

FONAFIFO: Over a decade of action

Costa Rican National Forestry Financing Fund



(CREDITS AND ISBN)

FONAFIFO:
Over a decade of action

A Costa Rican National Forestry Financing Fund
(FONAFIFO) publication

Editor: Jorge Mario Rodríguez
Producer: Edgar Toruño
Supervisor: Alexandra Sáenz
Writer-editor: Gabriela Hernández
Editorial assistant: Andrea Amighetti

Advisory Support and Technical Revision:
Ricardo Ulate, Edgar Toruño, Óscar Sánchez,
Héctor Arce and Jorge Rodríguez Quirós

Printing and design: INFOTERRA Editores S.A.

San José, January 2005

(ACKNOWLEDGMENTS)

Acknowledgments

FONAFIFO wishes to thank the following people for granting interviews and supplying information for this publication:

Carlos Manuel Rodríguez
Jorge Rodríguez Quirós
René Castro Salazar
Franz Tattenbach Capra
Marco Vinicio Araya
Gunnars Platais
Jorge Mario Rodríguez
Luis Fernando Sage
Carlos Herrera Arguedas
Alexandra Sáenz Faerron
Edgar Toruño Arguedas
Luis Arturo Salazar
Hilda Arroyo
Óscar Sánchez Chaves
Gilbert Canet Brenes
Héctor Arce Benavides
Edgar Ortiz Malavasi
Ricardo Granados Calderón
Hernán Hernández Sevilla

Contents

A strong tree
Introduction

A forest-loving country
The action begins – Chapter 1

A long-awaited birth
The creation of FONAFIFO – Chapter 2

The financial arm of the forestry sector
Fund raising! – Chapter 3

The driving force of the forestry sector
The impact of FONAFIFO – Chapter 4

Toward sustainable rural development
FONAFIFO looks ahead – Chapter 5

The world comes to visit
International recognition – Chapter 6

Bibliography



FONAFIFO

A strong tree



Introduction

The creation of FONAFIFO has been a rewarding experience for the country, and one which reflects and represents the innovative spirit of Costa Rica. The heir to an institutional effort dating back to the late 1960s, the National Forestry Financing Fund (FONAFIFO) is now the driving force of the forestry industry in Costa Rica, as well as its financial arm and a dynamic promoter of sustainable development throughout the country.

FONAFIFO is a young tree of great strength and reach, thanks to its solid legal and institutional foundation.

This tree would not have existed, however, without the water that keeps it fresh: the social, entrepreneurial and small-farmer initiatives that comprise the private forestry sector of Costa Rica, along with the country's ongoing commitment and international cooperation. All these elements have worked together to sow the seed of FONAFIFO throughout the country, water the tree and enable its branches to spread beyond national boundaries.

FONAFIFO has been instrumental in the development of the Environmental Services Payment Program (Programa de Pago de Servicios Ambientales - PSA), an innovative approach to forestry development that has set an example for the entire world by recognizing that forests are useful for more than producing timber. Current forestry legislation recognizes four types of environmental services: mitigation of greenhouse gases, protection of water resources, protection of biodiversity and scenic beauty.

The forestry loan program has been pursued as a means to support the production sector and the forest industry. The loans provided facilitate everything from the establishment of nurseries and equipment purchases to technical studies and research and development of forestry products.

Since 1996, when FONAFIFO obtained legal standing as an institution, more than 40 billion colones have been distributed to over 7,000 beneficiaries. The Environmental Services

Payment Program program has provided approximately US\$16 million per year (according to 2004 figures), especially to small and medium-size landowners in forested areas targeted for protection and reforestation.

The results of the significant investment that Costa Rica has made with funds obtained by FONAFIFO from taxes, agreements, sale of Environmental Services Certificates (Certificados de Servicios Ambientales) and loans and grants from friendly countries and international organizations, are clearly visible in the country's rural areas. This is attested to by the country's protected forests, the biodiversity they contain, the millions of trees and forests that have been planted, and the aquifers that are being protected. Tourism, mainly environmental tourism, has become the country's main source of income, adding value to the management, conservation and sustainable development of its forest resources.

Costa Rica has slowed down the rate of deforestation and is recovering the forest cover it once had. There can be no doubt that the forestry incentives of earlier days and the environmental service payments of today, coupled with other national policies, have played a major role in this national success story.

The following pages summarize the role FONAFIFO has played in this process. Its main projects are described, as are the financial mechanisms used to collect funds and the payment systems used to channel those funds to beneficiaries. The latest improvements to the program's overall operation, aimed at addressing the needs of the country, are also discussed. This information is followed by an assessment of results.

Also mentioned are the partners and colleagues, both local and international, who have been involved in this process. A number of actors who have joined us on the journey share their thoughts on the direction the institution should take.

After more than a decade of action, FONAFIFO has emerged as a firm proponent of a new environmental culture, with a strong commitment to the country's forestry sector. The Costa Rican Forestry Fund is a tool for sustainable rural development that combines state commitment with the dynamism of a forward-looking society. That is why we are so proud of its accomplishments.

A forest-loving country



The action begins

Costa Rica has made global environmental history, thanks to its outstanding role in the development of systems for the management, conservation and sustainable development of natural resources, as well as innovative financing mechanisms for the forestry sector. Representatives from scores of countries have visited us to get a closer look at the experiences gained from the Environmental Services Payment Program and to learn about mechanisms for halting the deforestation that was destroying the country's forest cover.

The task has not been an easy one. What Costa Rica has achieved thus far is the result of an effort spanning many years and a harmonious combination of many elements – minds, ideas, laws, incentives, political will, state leadership, corporate strength, *campesino* resolve, technologies and innovations, institutional strengthening, international support... the list goes on and on. The recent history of the country's forests has been written by many programs and many determined people over the course of more than 35 years.

All of this can be traced back to two things: millions of dollars invested and thousands of Costa Ricans involved in the forestry sector, doing field work or providing technical assistance or political support. All of these efforts have been directed towards addressing a problem that had caused widespread alarm: the rampant deforestation that threatened the country, putting its future in jeopardy.

By the early 1980s, Costa Rica had lost a part of its soul. Its forests, a source of life, had all but disappeared. Barely one fourth of the country still had some type of forest cover. The cedar, *pochote*, mahogany and almond trees, along with other native species of fine woods, had fallen, one by one.

Deforestation was occurring at a rate of over 50,000 hectares per year, as a result of extensive farming and stock-raising practices, legal and illegal logging, burning of fields and ignorance. These were the same mistakes other tropical countries were making, to the detriment of their economies and their natural resources.

Two studies published in the late 1970s revealed the true status of the country's forests (Silvander, 1977, and Pérez and Protti, 1978). Both placed the annual deforestation rate at

over 55,000 hectares and showed that less than one third of the country (31.1%) still had some forest cover.

Although the first forestry legislation in Costa Rican history had been enacted a decade earlier (in 1969), its provisions on forestry incentives were not implemented until 1979, ten years and two alarming studies later.

That Forestry Act also created the General Forestry Directorate within the Ministry of Agriculture and Livestock. The Directorate was to be the state entity responsible for forest-related issues. As such, it lay the institutional foundation for what would later become the State Forest Authority (Administración Forestal del Estado - AFE).

The birth of forestry incentives and forest trust funds

The country's first forestry incentive was established, as an urgent measure, in 1979. It consisted of a bonus for reforestation projects in the form of a 16,000-colon reward (equivalent to US\$ 2,000 at that time) for every hectare planted. This reward was tax deductible, in accordance with the 1969 Forestry Act (No. 4465), and was adjusted from time to time by executive decree.

The first National Forest Development Plan, also launched in 1979, represented an effort to align the various entities of the subsector with other production activities in the country.

The first incentive had only been in place five years, however, when another alarm was sounded. In 1984, the Ministry of Agriculture and Livestock reported on another study of forest cover (Junkov, 1984) which showed that by 1983, the country's forests had shrunk even further, so that they only covered 26.1% of its territory. This was equivalent to only 1,333,710 of the country's total area of slightly over five million hectares.

The deforestation rate had by that time risen to 59,000 hectares per year, virtually stripping the country bare.

FORESTRY LAWS THAT CHANGED COSTA RICA
FORESTRY ACT No. 4475 (1969) Established that forest lands assigned priority by the Forest Authority could be expropriated and fell under the legal system governing forests. Allowed forest land to be put to other uses, including human settlements or other private farming or stock-raising projects involving the clearing of forests. Assigned too many functions to the General Forestry Directorate. Made reforestation costs tax-deductible. Protected the forest industry by allowing concessions in forest reserves, granting tax exemptions, prohibiting the export of uncut timber and setting restrictions on the import of forest products.
REFORESTATION ACT No. 6184 (1977) Made the reforestation of the country obligatory for the Costa Rican State, and requires that a minimum of 2% of all resources earmarked for agricultural loans

The government rose to the occasion, and so did the people. That same year, in 1984, Trust Fund No. 178 was created under a loan agreement entitled “Conservation of Natural Resources” (Conservación de Recursos Naturales - CORENA). The trust fund was financed by the United States Agency for International Development (USAID).

This funding was used, among other things, for reforestation and soil conservation loans. The loans were granted at 8% interest, with a ten-year grace period and maturities of up to 30 years, depending on the species to be reforested. This was the country’s first forestry loan portfolio and the first trust fund established for that sector.

These favorable loans were followed by a new generation of forestry incentives, beginning with the 1986 enactment of the second Forestry Act (No. 7032). That law was superseded in 1990 by the third Forestry Act (No. 7174). Both of those laws radically changed the rules of the game for the forestry sector, encouraging small and medium-size producers to participate in national policy decisions.

