats.

According to the activities of the GEF Amazon Project in those specific areas, what relevant facts can you highlight?

C.A: I note that there is a narrow dependence of the fisherman with natural resources of the Amazonian aquatic ecosystems. The alteration and loss of these natural environments, which fisheries Biology depends, have led to the degradation of these ecosystems and the consequent loss of natural resources, including fishing. Besides the observation works, and interviews with leaders and fishing cooperatives, we have advanced with the identification of environmental stressors in the hotspots.

What is the approach used?

C.A.: To improve the knowledge of the Amazonian aquatic ecosystems, the study focuses on the Amazonian fish fauna (fish species group) and its aquatic ecosystems (environmental threat level). Then, the biological criteria can be an analysis element of the hotspot, for example, identifying critical habitats for feeding and fish reproduction (biological indicators) and how the environmental threats are affecting these habitats.

As a researcher, what is the lesson that you get from your field work to submit to the GEF Amazon Project?

C.A: If endemic species live in a given hotspot and not in another, the environmental threats acting negatively should be mitigated or eliminated, through various interventions, including a strategic conservation plan.

Thus, the results of various scientific researchs conducted by the GEF Amazon Project will serve as inputs to formulate the Strategic Action Program, PAE, the main objective of the Project.

News from Component III

Water pollution in the Amazon basin

Dr. Fernanda Nascimento and Dr. Bernhard Perigovich, GEF Amazon Project Consultants

Water pollution in the Amazon basin is one of the ongoing scientific research, whose results will serve to formulate the Strategic Action Program (SAP), the main objective of the GEF Amazon Project- Water Resources and Climate Change.

This study of water pollution is part of Project Component III, is in charge of Dr. Fernanda Nascimento, geologist at the University of Pará, phD in Geochemistry from the University of Vienna (Austria) and Postdoctoral in Environmental Geochemistry at the University of Paris 12.

The main goal of this specific project is to collect data of water quality and information about sources of pollution in the Amazon basin, identify and map the most critical water pollution hot spots to prepare the formulation of preventive strategic measures to control water pollution in the Amazon basin.

The expert explains: "When we consider water pollution, urban and rural areas must distinguished. In urban areas, pollution most often has a diffuse character. It is linked to effluents or domestic and industrial wastewater, conducted directly into the rivers, mostly without any previous treatment. The available publications identify the chemical contaminants in the main water bodies receiving these effluents. In rural areas, pollution has a punctual character and it is linked to specific economic activities, mainly natural resource extraction and land use."

According to Dr. Nascimento, in Brazil currently the main water pollutants are volatiles organics substances that contain nitrogen, probably due to soybean crops since the 2000s, and Mercury, highly toxic in its organic compound, widely used for artisanal gold mining especially in the 1980s and 1990s.

Actually the most contaminated areas are the hydric environments of the major Amazonian urban centers. In the case of rural or mining regions "We need to map the data obtained in order to have a general overview of agro- and mining activities and investigate if they are active or not," the consultant said.

The process of collecting data on pollutants in the Amazon Rivers is a very tricky task, because of the widespread and inhomogeneous data. The National Assistants of the GEF Amazon Project are working together with the consultant in collecting required information.

Until now, Dr. Nascimento has conducted a thorough review of the available literature, consulting the main institutions involved in planning and managing Amazon water resources, and researching all available information on the internet.

"The major part of published documents are focused on pollution of water resources in urban centers, in regions of natural resource extraction (basically mining activities) and extensive land use, "said the Project Consultant.

To collect information about water pollution in the Amazon is a difficult enterprise when you need to have access to the companies´ records that have activities in the Amazon, because most of them are not willing to share this kind of information.

COURSES

Courses: ANA/ACTO- Project Amazon: Regional Action in the field of Water Resources, implemented by the National Water Agency of Brazil (ANA), with the support of the PS/ACTO

Directed to the technical staff in the area of water resources.
Costs to participate: tickets, lodging, materials covered by the Project.
Contact:projeto.amazonas@ana.gov.pe and cursos.ana@otca.org.br

COMPONENT	ACTIVITY	DATE	PLACE
Technical Meetings	Technical Meeting on Management of the Hydro-meteorological Network: Participatory Vision and Technical Cooperation among ACTO Member Countries,	August 12 to 15	Brasilia/Brasil
	Technical Workshop: Current Scenario of the Ground Water Knowledge in Sedimentary Aquifers in the Amazon Region	July 24 to 26	Manaos/Brasil
	Technical Meeting on Exchange of experiences on extreme events Management.	November 18 to 20	Lima/Perú
Trainings	Course on Hydro-Sedimentology	August 5 to 9	Brasilia/Brasil
	Data Collection Platforms (DCP) -Operation and Maintenance –Course for Technicians of ACTO Member Countries	September 28 to October 4th	Brasilia/Brasil
	Pedagogic Basins-Intercultural and Academic Interaction Course	September 16 to 20	Cochabamba/Bolivia

Source: ANA/ACTO Project

EVENTS

First Working Meeting of National Assistants and Main Consultants of GEF Amazon Project

The GEF Amazon Project- Water Resources and Climate Change performed the First Working Meeting of National Assistants and Main Consultants, that was held on April 9 and 10, 2013 in Brasilia, Brazil. One goal of the event was to foster the consolidation of the technical team at the regional level.

The meeting was attended by six National Assistants corresponding to six countries, also by the Alternate Focal Point from Bolivia, the Focal Point from Brazil and by four Main Project Consultants in charge of various subprojects.

At the same time, the methodology of the formulating process of the Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP) was also presented.