A new generation of incentives was thus developed. It was comprised of the Forest Bond Certificate (Certificado de Abono Forestal - CAF), created in 1986; the Advance Forest Bond Certificate for Small-scale Reforesters (Certificado de Abono Forestal por Adelantado para Pequeños Reforestadores - CAFPA), created in 1988; the Forest Management Bond Certificate (Certificado de Abono Forestal para el Manejo del Bosque - CAFMA), created in 1992; and the Forest Protection Certificate (Certificado para la Protección del Bosque - CPB), created in 1995.

Benefits were also channeled to the forestry sector through the Forest Development Fund (FDF Trust Fund) (Fondo de Desarrollo Forestal - Fideicomiso FDF), created in 1989 and financed by the Government of the Netherlands through an innovative debt-for-nature swap. Sweden and Finland later made contributions using this same mechanism.

One of the keys to the modernization and success of forestry incentives was the creation, in 1986, of the Ministry of Natural Resources, Energy and Mines (MIRENEM). The General Forestry Directorate and the National Park Service, which had previously been part of the Ministry of Agriculture and Livestock, were transferred to the new Ministry. In 1995, MIRENEM became MINAE (Ministry of the Environment and Energy), after the enactment of the Basic Environment Act.

<p>extended by state commercial banks be used for that purpose. Set an 8% ceiling on interest for such loans and allowed trees as collateral.</p>
<p>FORESTRY ACT No. 7032 (1986) and FORESTRY ACT No. 7174 (1990)</p> <p>Authorized the Executive Branch to include such forestry projects as it deemed necessary in protected areas, or put them under the forest regime. Expanded protected areas. Allowed strong Forest Authority intervention in the use of forest resources. Special logging permits required municipal approval. Created a stumpage tax and a replacement guarantee equivalent to 20% of the value of each cubic meter authorized. Established Forest Bond Certificates as direct reforestation incentives. Maintained protection for the forest industry.</p>
<p>FORESTRY ACT No. 7575 (1996)</p> <p>Prohibits changes in the use of forested areas. Introduces restrictions on the exploitation of forest species. Prohibits the export of square timber and logs. Establishes environmental service payments for services provided by forests.</p>

Deforestation is halted

Change came about thanks to ministry support for the forestry agenda and the sector's own efforts. By the late 1980s, Alvaro Umaña, then Minister of Natural Resources, announced that the deforestation rate had dropped from 59,000 to 22,000 hectares per year. It continued to drop, and by 1994, it had fallen to 4,000 hectares per year.

By 1998, the Costa Rican Government was able to make an announcement few countries in the world could match: the loss of forest cover had fallen to zero. In other words, the land being deforested was equal to the area being recovered and replanted. Costa Rica had been transformed from a net deforester into a nation that managed and conserved its forests with sustainability in mind. From that point on, the challenge would be to regain as much forest cover as possible.

There is no question that this first generation of reforestation, forest protection and forest management incentives were decisive factors in the success of the country's forestry policy.

As far as credit programs are concerned, project financing obtained from various sources during the 1993-1997 period alone surpassed one billion colones. Loans were granted to many associations, co-ops, regional agricultural centers, small and medium-size landowners and businesses.

Resources were directed toward reforestation, interim financing, agroforestry projects, industry, working capital and other needs of the Costa Rican forestry sector, as shown below.

Over 1 billion in 5 years
Forestry operations and loans financed
by different sources, by type of investment
(1993 - 1997, in colones)

ACTIVITY	No. of PROJECTS	AMOUNT
Reforestation	34	172,167,496.00
Interim financing	117	396,080,015.50
Nurseries	58	97,389,875.00
Forest management	2	1,450,000.00
Forest industry	18	280,602,820.00
Technical studies	43	37,116,903.75
Extraction equipment	2	17,000,000.00
Working capital	1	10,000,000.00
Agroforestry	4	9,705,516.00
Seed stands	5	1,540,000.00
Other	7	25,823,077.50
TOTAL	291	1,048,875,702.75

Between 1979, when the first forestry incentive was created, and 1996, when contracts backed by those first incentives were discontinued, the incentive system brought reforestation, forest management and forest protection projects to over 200,000 hectares of land.

Almost half of those hectares were planted through Forest Bond Certificates (CAFs) and Advance Forest Bond Certificates (CAFAs). Under the Forest Bond Certificate system, farmers cover the overall cost of planting, and the state covers 50% of the total value of the incentive, once contract compliance has been verified. The remaining 20, 15, 10 and 5 per cent of the incentive are covered during subsequent years.

Advance Forest Bond Certificates also played a vital role in attracting small farmers and *campesinos* to forestry production. These incentives provided an advance on the first disbursement (50%) to help farmers begin planting. Reforesters received 20% during the second year, 15% during the third, 10% during the fourth and 5% during the fifth year. As originally conceived, Advance Forest Bond Certificates covered areas of no more than 5 hectares per landowner.

Forest Management Bond Certificates (CAFMA) and Forest Protection Certificates (CPBs) were also very useful. In a matter of twelve months (1995-1996), Forest Protection Certificates covered over half the area in hectares that had been covered by Forest Management Bond Certificates in seven years and by Advance Forest Bond Certificates in twelve. The reason for this success is explained below.

Recognition of forestry services

Since its inception, the Forest Protection Certificate program has been one of the most successful of the country's forestry incentives. During its very first year of existence, 22,000 hectares of forest were brought under the protection offered by this program, compared to an annual average of just over 3,000 hectares covered by Forest Bond Certificates and Advance Forest Bond Certificates, and approximately 6,000 hectares per year for Forest Management Bond Certificates.

The reason for this success lay in the fact that for the first time, Costa Rica was paying the owners of forest land for the environmental services that forests offer other than the production of timber. (Neither the concept nor the mechanism of payments for environmental services had yet been formally introduced; the latter would be recognized by law at a later date.)

Through the Forest Protection Certificate mechanism, both the Government and the people of Costa Rica began to pay owners of forest lands "merely" for protecting the forest, thus acknowledging the fact that forests produce not only timber, but other goods and services required by society as well. The Forest Protection Certificate mechanism was thus a significant milestone in the lead-up to the establishment of the Environmental Services Payment Program and the turning point that marked the birth of a new vision of forestry development. Forestry incentives would no longer be used as a subsidy for producers of forest products, but rather as payment for the services forests provide – fair compensation for those who protect the country's water resources, scenic beauty and biodiversity, among other goods and services. Natural beauty and biodiversity, not to mention water resources, are clearly strategic services provided by a country in which tourism is a primary source of income.

Costa Rica used both Forest Protection Certificates and other forestry incentives as a basis for what later became the Environmental Services Payment Program created in 1996. A new

approach to forest conservation was thus created, in which forest products were marketed without damaging the forest. It was a process that took years of practice, trial and error, local inspiration, outside influence and hard work in every area... that is how it all began.

Impact of early forestry incentives

Number of hectares protected and managed, by type of incentive or source of funding for early incentives (1979 – 1996)

Type of incentive	Hectares	Period
Income tax deduction	35,597	1979 - 1992
Soft loans	2,802	1985 - 1995
Forest Bond Certificates (CAFs)	45,482	1986 - 2000
Advance Forest Bond Certificates (CAFAs)	40,747	1988 - 2000
Forest Development Fund (FDF)	12,789	1989 - 1995
Forest Management Bond Certificates (CAFMA)	45,222	1992 - 1999
Forest Protection Certificates (CPBs)	22,200	1995 - 1996
TOTAL	204,839	1979 - 1996

The first beneficiaries of the Environmental Services Payment Program

FONAFIFO granted the first environmental service payments to 20 *campesinos* in Los Jilgueros, Guápiles, who entered into an agreement with the Central Volcanic Range Development Foundation (Fundación para el Desarrollo de la Cordillera Volcánica Central - FUNDECOR). These individuals were probably the first in the world to receive benefits in exchange for protecting the forest under the innovative Environmental Services Payment Program.

FUNDECOR, a progressive Costa Rican organization created in 1991, offered to pay this group of farmers from Guápiles for permission to exploit the scenic beauty of 1,600 hectares of mountains and waterfalls. Under the project, entitled Ecocampo, hiking trails were created to enable tourists to enjoy the natural wonders of the property. The agreement with the Los Jilgueros Group (Grupo Los Jilgueros) was signed in 1992 and remains in force to this day.

From the outset, the FUNDECOR/Guápiles Group venture was supported by the newly created FONAFIFO. Its success proved the viability of the idea, and together with the provisions of the Convention on Biodiversity and the Earth Summit, which had recently been held in Rio (1992), convinced the Minister of the Environment that the country truly could protect the environment and pursue economic and social development at the same time, while also recognizing and paying for forest services.

As René Castro, who was Minister of the Environment at the time, would write, “The sale and exploitation of our forests is one of the best tools for preserving them... such a statement would doubtless be received with shock and revulsion by most people. In these times, however, it is possible to 'sell and exploit' our forests in such a way that, paradoxically, their

conservation is actually enhanced, and their development is encouraged" (FONAFIFO, *Memoria 1993-1997*).

The Costa Rican people understood the message. But the forestry sector – a dynamic, enterprising sector that had been mobilizing and working to create opportunities for the development of the country's forests – understood it best of all.

A pioneering group

The progress of the forestry sector in Costa Rica has been closely tied to an active, enterprising private sector that has worked hand in hand with the Forest Authority and FONAFIFO. In addition to working in the field, this sector has become fully involved in the political and conceptual management of the country's forest development.

In 1969, the first Forestry Act created the National Forestry Council (Consejo Nacional Forestal - CNF), which was comprised of six representatives of the public sector and one member of the private sector, given that private-sector representation was still in its early stages. The situation changed after the enactment of the 1986 Forestry Act, which raised the number of private-sector representatives to three.

The National Forestry Council served as an advisory body to the Minister, but lacked decision-making power. Consequently, the private sector organized other associations, such as *Aserraderos Unidos* (a trade organization of sawmill operators) for the lumber industry, the *Cámara Nacional de Industriales de la Madera* (National Timber Industry Chamber) for the forestry industry as a whole, and the *Cámara Nacional Forestal* (National Forestry Chamber) for those engaged in reforestation, along with a few other industry groups.

Interest in forest issues continued to grow during the second half of the 1980s. The San Carlos Forestry Development Commission (*Comisión de Desarrollo Forestal de San Carlos - CODEFORSA*), the Guanacaste Forestry Development Association (*Asociación Guanacasteca de Desarrollo Forestal - AGUADEFOR*) and other local organizations devoted to promoting forestry activities were also created during this period.

At that time, however, efforts to unite the sector were unsuccessful, as industrialists and growers remained divided. During the early 1990s, small-scale silviculturists began forming their own associations, and in September 1991 they held the first National *Campesino* Forestry Conference (*Congreso Nacional Forestal Campesino*). At this event, the National *Campesino* Forestry Board (*Junta Nacional Forestal Campesina - JUNAFORCA*) was created.

The Costa Rican Forestry Chamber (*Cámara Costarricense Forestal - CCF*) was created in 1994 to improve coordination among members of the private sector. The Forestry Chamber later became part of the Costa Rican Union of Private-Enterprise Chambers and Associations (*Unión Costarricense de Cámaras y Asociaciones de la Empresa Privada - UCCAEP*).

With the creation of CCF and JUNAFORCA, the private sector settled into two distinct groups, with coordination channels that have worked well. The 1996 Forestry Act, for example, was discussed and adopted with significant input from both groups. The National Forestry Office (*Oficina Nacional Forestal - ONF*), created by the 1996 law to ensure

communication between the public and private sectors, also has representatives from both organizations on its board of directors.

Tools to improve coordination with the public forest management sector have also been created. A Joint Public Sector-Private Sector Commission (Comisión Mixta Sector Público-Sector Privado) was created in 1993 by Executive Decree No. 22513-MIRENEM, to address the many conflicts between the two sectors. The purpose of the Commission was to provide a permanent forum for dialogue, coordination and analysis of the country's forest development.

The private forestry sector has thus been active and vigilant, staunchly supporting the forestry policies and actions undertaken over the last 20 years.

Forestry funds are consolidated and FONAFIFO is born

In 1995, the Ministry of the Environment took a crucial step in the history of Costa Rican forestry when it consolidated into a single system the various forestry trust funds that had been operating over the previous ten years. The move was intended to make the management of priorities and funds clearer, more transparent, more flexible and more efficient.

This entailed merging the different administrative offices that had been managing those funds. The *Campesino* Forestry Development Department (Departamento de Desarrollo Campesino Forestal - DECAFOR) was responsible for the Forest Development Trust Fund (Fideicomiso de Desarrollo Forestal - FDF), which was in turn responsible for managing the international cooperation resources provided by the Netherlands and Sweden. The General Forestry Directorate and the Reforestation Department were in charge of the "340 trust funds" (formerly "178 trust funds", funded by AID) and the "04-87 trust fund", respectively. The latter was used to manage forest tax revenues.

The "19-91 Trust Fund", or National Forestry Financing Fund, had been created in 1991. FONAFIFO took its name from this trust fund, which was supported by resources from the Special Budget of the Republic (pursuant to article 32 of Act 7216).

At the administrative level, these different offices were merged into a single unit called the Coordination and Oversight Office in 1995.

As René Castro, former Minister of the Environment, recalls, "It was a major step and a complicated one, but one of the advantages of a unified administration was that it reduced costs and made for more efficient, more transparent and trustworthy management, since more information was now accessible to the public."

According to Ronald Vargas, who was part of the group that helped to bring about these changes, the creation of a single fund provided a leadership mechanism to steer the development of forestry in Costa Rica in the right direction.

In practical terms, that step marked the birth of the entity that would be ratified by law as the National Forestry Financing Fund (FONAFIFO) one year later, in 1996.

Early forestry trust funds (Before and at the inception of FONAFIFO)			
TRUST FUND	YEAR OF CREATION	RESOURCES MANAGED	TRUSTEE
178 Trust Fund*	1984	AID funds	Banco Nacional
04-87 Trust Fund	1986	Forestry Tax	Bancoop
FDF Trust Fund**	1988	Netherlands and Sweden	Bancoop
19-91 Trust Fund	1991	Regular Budget	Bancoop
FDF-Multidonor	1995	Various funds	Bancoop

* Later discontinued and converted into the 340 Trust Fund.

** FDF: Forest Development Fund. This trust fund was not administered by FONAFIFO.

An idea whose time had come

During the 1980s and 1990s, the Costa Rican forestry sector went through many changes. New public and civil-society organizations came to life and developed, the Ministry of the Environment was consolidated, and three laws on forest protection, use and management were enacted.

Deforestation rates were reduced, and forest cover was being restored thanks to the joint efforts of the government and of society as a whole. Innovative mechanisms were also developed to finance reforestation, manage forests and develop environmental services payment programs.

The changes in the forestry financing system, the elimination of subsidies, the move toward payment of environmental services and the creation of a single, streamlined fund to manage the resources assigned to this new type of development were all clear signs of the about-face of the Costa Rican forestry sector.

Beyond the structural adjustment policies calling for the elimination of subsidies in a number of areas, the public and private sectors shared a core belief that Costa Rica's forestry sector was ready for something new. The sector was evolving, maturing, opening up a new chapter in its history with the help of the newly created National Forestry Financing Fund (FONAFIFO) and its incipient Environmental Services Payment Program.

A long-awaited birth



The creation of FONAFIFO

April 16, 1996 was a milestone in the history of Costa Rica's forestry sector. On that date, Forestry Act No. 7575 was published and entered into force. This law created two instruments that would play a key role in the development of modern forestry activities: the National Forestry Financing Fund (FONAFIFO) and the Environmental Services Payment Program.

Other innovations included the creation of the National Forestry Office (ONF), the establishment of a fuel tax as one of the main sources of financing for forestry activities, the creation of other financing mechanisms, and the acceptance of trees and forests as items to be accepted as collateral for loans granted by the national banking system.

Without a doubt, the most significant contributions of the Forestry Act were the creation of FONAFIFO and of the environmental services payment system. These two programs have worked to further the country's forestry/environmental development.

The main objective of FONAFIFO is to provide small and medium-scale producers with financing for reforestation, planting of forests and nurseries, development of agro-forestry systems, recovery of deforested areas and implementation of technological change, all for the productive use and industrialization of forest resources. The Forestry Fund is also responsible for obtaining financing for environmental service payments programs.

FONAFIFO was designed as an entity operating under the “maximum decentralization” model; thus, it is authorized to carry out all kinds of lawful, non-speculative transactions. It is authorized to create trust funds, issue securities and bonds, negotiate projects and receive grants or loans. It is also entitled to receive fuel tax revenues, as well as 40% of forest tax revenues.

According to Ricardo Granados, coordinator of the FONAFIFO Legal Department, “the law views the Fund from an entirely new perspective, investing it with broader powers to obtain financing, enter into all kinds of forest-conservation and related transactions and develop the forestry sector. This has enabled it to sign many different agreements and contracts for conservation activities that benefit the country.”



Vision

To become the country's chief financial institution for the promotion of environmental and, in particular, forestry activities and a leader in the creation of innovative financing mechanisms aimed at developing markets for the goods and services produced by forest ecosystems, improving productivity and competitiveness in harmony with the environment and helping to enhance the quality of life of small and medium-scale foresters.

Mission

We are the financial institution of the forestry sector, operating under the aegis of MINAE, at the national level and with international scope. FONAFIFO seeks to improve the competitiveness and well-being of small and medium-size producers of forestry goods and services, through development mechanisms applying state-of-the-art technology, and with a highly qualified staff.

We offer quality services through efficient, timely action. Resources are managed in a transparent manner, thereby ensuring the production of forest goods and services that meet the needs of society at large.

Objective

To use loans and other mechanisms for promoting the development of forests, disturbed or otherwise, and provide small and medium-scale producers with financing for reforestation, planting of forests and nurseries, development of agro-forestry systems, recovery of deforested areas and implementation of technological change, all for the productive use and industrialization of forest resources.

To obtain financing for environmental services payment programs, forest planting and other activities needed to strengthen the development of the natural resources sector.

A long-term vision

Both FONAFIFO and the Environmental Services Payment Program were conceived with long-term objectives in mind, as instruments to support sustainable development projects. Forest protection projects, for example, have a duration of five years and are renewable by agreement between the State and the forester. Reforestation contracts are written for the same duration as that of the forest plantation's production cycle, or for a maximum of fifteen years, depending on the species concerned.

In the words of René Castro, under whose tenure both programs were created, "If you want to conserve forests or plant trees, you've got to think in terms of three or four administrations. I think we took steps in that direction, developing environmental and forestry policies that transcend presidential terms."

One step that was taken to ensure the fulfillment of this long-term vision was the mandate to include private-sector representatives on the Board of Directors of FONAFIFO. These representatives do not necessarily change when a new administration or a new minister takes office (the Board of Directors is comprised of two representatives from the private sector, two from the public sector and one from the national banking system).

Values and Principles of FONAFIFO

The ideals of FONAFIFO are based on the following values and principles:

- Responsibility
- Honesty
- Loyalty
- Mutual respect
- Ethical and moral integrity

Accordingly, FONAFIFO will strive to:

- Create an institutional identity and a sense of community among its staff.
- Observe and respect its legal framework.
- Improve and innovate on a continual basis.
- Be transparent and accountable.
- Provide excellent service.
- Recruit a highly qualified staff.

FONAFIFO is also committed to:

- Teamwork.
- Democratic leadership.
- Open channels of communication.
- Creativity and openness among all staff members.
- Gender equality.

Finally, FONAFIFO promotes:

- A policy of purchasing goods and services from sustainable, non-pollutant sources.
- The recognition of forest ecosystems as producers of a variety of goods and services.
- Belief in natural-resource-based economic development.