National Coordination Units of the Project (UNCP) of the participating countries play an important role in the coordination and implementation of the GEF Amazon Project Activities. In this context, the Project Steering Committee, during its Second Meeting in Santa Cruz (Bolivia), approved the convening of a Working Meeting with the participation of all National Assistants, which is part of the Project Operational Plan for 2013.

The GEF Amazon Project team with ACTO Authorities

News from Component III

Get to know the strategies in place for transboundary floodable forests of the Peruvian Amazon

Responding to the need to create a Strategic Action Program for the Amazon Basin, the GEF Amazon - Water Resources and Climate Change Project, through one of its pilot projects, is building enabling scenarios for sustainable ethnodevelopment in transboundary floodable areas of the Peruvian and Brazilian Amazon together with the communities.

The pilot project "Sustainable management of transboundary floodable forests in the Amazon Basin" is directed by Ms. Patricia Chaves de Oliveira, PhD in Agrarian Sciences, who works with a team of three Peruvian and three Brazilian consultants in the floodable forests of the Peruvian Amazon.

These forests are subject to regular flooding from the Amazon River in both Peru and Brazil.

"In Peru, floodable areas or tahuampas correspond to floodable areas or floodplains. This is the case of the region of Loreto and its capital Iquitos, which includes the provinces of Maynas, Loreto - Nauta, Ramón Castilla and Requena. Particularly noteworthy is the Pacaya Samiria National Reserve (home to one of the largest floodplains in Loreto)", explains Peruvian consultant Javier Chavez, professor and researcher of the Scientific University of Peru, headquartered in Iquitos.

The project expert is particularly interested in ethnic knowledge, the way that the local residents face these regular floods. She explains ethnodevelopment as the knowledge, memory and culture of ethnic groups, used to seek and create adequate and sustainable solutions.

Dr. Patricia Chaves de Oliveira, Project Consultant with Artisans from Comunidad de San Jacinto, Nauta, Iquitos, Perú

Why is it important to manage the floodable forests of the Peruvian Amazon sustainably?

Ms Chaves de Oliveira points out that the biodiversity found in Peruvian flooded ecosystems is extremely varied, which offers the possibility of applying technology to use and manage it, generating income for tahuampa residents.

This will make it possible to create new green economy scenarios in the Amazon.

Sustainable management strategies for Peruvian floodable forests

To productively include tahuampa communities in little explored markets and reduce local poverty, after a long period spent in the field working with riverside populations the GEF Amazon Project expert proposes four things:

Introduce "churo" management in tahuampa lakes

"In Iquitos, Loreto - Nauta province, San Regis community, churos (Amazonian sweet water mollusks) are found in the floodable forests of the Peruvian Amazon but are not exploited by the population as a source of income", states Ms Chaves de Oliveira, which makes it a good option to improve the quality of life of local communities.

Use technology to produce fiber and wood handicrafts

In the community of San Jacinto (Nauta, Iquitos) plant and wood fibers of the Peruvian Amazon flood forests have been historically used by the locals as a source of income. However, limitations in the use of technology make it impossible for these products

to reach the most demanding markets.

In addition to using technology to produce handicrafts, the Peruvian consultant recommends creating a germplasm bank with the species used to reduce anthropogenic impact on them.

Use network tanks and land excavation to manage fish species

"The many lakes present in these areas favor the use of network tanks to increase fish production, thereby generating income for artisanal fishermen", points out Ms. Chaves de Oliveira.

Traditional knowledge about artisanal fishing and intensive fish production can be turned into an innovative sustainable development strategy.

Increase fruit and vegetable production

Despite only possible during the dry season, agriculture in the Peruvian Amazon floodplains is an important productive activity for the communities.

"Nevertheless, if appropriate technologies are used, like suspended vegetable gardens using hydroponic techniques, floodable forests can also be used as cropland throughout the flood season", explains the GEF expert.

Boosting the agricultural use of floodable forests will allow riverside communities to tap into untapped markets in a climate change scenario where floods and droughts are becoming increasingly severe in the Peruvian Amazon.

CIFFEN will prepare the Hydro-climatic Vulnerability Atlas

The International Center for Research on the El Niño Phenomenon (CIIFEN) was the entity contracted by the ACTO Permanent Secretariat to prepare the Hydroclimatic Vulnerability Atlas of the GEF Amazon - Water Resources and Climate Change Project.

Data about extreme water and weather events and their socioeconomic impacts on the Amazon basin, validated by official sources recognized by ACTO Member Countries, will be compiled, analyzed and turned in an Atlas (scale 1:1.000.000) to be hosted in the platform of the GEF Amazon Project's Integrated Information System.

CIIFEN is located in Guayaquil, Ecuador and was created as an interagency mechanism in 2003 after the United Nations General Assembly issued Resolution 52/200 encouraging international cooperation to reduce the negative impacts of the El Niño phenomenon.

"CIIFEN's mission is to promote, complement and undertake applied scientific research projects to improve understanding and early warning of ENOS and climate variability at a regional scale, contributing to reducing its socioeconomic impacts and generating a solid basis to formulate sustainable development policies adjusted to the new climate change scenarios."

CIIFEN will work in coordination with the GEF Amazon Project, and ACTO will work with the national focal points and national project assistants, to obtain national and regional hydroclimatic data for the Amazon Basin. CIFFEN will also be in charge of establishing a Geographic Information System (GIS) to organize the data acquired and prepare the Atlas, based on maps of the areas most prone to extreme water and climate events.

The Hydroclimatic Vulnerability Atlas of the GEF Amazon - Water Resources and Climate Change Project, to be executed within a period of 18 months counting from June 2013, is expected to cover the Amazon region of the eight Member Countries of ACTO, thereby contributing to the analysis of extreme water and weather events.

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