Environmental services envisaged by the Forestry Act

The groundbreaking Forestry Act 7575 clearly establishes four types of environmental services for which FONAFIFO is authorized to make payments:

1. *Mitigation* of greenhouse gas emissions (carbon reduction, absorption, fixation and storage).
2. Protection of *water* for urban, rural or hydroelectric use.
3. Protection of *biodiversity* for conservation and sustainable, scientific and pharmaceutical uses, genetic research and breeding, and protection of ecosystems and life forms.
4. Natural *scenic beauty* for tourism and scientific research.

While forests also provide other environmental services, Costa Rican law has recognized those listed above, and that in itself is an important step forward.

In the words of Franz Tattenbach, who spent eight years as a Costa Rican negotiator on the Framework Convention on Climate Change and also served as Executive Director of FUNDECOR, “I believe Costa Rica made global history by putting this into a law, and in that same law, creating FONAFIFO.”

During the mid-1990s, in fact, Tattenbach and other forward-looking specialists, inspired by the Biodiversity and Climate Change conventions, as well as by the 1992 Rio Summit, promoted those innovative approaches to sustainable development.

As he explains, “What we had then was a significant paradigm shift. The idea of fiscal incentives for a fledgling reforestation industry was replaced by a very different concept: the idea that forests provide environmental services.”

At the time, climate change was one of the most significant and novel issues on the international agenda. Environmental services – especially external (global) services related to climate change – enjoyed strong political support.

Says Tattenbach: “This has been a longstanding struggle for Costa Rica, and it has now been rewarded with the latest resolutions of the Framework Convention on Climate Change (FCCC), which recognize the importance of the forestry sector and its contribution to the mitigation of climate change. Through FONAFIFO and MINAE, Costa Rica began the struggle in 1995, and by 2003 the concept had gained full acceptance.”

There can be no doubt that the legislation enacted in 1996 (Act 7575) energized these ideas and allowed them to be put into practice. The Act established a basic conceptual framework for the environmental services package that would be included in the Environmental Services Payment Program, and provided for the use of fuel tax revenues to pay for environmental services (article 69).

Inspired to legislate

When the forestry bill was being discussed, conditions were ripe in the Legislative Assembly for a spirited debate on reforestation and forest management issues. By the end of 1995, the Environmental Affairs Committee was putting the finishing touches on the bill, which would be brought to the floor in early 1996.

The work of the Committee was crucial, as it strove to update legislation that was nearly 30 years old. The first Forestry Act dated back to 1969, and although it had been amended in 1986, the position of the Costa Rican State vis à vis the country's forests still required extensive modernization. The Environmental Affairs Committee was the legislative leader of this process. Its Chairman, Hernán Bravo, had also served as Minister of Natural Resources from 1990 to 1994.

After almost 30 years of trial and error in the field of reforestation, both the country and the Committee had a much clearer idea of what needed to be done to manage and protect forests.

Forestry Act 7575 was adopted by the Assembly on February 13, 1996, and entered into force two months later, on April 16.

One of the secrets of its success, and the basis for its future implementation, was the fact that civil society actors were involved in its design from the moment of its inception. These groups, working together with the State, ensured the soundness and effectiveness of the Act.

Public-private cooperation

The National Forestry Chamber (CANAFOR), JUNAFORCA, FUNDECOR and other private organizations were concerned with and involved in the drafting of the bill, its adoption – as Forestry Act 7575 – by the Legislative Assembly, and its implementation.

This convergence of the interests of the private forestry sector with those of the Administration and the lawmakers was, of course, reflected in the spirit of the Act, which provided for the direct participation of private sector representatives on the Board of Directors of FONAFIFO. It also established the National Forestry Office as the entity responsible for harmonizing the interests of private forestry groups with those of the public sector, and coordinating the initiatives needed to accomplish that.

It was crucial to encourage private forestry sector participation, since it was clear that, given the socio-economic situation of Costa Rica, further expropriations to create national parks were neither feasible nor advisable. Genuine private sector participation, through the involvement of forest owners or landowners willing to reforest, was the key to stopping deforestation and achieving sustainable and widespread recovery of the country's forest cover.

FONAFIFO, with its Environmental Services Payment Program, was to play an important role in that regard, acting as a bridge between the public and private sectors.

As Luis Arturo Salazar, former chairman of CANAFOR and owner of the company Maderas Cultivadas de Costa Rica recalls: "I was chairman of the National Forestry Chamber (Cámara Nacional Forestal - CANAFOR), and we sat down with the Timber Industry Chamber (Cámara de Industriales de la Madera - CAMAINA), JUNAFORCA and others to discuss the matter, to see how we could help the government develop some type of institution to provide financing for the sector. That was how we decided to support the creation of FONAFIFO, a fund that could really help us."

Years later, Salazar can attest to the fact that financing has been available to help the private forestry sector: "During our most difficult times as a business, in 1994-1995, when the company had obtained loans from Banco Nacional, FONAFIFO was there for us, because they understood what was happening. It was a cash-flow problem that is typical of long-term forestry investments. That moral support from FONAFIFO was crucial."

This cooperation between the public and private forestry sectors has been consistently reflected in the structure, policies, decisions and working agenda of FONAFIFO ever since its creation.

The early structure of FONAFIFO

When FONAFIFO was established by law in 1996, its main administrative units were the Board of Directors, the Executive Director and three departments.

The three departments that made up the organization immediately after its creation were the Department of Administration, the Credit Department and the Environmental Services Department. Two others – the Resource Management Department and the Legal Department – were established later.

The Board of Directors includes two members from the private sector; these are appointed by the National Forestry Office (ONF) and represent small and medium-size producers and entrepreneurs in the timber industry. The public sector has three representatives – one from the Ministry of Agriculture and Livestock, one from the Ministry of the Environment and Energy and one from the national banking system. Board members are appointed for two-year terms, and may be reelected.

Armed with this organizational structure and a 12-member staff committed to making it the most important forestry institution in the country, FONAFIFO switched into high gear in 1996.

Support of the National Conservation Area System (SINAC)

In order to make the Environmental Services Payment Program operational, the Forestry Act 7575 provided that in addition to FONAFIFO, the National Conservation Area System (Sistema Nacional de Áreas de Conservación - SINAC) should also be involved in its implementation. This body was responsible for selecting owners of forests and plantations who were eligible to receive payments for providing environmental services.

Accordingly, the National Conservation Area System was responsible for deciding which areas should be given priority as recipients of payments; it also received and processed

applications from interested parties and decided which ones to approve. Through the conservation areas, it was also responsible for supervising the projects undertaken.

Applications were submitted to the National Conservation Area System at its 32 subregional offices throughout the country, and it in turn requested FONAFIFO to make the payments. This system remained in place until 2003, when the Ministry of the Environment and Energy entrusted all responsibility for the Environmental Services Payment Program to FONAFIFO, and the National Conservation Area System took on more of a policy-making role, as described below.

An enormous challenge

The main challenge facing FONAFIFO was that of restoring the country's forest cover, which had been destroyed, especially during the 1960s and 1970s. Environmental services collection and payment mechanisms, reforestation loans and other forestry activities would be its tools.

The main objective was to get as close as possible to 70% forest cover. This is the percentage of the country's total area that has forest potential (Costa Rica has a total area of 5,110,000 hectares, of which approximately 3,577,000 have forest potential).

To help achieve this goal, FONAFIFO was determined to become the country's main environmental finance institution and a leader in the creation of innovative financing mechanisms. Its objective was to develop markets for the goods and services produced by forest ecosystems, helping to improve productivity and competitiveness in harmony with the environment and to enhance the quality of life of the population.

The objective was to use loans and other mechanisms for promoting the development of forests, disturbed or otherwise, and to provide small and medium-scale producers with financing for reforestation, planting of forests and nurseries, development of agro-forestry systems, recovery of deforested areas and implementation of technological change, all for the productive use and industrialization of forest resources.

Another objective would be to obtain financing for environmental services payment programs, forest planting and other activities needed to strengthen the development of the natural resources sector.

One of the first actions undertaken by FONAFIFO was the development of a baseline study to assess the country's existing forest cover. Progress could then be measured, years later, against that baseline.

As René Castro explains, "It was a thorough study of the country's forest cover conducted by the University of Costa Rica and financed by FONAFIFO with proceeds from the first carbon fixation sales. We needed a baseline, both to determine what was required of the country after the creation of FONAFIFO and to make the international community understand the potential global impact of the sale of environmental services.

The study, conducted in 1997, included a comparative assessment of the loss of forest cover during different periods from 1940 onwards. It used the famous "striptease" maps of Costa Rica – a set of seven maps showing how the country had "stripped off" its forest cover between 1940 and 1987 – to illustrate this process. The last map, however, shows the

country beginning to regain its cover (between 1987 and 1998, the deforestation rate declined from nearly 50,000 hectares a year to zero).

The 1997 baseline study clearly showed that by that year, Costa Rica had increased its forest cover to 40% of the national territory. (In 1983, the forest cover had dropped to a record low of 26.1%).

Consequently, one of the greatest challenges facing the country was to curb deforestation while also achieving the 70% forest cover recommended by experts. From 1997 onward, FONAFIFO would work to accomplish this goal.

(INSERT STRIPTease MAPS)

A difficult start

The first three years of the organization's existence as a legal entity were not easy. The Fund was established by law in 1996, but did not begin receiving fuel tax revenues – designated as its main source of funding – until 1998.

In 1997, the Ministry of Finance failed to fully disburse these funds, thus making it difficult for FONAFIFO to begin its work. Despite its high hopes and responsibilities, it had only limited operating resources.

Fortunately, in 1997 the Costa Rican Office on Joint Implementation (Oficina Costarricense de Implementación Conjunta) negotiated a US\$ 2 million carbon sale agreement with Norway which provided for the sale of 200,000 tons of carbon, at US\$ 10 per ton.

“This money was used to cover the first environmental services payments made in Costa Rica, as required by law”, recalls Carlos Herrera, Deputy Director of FUNDECOR, which helped secure the initial approval of the Environmental Services Payment Program.

The fuel tax revenues referred to in the Forestry Act remained unavailable, however. This caused a national uproar in June and July of 1997, with private forestry groups threatening to block the inter-American highway at the Barranca River bridge, as well as the access route to San Carlos, in the north. After intense negotiations involving the ministers of finance and the environment, the President instructed the Minister of Finance to promise delivery of slightly over 1.7 billion colones to FONAFIFO to finance the payment of Forest Bond Certificates (the traditional Forest Bond Certificates, Forest Management Bond Certificates and Forest Protection Certificates).

The forestry sector soon realized that this was a double-edged sword. Under the new Forestry Act, the old incentives were destined to slowly disappear. The right approach was to use those funds as environmental service payments, as envisaged in the new model created by Act 7575. The cooperation of Jorge Rodríguez Quirós, then president of FUNDECOR, was crucial in that regard, as he spoke out on the need to clearly specify that Forest Bond Certificates should be used to cover environmental service payments.

In 1998, FONAFIFO received the required fuel tax revenues and placed them in trust with Banco Cooperativo (Bancoop), the bank that had been awarded trusteeship following a competitive bidding process.

All the necessary administrative arrangements were made to begin payment of environmental services throughout the country – amounts, procedures, check-processing systems, administrative channels for the delivery of payments, and project and beneficiary follow-up procedures, among other details. Everything was moving full-steam ahead.

At the end of 1998, however, FONAFIFO suffered another serious setback: the bankruptcy of Bancoop. December 1998 was a very difficult month. Part of the Fund's assets (those that were tied up in investments) were frozen, and questions arose in every quarter.

In addition to having part of its assets frozen, FONAFIFO spent the first half of 1999 filing complaints and struggling to recover as much of its money as possible. The second half of that year was spent looking for a new trustee and transferring resources to the new bank.

In October 1999, the Fund began working with Banco Nacional, its current trust fund administrator.

FONAFIFO greeted the year 2000 with a new trustee, a new director, renewed funding and, in February of that year, a new building, in which it is currently housed.

Despite the upheaval, the Fund maintained an intense schedule of activities and managed to invest a significant amount of resources in the Environmental Services Payment Program between 1997 and 2000.

Over the course of those three years, the Environmental Services Payment Program covered more than 200,000 hectares which were put under reforestation, forest protection and forest management plans, thereby outdoing the old forest incentives, which had taken 20 years (1979 to 1996) to cover the same area.

“There is no question that this process made us stronger as an institution, and, despite all the problems we faced, the Environmental Services Payment Program was not affected”, says Edgar Toruño, Administrative Coordinator of FONAFIFO.

An efficient service

The key to the effectiveness of FONAFIFO, even in the face of adversity, was the strong sense of mission and commitment of its small staff, and its effective and efficient work ethic.

From the start, FONAFIFO had a clear vision of the type of services it needed to provide: efficient and transparent services based on clear information, cutting-edge technology and highly qualified personnel.

“It was very important to build a good working team, with clear rules, a good institutional image and an organization that looked toward the future, where it must grow”, says Marco Vinicio Araya, the organization's first director.

Thus established, and after many changes in a short period of time, FONAFIFO was ready to begin work in earnest, negotiating the funds that were to be the spearhead of its environmental services payment program. The stage was set to begin attracting and managing more resources for the country's forestry and environmental sector.

The financial arm of the forestry sector



FONAFIFO

Fund raising!

By 2004, FONAFIFO had an annual budget approaching seven billion colones – 6.9 billion, to be exact, or approximately US\$ 15.5 million¹. This is a significant amount for a country with a population of only 4.1 million. Costa Rica's investment in the forestry sector – particularly for environmental services payments – is equivalent to approximately US\$ 3,780 per capita.

FONAFIFO has mobilized over 40 billion colones over the last ten years (1995-2004) – an impressive achievement for a developing country, made possible by the interest of Costa Rican society in forestry issues and the political support of several government administrations.

What is the secret of this financial success? In addition to the merging of the country's forest trust funds in 1995 – which brought the cumulative value of FONAFIFO to nearly 700 million colones and served as an excellent starting point – the answer lies in the fact that FONAFIFO has made wise use of the fund-raising tools provided by the Forestry Act of 1996.

¹ The exchange rate in September 2004, when this publication went to press, was US\$1=446 colones.

The mechanisms FONAFIFO uses to finance its activities include tax revenues, grants, loans, agreements with private businesses, financial market instruments such as bonds and certificates, short-term investments and recovery of forestry loans. Act 7575 authorizes the Fund to use all of these tools, as well as other innovative forms of financing to be developed within its legal framework (see sidebar).

Under the Forestry Act, FONAFIFO is entitled to one third of the revenues obtained from the fuel tax; however, these funds have never been fully disbursed. The Tax Simplification and Efficiency Act assigns 3.5% of the single fuel tax to FONAFIFO, and these funds have been disbursed on a regular basis.

FONAFIFO soon realized, however, that it would need more than taxes to meet the country's forestry finance needs and generate a sustainable financial momentum through market instruments and with the participation of society and the international community.

Thus, during the first year of its existence as a legal entity, the Fund began negotiations with private businesses, international agencies and banks, with a view to obtaining additional resources, especially to finance environmental services payments.

As a result of these negotiations, seven agreements have been signed (as of 2004) with private businesses that pay for the environmental service of protecting water resources. Agreements signed between 1997 and 2004 also include a loan from the World Bank and grants from the Global Environment Facility (GEF) and the German bank KfW.

These agreements, loans and grants now account for over 65% of the annual budget of FONAFIFO – approximately US\$ 10.2 million of the US\$ 15.5 million budgeted for 2004 (see sidebar on funding sources).

FONAFIFO: Funding Sources

- Allocations from the regular and special state budgets, as well as other mechanisms (3.5% of the excise tax on fuels and other hydrocarbons).
- Grants or loans from national and international organizations.
- Loans and resources obtained through the issue and sale of credit instruments.
- Resources obtained from the conversion of foreign debt, as well as environmental services payments made by public, private, national and international organizations and administered by FONAFIFO.
- Recovery of development loans.
- Financial returns from short-term investments.
- Forty per cent of timber tax revenues (Act 7575, article 43). However, legal challenges have prevented collection of this tax.
- Present and future forest bond issues.
- Other resources collected to fulfill the objectives of the organization.

Source: Act 7575, article 47.

More recently, the Reforesta project was designed as a tool to promote reforestation more actively, and Environmental Services Certificates (CSAs) were created as a market instrument to obtain funding from private businesses and individuals who wished to protect environmental resources – usually those that they themselves use for tourist or recreational purposes.

Fees collected from private businesses for the protection of water resources

Almost half of the electricity consumed in Costa Rica is sold by the National Power and Light Company (Compañía Nacional de Fuerza y Luz - CNFL). To produce this electricity, CNFL draws water from the basins of four rivers – the Cote, Balsa, Aranjuez and Virilla rivers.

In 1998, FONAFIFO signed an agreement with CNFL whereby the latter pays a pre-established fee in exchange for the protection of three of the basins mentioned above (Cote, Aranjuez and Balsa). Since then, CNFL has paid FONAFIFO US\$ 40 per hectare per year. At present, the agreement covers a total of 10,900 hectares and earns the Fund approximately US\$ 436,000 a year. This amount is turned over to the owners of forests in the river basins, as an environmental service payment for the protection of forests.

Similar agreements have been entered into with two other hydroelectric companies – Energía Global de Costa Rica S.A., which operates hydroelectric projects in the San Fernando and Volcán river basins in Sarapiquí, and Hidroeléctrica Platanar, which uses the Platanar River basin to generate electricity for the canton of San Carlos, in the north of the country. FUNDECOR helped to negotiate both agreements and acts as an intermediary, handling payments to the basin forest owners.

The agreement with Energía Global was signed in 1997 for renewable five-year terms. The company disbursed US\$ 200,000 over the course of the first five years (1997-2002), and is expected to pay the same amount over the next five years (2003-2008), at a rate of US\$ 40,000 a year.

The agreement with Hidroeléctrica Platanar was signed in 1999 for a ten-year period. It provides for the protection of 1,300 hectares at an annual rate of US\$ 30 per hectare, thus generating US\$ 39,000 per year.

Another agreement involving river basin protection – and hence a water protection fee, which is used to pay landowners – has been signed by FONAFIFO, FUNDECOR and Florida Ice and Farm (Cervecería de Costa Rica – a brewery). The difference in this case is that the company uses water for its brewery and bottling plant (water, fruit drinks and soft drinks), rather than for power generation.

The agreement between FONAFIFO and Florida Ice and Farm was signed in 2001. The initial contract is for eight years, during which time the company will pay to protect 1,000 hectares of forest at a yearly fee of US\$ 45 per hectare (for a total of US\$ 45,000). The agreement protects the upper Segundo River basin, in the province of Alajuela.

These four agreements with private businesses and hydroelectric power companies earn FONAFIFO approximately US\$ 560,000 a year, which is used to pay forest owners through the Environmental Services Payment Program.

International loans and grants

Loans and grants from the World Bank, the Global Environment Facility and the German cooperation bank KFW are currently the Fund's main sources of income. The relevant agreements were signed in 2000, and they enabled the organization to begin the new millennium with adequate funding.

The World Bank approved a US\$ 32.6 million loan, and GEF provided a grant of US\$ 8 million, for a total of US\$ 40 million for payment of environmental services under the **Ecomercados** project for a five-year period (2000-2005). Considered one of the country's most significant environmental successes, the project is evidence that the two agencies recognize the strength of Costa Rica's Environmental Services Payment Program.

In addition to providing funds, Ecomercados has brought the country international recognition. The World Bank is very selective in the use of its resources, and the fact that it granted this loan shows that FONAFIFO has been a good steward of the funds placed under its control. The same is true of the grant made by the German government through KFW.

Ecomercados is also financed by approximately US\$ 9 million in national counterpart funding, which attests to the commitment of the Costa Rican Government to the Environmental Services Payment Program. This, combined with the interest rate and grace period granted, made the World Bank loan package and the GEF grant feasible options for the country and its Ministry of Finance. This arrangement actually amounts to swapping national debt for foreign debt.

"The payments are scheduled to end in five years (2000 to 2005), but the final payments to forest owners will not be completed until 2009, since the environmental services payment mechanism entails making payments over a five-year period. Beneficiaries entering the program in 2005 will receive their final payments in 2009", explains Oscar Sánchez, Coordinator of the FONAFIFO Environmental Services Department.

Ecomercados gives priority to areas located inside the Meso-American Biological Corridor, where environmental services are designed to protect biodiversity, reduce greenhouse gases and protect water sources. Thus, the project is also helping to achieve the regional resource conservation and management goals established within the framework of the Central American Integration System (SICA), and in particular, the Central American Commission on Environment and Development (CCAD).

Another important international agreement has been signed by FONAFIFO and the German development bank KFW. Under this agreement, KFW has donated 10.25 million euros (approximately US\$ 12 million), to be disbursed over the course of seven years (2000 to 2007).

This grant is being used to cover environmental service payments in the Arenal-Huetar Norte Conservation Area (in the north of Costa Rica), as well as in the Sarapiquí subregion of the Central Volcanic Range Conservation Area. The purpose of these payments is to continue the work begun there by the COSEFORMA technical cooperation project, an earlier forestry initiative financed by the German government.

FONAFIFO has also entered into a technical cooperation agreement with the Food and Agriculture Organization of the United Nations (FAO). The project, entitled CTP FAO 066, focuses on analyzing opportunities for the industrialization and marketing of artificial forest timber and, by extension, reforestation in Costa Rica.

In addition, the World Bank and the Government of Japan have supported the development of the **Reforesta** project, which seeks to reactivate reforestation efforts in Costa Rica. Over US\$ 300,000 were invested in the development and execution of this project between 2002 and 2004.

The main source of permanent funding for the Reforesta project, however, will be the sale of bonds, which are intended to raise funds from businesses and institutions for reforestation loan programs. The first bond issue – 2.6 billion colones – will finance nearly 9,000 hectares of plantations of different ages. Priority will initially be given to the planting of melina and teak, but future bond issues will cover native species as well.

“Reforesta will help growers plant high-quality forests in accessible, high-yield areas, combining forestry loans, environmental service payments and advance timber purchases to improve the cash flow of commercial reforestation efforts”, explains Héctor Arce, Loan Coordinator for FONAFIFO.

In January 2003, FONAFIFO signed an important agreement with the Ministry for Foreign Affairs. The agreement, which came about as a result of broad international interest in the country’s Environmental Services Payment Program, involves the implementation of international cooperation mechanisms in the fields of natural resource conservation and rural development. It will be executed through the Costa Rican Foreign Service and the Ministry of Foreign Affairs. Thus, FONAFIFO will be transferring its experience and knowledge through international cooperation.

Environmental Services Certificates

Another successful fund-raising tool developed by FONAFIFO is the Environmental Services Certificate (CSA), whereby funds are obtained from institutions and private businesses in exchange for a certificate for an amount equivalent to the number of hectares they wish to protect. The protected land is, of course, located in areas that provide environmental services for the parties involved. The payments are transferred to the forest owners, who undertake to continue preserving the area in question.

The first large CSA issue was valued at US\$ 1.99 million and was aimed at protecting at least 7,000 hectares in the province of Guanacaste. The contracts have a duration of five years and pay US\$ 285 per hectare. Special priority is given to protecting surface or underground water resources in the cantons of Nicoya, Santa Cruz, Filadelfia, Carrillo and Liberia.

“I would even go so far as to say that this is one of the first instruments of its kind in the world. The idea of private businesses paying for forestry environmental services is not new, but FONAFIFO has developed a market tool to put it in practice”, says Luis Fernando Sage,

the environmental economics expert who designed the Environmental Services Certificates (CSAs).

Thus, FONAFIFO is successfully combining projects, agreements and financial tools, of both national and international scope, to create, develop and maintain a market for environmental services in Costa Rica.

The following table provides an overview of the organization's main sources of funding between 1997 and 2004.

FONAFIFO funding sources

Tools, agreements and projects developed between 1997 and 2004

SOURCE	PERIOD	AMOUNT
STATE RESOURCES		
Fuel tax (Established by the Forest Act of 1996)	1997 onward (Indefinite)	Approx. US\$3.5 million per year (2003 figures)
Stumpage tax (timber) (Entitled to 40% of these revenues, under the Forest Act of 1996)	1998 (only year these revenues were received)	40 million colones (recirculated as loans; increased to approximately 60 million through capitalization as of 2004)
AGREEMENTS WITH PUBLIC AND PRIVATE CORPORATIONS (Approximately US\$ 560 ,000 per year)		
Energía Global FONAFIFO-ENERGÍA GLOBAL-FUNDECOR agreement. Protects the San Fernando and Volcán river basins in Sarapiquí, in the Central Volcanic Range)	1997 onward (renewable five-year contracts)	Approximately US\$ 40,000 per year US\$ 200,000 during the first five years (1997-2002) and US\$ 200,000 over the next five years (2003-2008)
Compañía Nacional de Fuerza y Luz (CNFL) FONAFIFO-CNFL agreement. Protects the Aranjuez River and Cote Lake basins, as well as the upper Balsa River basin.	1998 onward (renewable five-year contracts)	Approx. US\$ 436,000 per year (10,900 hectares at US\$ 40 per year)
Hidroeléctrica Platanar FONAFIFO-Hidroeléctrica Platanar S.A.-FUNDECOR agreement. Protects the northern Platanar River basin in San Carlos (in the north).	1999 onward (renewable ten-year contracts)	Approx. US\$ 39,000 per year (1,300 hectares at US\$ 30 per year)
Florida Ice and Farm (Cervecería de Costa Rica) FONAFIFO-Florida Ice and Farm-FUNDECOR agreement. Protects the upper Segundo River basin.	2001-2009 (initial contract for 8 years, renewable)	US\$45,000 per year (1,000 hectares at US\$ 45 per year)
PROJECTS INVOLVING LOANS, GRANTS AND MARKET INSTRUMENTS (Approx. US\$ 9.35 million per year as of 2004) (Projected at approx. US\$ 11 million per year)		
Ecomercados World Bank loan for US\$ 32 million GEF grant of US\$ 8 million Assigns priority to Meso-American Biological Corridor.	2000-2005 (first phase of disbursements, but payments to beneficiaries will run through 2009)	Approx. US\$ 8 million per year (Total of US\$ 40 million)
KFW (German bank) Grant for the North Huetar Conservation Area and the Sarapiquí subregion of the Central Volcanic Range Conservation Area)	2000-2007	US\$ 1.8 million per year (Approx. US\$ 12 million over 7 years)
Reforesta Reforestation program designed to raise funds through the sale of bonds (market instruments)	2002-2004 (design phase) 2005 onward (bond issue)	US\$ 300,000 for design phase 2.6 billion colones (projected first bond issue)
CSA (Environmental Services Certificates) Market instrument designed to obtain funds from businesses and institutions. First issue focused on the protection of 7,000 hectares in the Guanacaste region.	2002 onward	Approx. US\$ 1.35 million per year (Issue of US\$ 1.9 million in certificates for five-year contracts covering 7,000 hectares, at US\$ 285 per hectare).

Over 40 billion colones in ten years

During its first ten years of existence, FONAFIFO has mobilized over 40 billion colones, raising funds from a variety of sources, as explained above. This figure was obtained using 1995 as a starting point, since that was the year FONAFIFO began operations, although it was not ratified and legally formalized until a year later, in 1996. The sum raised is equivalent to approximately US\$ 110 million.

The organization's budget has grown year by year, especially since 1997, when it began raising funds for the Environmental Services Payment Program. Since then, approximately 27 billion colones have been raised for that program alone. In addition, almost 15 billion colones were raised between 1995 and 2004 for the Forest Bond Certificate program, which preceded the establishment of the Environmental Services Payment Program. These two programs have a combined worth approaching 42 billion colones, as shown below.

Another billion colones (approximately) have been allocated to forestry loans, which are described in greater detail below. This brings the total amount raised by the Fund during its first decade to approximately 43 billion colones – a record for the Costa Rican forestry sector.

The budget of FONAFIFO during its first 10 years

CAF and PSA allocations by source of funding, in colones

Year	CAF ¹	PSA Regular Budget _{2,3}	PSA Ecomercados	PSA KFW grant	PSA CNFL agreement	PSA Florida Ice and Farm agreement	PSA Agreements with private hydroelectric companies	TOTAL
1995	1,614,000.000							1,614,000.000
1996	1,651,000.000							1,651,000.000
1997	1,789,000.000							1,789,000.000
1998	2,381,000.000	1,269,000.000					1,986.378	3,650,000.000
1999	1,590,000.000	2,406,000.000					2,104.980	3,996,000.000
2000	1,373,300.000	2,098,250.000					0	3,471,550.000
2001	1,250,960.000	2,345,127.500	655,400.000		75,825.407	1,514.656	9,141.255	4,251,487.500
2002	1,243,000.000	3,066,900.000	2,946,690.576		78,328.727	17,269.528	6,416.615	7,256,590.576
2003	1,000,000.000	1,399,300.000	2,960,722.973	1,714,503.195	153,510.163		19,772.806	7,074,526.168
2004 ⁴	1,080,000.000	1,511,200.000	3,536,000.000	810,942.757			1,713.588	6,938,142.757
TOTAL	14,972,260.000	14,095,777.500	10,098,813.549	2,525,445.952	307,664.297	18,784.184	41,135.621	41,692,297.001

1. Refers to budget allocations to meet commitments. CAF: Forest Bond Certificate
2. Includes 5% for overhead expenses. Raised to 7% in 2003.
3. The sum appropriated from the 2002 Regular Budget was replaced with funds from the World Bank loan agreement (Ecomercados Project).
4. Budgeted items which must be included in the Regular Budget and the budget of the World Bank Ecomercados Project.

FONAFIFO has allocated a significant amount of resources to forestry loans over the past few years. It invested over one billion colones in various types of loans between 1993 and 1997, and an additional 654 million colones between 1999 and October 2004 (see table).

Between 1993 and 2004, FONAFIFO and its immediate predecessors invested a total of over 1.7 billion colones in loans, which makes for an annual average of 142 million colones.

The loans were used to finance reforestation, agroforestry and forest industry activities, among others.

Forestry Loan Funds	
1993 to 2004, in millions of colones	
Period	Amount
First period 1993-1997	1,048,875.702
Second period 1999-2004 *	654,608.093
TOTAL	1,703,483.795

* Up to and including October 2004.

Trust funds

The resources budgeted for environmental services payments, Forest Bond Certificates, loans and regular expenses have been placed in a trust fund administered by a state bank.

“The advantage of a trust fund lies not only in its flexibility and efficiency, but also in the fact that it allows FONAFIFO to focus on the technical, strategic and conceptual aspects of its activities, leaving accounting matters in the hands of a specialized financial entity. In other words, it enables the organization to concentrate on the “macro” aspect of its work”, explains Hilda Arroyo, the expert who advised FONAFIFO on the management of its first trust funds during the mid-1990s.

Trust agreements are governed by the Commercial Code and are therefore subject to private rather than public law. This gives them a certain degree of flexibility in the management of funds, although they must still abide by the Code and the rules of the national banking system. When public funds are involved, the rules of the Office of the Comptroller General must be followed.

FONAFIFO has thus been able to manage the substantial funds it has invested in the Costa Rican forestry sector with confidence and efficiency.

A steady flow of funds

So far, the use of innovative fund-raising mechanisms and practical payment instruments has enabled the Fund to maintain a steady flow of funds, as illustrated in the chart below. Fund-raising mechanisms are shown in the column on the left, and the corresponding activities are on the right.

As the chart shows, the Environmental Services Payment Program and the forestry loan program are the two main arms of the Fund's action, and they absorb most of its financial resources. This arrangement has given momentum to the Costa Rican forestry sector.



The driving force of the forestry sector



FONAFIFO

The impact of FONAFIFO

Over 400,000 hectares are covered by the Environmental Services Payment Program (almost 8% of the total area of the country). The same number of hectares are in line for future participation. Over 7,000 owners of forest land benefited from the program and received forestry loans between 1995 and 2004.

This is just part of the impact FONAFIFO has had on the country after investing the more than 40 billion colones raised during its first ten years of operation.

Thousands of producers throughout the country – especially small and medium-size owners of forest land – have benefited from these resources. Over 7,000 *campesinos*, indigenous persons, projects, businesses and co-ops in the forestry sector have participated in the effort to protect and recover forests through the Environmental Services Payment Program or FONAFIFO loans.

According to Jorge Mario Rodríguez, Executive Director of FONAFIFO, “Forestry financing mechanisms have not only contributed to the socio-economic development of all these beneficiaries in the rural sector, but they have also had a visible environmental impact which is reflected in a reduced deforestation rate and an increase in the country’s forest cover.”

The work of the Fund has also had a significant institutional impact, strengthening the public and private forestry sectors and creating a National Forestry Development Plan to lead the way.

But its most important achievement may well be the change of mindset it has brought about in Costa Rican society, with the help of the Environmental Services Payment Program. Today, forestry services are highly valued, and there is an emerging market for the purchase and sale of environmental services. More and more businesses are willing to participate in that market, and an increasing number of landowners are interested in forest protection or reforestation.

Environmental services payments throughout the country

Between 1997 and 2004, the Environmental Services Payment Program reached over 400,000 hectares of forests and plantations throughout the country.

The Environmental Services Payment Program is currently the Fund's main area of activity and accounts for approximately 70% of its budget. Payments are divided into four categories: forest protection, reforestation, forest management (currently discontinued) and self-financed planting. A fifth category, Agroforestry System (SAF) payments, was created in 2003. Under this system, payments are calculated based on the number of standing trees, rather than hectares.

Forest protection is the undisputed priority of Costa Rica's Environmental Services Payment Program. Eighty percent of the resources invested by FONAFIFO in the Environmental Services Payment Program between 1997 and 2003 – over 22 million colones, covering 326,845 hectares – were used for that purpose.

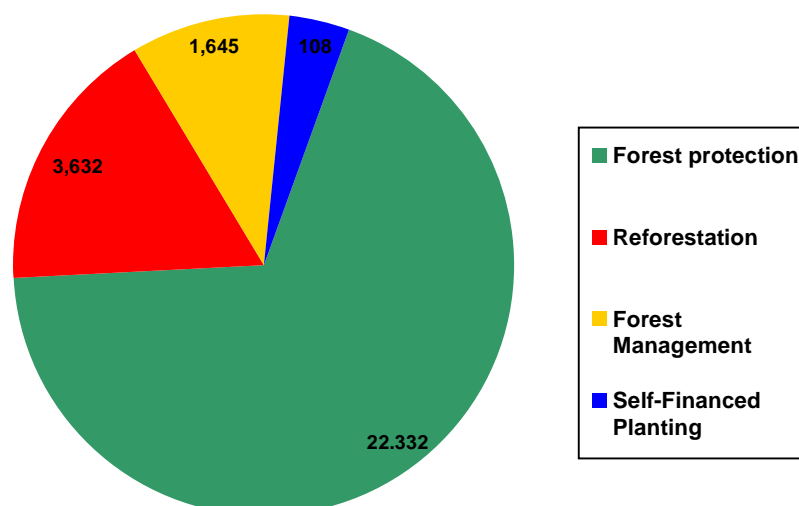
Reforestation ranks second and accounted for 13% of the Fund's investment in the Environmental Services Payment Program during the same period. Environmental service payments for reforestation totaled almost four billion colones and covered 21,936 hectares.

Forest management ranked third during the first seven years of the program, as it accounted for almost two billion colones. While fewer resources were invested in this category than in reforestation, more hectares were covered, since forest management has a lower cost per hectare than reforestation. The area protected was 28,065 hectares, not counting 2003, when payments under this category were discontinued.

Finally, approximately 1% of environmental service payments between 1997 and 2003 – slightly over 100 million colones – were invested in self-financed planting on 1,247 hectares.

The following chart shows the share of total resources invested in each environmental services payment (PSA) category.

Share of investment by PSA category
(1997-2003, in billions of colones)



Forestry loans – a good supplement

In addition to its payments under the Environmental Services Payment Program, FONAFIFO has provided the forestry sector with over 1.7 billion colones in loans over the past ten years.

After the approval of the new Forestry Act in 1996, FONAFIFO understandably shifted its focus toward the Environmental Services Payment Program, which is now the Fund's main area of activity. Forestry loans have been maintained, however, as a tool to support the production sector. An effort has been made to increase funding for this item on a yearly basis.

This effort is clearly reflected in the Fund's budget. Over the last four years, total forestry loans have doubled, rising from 70 million in 2001 to practically twice that amount – 115 million – in 2002.

The forestry loan budget also increased in 2003, rising to almost 160 million colones – an increase of approximately 45 million colones. The same trend is expected to hold in 2004; the amount loaned surpassed 160 million colones during the first nine months of the year (January to October).

“The impact of forestry loans has been reflected mainly in the forestry industry. Between 70% and 80% of the annual budget is invested in forestry activities and needs, and in the development of small-diameter plantations,” explains Hernán Hernández, of the FONAFIFO Credit Department. As shown below, loans are granted for activities ranging from the establishment of nurseries and the purchase of equipment to the drafting of technical studies and product research and development.

Forestry loans granted between 1993 and 1997* (By activity, in colones)		
ACTIVITY	No. of PROJECTS	AMOUNT
Reforestation	34	172,167.495
Interim financing	117	396,080.015
Nurseries	58	97,389.875
Forest management	2	1,450.000
Forest industry	18	280,602.820
Technical studies	43	37,116.903
Extraction equipment	2	17,000.000
Working capital	1	10,000.000
Agroforestry	4	9,705.516
Seed stands	5	1,540.000
Other	7	25,823.077
TOTAL	291	1,048,875.702

*Granted by FONAFIFO and its immediate predecessors with funds from

Loans granted by FONAFIFO in the past 6 years (By year, in colones)	
YEAR	AMOUNT
1999	107,045.052
2000	45,221.500
2001	69,635.453
2002	114,820.000
2003	159,705.105
2004 *	158,162.893
TOTAL	654,608.093

*Up to October.

Over 7,000 beneficiaries

The more than 40 billion colones provided by FONAFIFO over the last decade, in the form of both environmental service payments and forestry loans, have been well distributed among over 7,000 beneficiaries throughout the country.

The secret has been to facilitate participation on the part of small and medium-size forest and plantation owners everywhere in the country. The average size of the Fund's reforestation projects – under 30 hectares – is evidence of the fact the Fund is reaching small and medium-scale beneficiaries. FONAFIFO accepts projects from one hectare onward and also encourages small landowners to form groupings and create fundable projects through organizations such as CODEFORSA and FUNDECOR.

The average plot covered by forest-protection payments has an area of no more than 90 hectares, which is not considered large by forest-protection standards. Since small and medium-size landowners are still the Fund's main beneficiaries, the distribution of resources in rural areas has remained equitable.

The Environmental Services Payment Program was designed to protect and increase forest cover, not to address poverty or resource-distribution issues. There is no question, however, that it is having a significant social impact and has become an important tool in the government's poverty-reduction strategy, especially in rural areas.

In fact, Environmental Services Payment Program funds and FONAFIFO loans reach the most remote areas of the country's northern region, as well as Guanacaste, Limón, the Osa Peninsula, the entire central Pacific region and the mountains of the Central Volcanic Range, among others.

The active involvement of indigenous communities in the Environmental Services Payment Program, since its creation, is another significant achievement.

Over ten communities and more than 21,000 hectares of indigenous land are currently involved in the Environmental Services Payment Program. Participating indigenous communities include Talamanca, Salitre, Conte Burica, Ujarrás, the Cabécar Indigenous Territory, the Guaymí Indigenous Territory, the Cabagra Reservation, the Cabécar Nairi Awiri Reservation, the Talamanca Bribri Indigenous Territory and the Coto Brus Guaymí Reservation.

FONAFIFO expects to have delivered over 1.5 billion colones to indigenous communities over the course of the first ten years of the Environmental Services Payment Program. During its first five years (1997-2001), the Fund paid indigenous beneficiaries slightly over 221 million colones (approximately US\$ 700,000). It expects to provide over one billion colones more between 2002 and 2005, based on the contracts that have been signed so far.

These resources have significantly enhanced the development and the living standards of these communities. The benefit is not only social, however, but environmental as well; virtually all of the indigenous territories included in the program are under a full forest protection regime. This is a highly positive development, considering that most indigenous communities are located in buffer zones surrounding protected areas, and are home to the last remaining forests of significant size outside of those areas.

The areas (in hectares) covered by Environmental Services Payment Program (PSA) contracts in Costa Rican indigenous communities between 1997 and 2003 are shown (in hectares) in the following table.

Participation of indigenous peoples

Areas in Environmental Services Payment Programs in indigenous communities of Costa Rica (1997-2003)

Year	Beneficiary	Area (ha)	Type of program
1997	ARADIKES Salitre	373	Protection
	ARADIKES Ujarrás	25	Protection
	ADI Conte Burica	420	Protection
	ADI Talamanca	300	Protection
	Yearly total	1,118	
1998	ADI Ujarrás	188	Protection
	ADI Talamanca	150	Protection
	Cabécar Indigenous Territory	200	Protection
	Guaymí Indigenous Territory	170	Protection
	ADI Conte Burica	600	Protection
Yearly total	1,308		
1999	ADI Salitre	121	Protection
	ADI Guaymí	421	Protection
	ADI Conte Burica	600	Protection
Yearly total	1,142		
2000	ADI Salitre de Buenos Aires	288	Protection
	ADI Buenos Ujarrás	94	Protection
	ADI Talamanca Bribri Indigenous Territory	550	Reforestation
	ADI Guaymí Coto Brus Reservation	220	Protection
	ADI Guaymí Reservation	600	Protection
	ADI Conte Burica	600	Protection
	ADI Salitre	121	Protection
	ADI Cabagra Reservation	100	Protection
	ADI Cabécar Nairi Awari Reservation	600	Protection
	ADI Cabécar	400	Protection
Yearly total	3,733		
2001	ADI Cabécar Nairi Awari	600	Protection
	ADI Telire Cabécar	400	Protection
	ADI Cabécar Bajo Chirripó	600	Protection
	ADI Cabécar Talamanca	402	Protection
	ADI Talamanca – Bribri	600	Protection
	ADI Ujarrás	267	Protection
	ADI Salitre	130	Protection
	ADI Guaymí Coto Brus	600	Protection
	ADI Conte Burica	600	Protection
Yearly total	4,199		
2002	ADI Cabécar Telire	300	Protection
	ADI Cabécar Tayni	300	Protection
	ADI Cabécar Bajo Chirripó	600	Protection
	ADI Cabécar Nairi Awari	600	Protection
	ADI Talamanca – Bribri	700	Protection
	ADI Guaymí Coto Brus	50	Protection
Yearly total	2,550		
2003	ADI Cabécar	600	Protection
	ADI Térraba	600	Protection
	ADI Curré de Boruca	373	Protection
	ADI Boruca Buenos Aires	571	Protection
	ADI Conte Burica	600	Protection
	ADI Cabécar Bajo Chirripó	600	Protection
	ADI Cabécar Talamanca	600	Protection
	ADI Cabécar Tayni	600	Protection
	ADI Salitre	544	Protection
	ADI Telire	600	Protection
ADI Nairi Awari	600	Protection	
Yearly total	6,288		
GRAND TOTAL		20,373	

Source: FONAFIFO, 2004
Association

ADI: Indigenous Development

Female forest and plantation owners have also benefited from the Environmental Services Payment Program (PSA).

As part of its policy on distribution of payments for environmental services, FONAFIFO has tried to involve as many women as possible in the program. Hundreds of women are currently participating as a result of that effort.

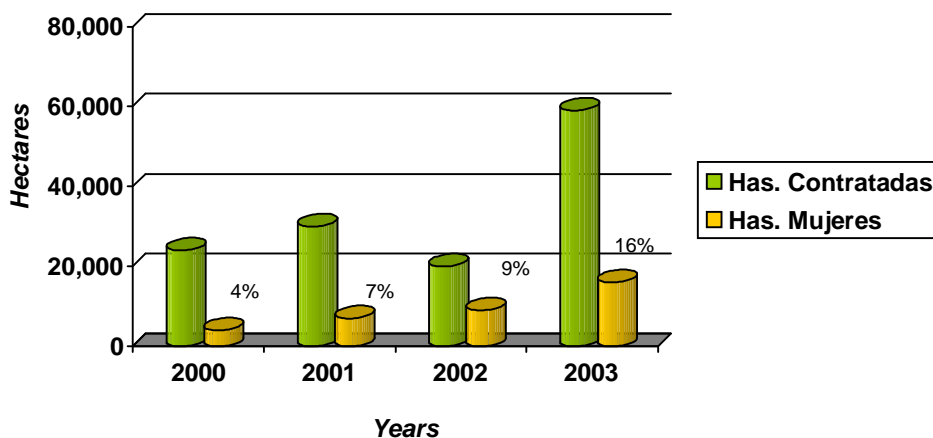
During its first year of operation (1998-1999), 350 women were among those who benefited from the Environmental Services Payment Program, which reached a total of 1,642 beneficiaries. In other words, nearly 20% of the beneficiaries were women.

With the establishment in 2000 of the Ecomercados project, that figure rose by more than 200%, surpassing by far the project's original goals. In absolute terms, the number of women participating in the Environmental Services Payment Program rose from 22 in 2001 to 211 in 2004.

The percentage of hectares owned by women quadrupled between 2000 and 2003, with the total area under contracts with women during that same period rising from 4% to 16% (see chart below).

The investments of FONAFIFO in the environmental services payment and forestry loan programs have thus benefited several sectors of Costa Rican society and have encouraged thousands of people and projects to become actively involved in forest protection, reforestation and forest management.

Participation of women in the Environmental Services Payment Program
(Ecomercados project)



Curbing deforestation

The reduction of the country's deforestation rate and the subsequent recovery of its forest cover are not solely attributable to FONAFIFO. There is no question, however, that the PSA incentive system and the forestry loan program have contributed significantly to that accomplishment.

The more than 400,000 hectares covered by the Environmental Services Payment Program since 1997 represent approximately 11% of all land with forest potential in Costa Rica (as mentioned earlier, 70% of the country's land is believed to have forest potential – 3,577,000 of the total area of 5,110,000 hectares).

Four hundred thousand more hectares – another 11% of potential forest land – are on the program's waiting list, and are therefore being protected with a view to including them in the Environmental Services Payment Program.

After witnessing the effectiveness of the Environmental Services Payment Program, many individuals have begun protecting their plots simply in the hope that they might be included in the program. In 2003 alone, without carrying out any promotional activities, FONAFIFO received applications in respect of 400,000 hectares, but was only able to accept 100,000, or 25%. The rest have been waitlisted.

Approximately 30% of the country's potential forest land is, in fact, being protected or reforested as a direct or indirect result of the Environmental Services Payment Program – half within the system, half on the waiting list. There is no doubt that this is helping not only to curb deforestation, but also to regain forest cover.

A good example of this process is the proven recovery of forests in the Central Volcanic Range area. FUNDECOR studies show a linkage between the percentage of forests receiving environmental service payments and the reduction of deforestation in that area.

"The final achievement – the most important and gratifying one – is what we see in the satellite images of the Central Volcanic Range Conservation Area, which is the area we have studied the most, and where we have clearly found that the higher the percentage of forests receiving payments under the Environmental Services Payments Program, the lower the rate of deforestation", says Franz Tattenbach, Executive Director of FUNDECOR.

Tattenbach adds: "This is the evidence we needed to determine whether the reversal of deforestation is spurious, caused by external factors, or related to the provision of environmental service payments. My answer: in the Central Volcanic Range, at least, where we have conducted the most detailed studies, there is a clear correlation between the percentage of forests receiving payment under the Environmental Services Payment Program and the reduction of deforestation."

As mentioned earlier, the country's forest cover reached an all-time low in 1983, when it dropped to 26%. This trend was reversed, however, and by 1997, forest cover had increased to approximately 40%, according to studies carried out by the Tropical Science Center (TSC) for FONAFIFO.

More recently, in 2000 (when the last study using satellite images was conducted), forest cover was found to be even greater, i.e., 45%.

(INSERT TWO MAPS SHOWING PSA PROJECTS THROUGHOUT THE COUNTRY – 1998 AND 1998-2003)

In the most critical areas

The impact of the Environmental Services Payment Program on the reduction of deforestation in Costa Rica becomes even more clear when analyzed by region. As shown in the figure and the table below, during the first seven years of the program (1997 through 2003), most of the land area covered by environmental service payments was located in the regions most affected by deforestation.

The Guanacaste and Tempisque Conservation Areas (geo-environmental divisions within the country), for example, accounted for 76,961 hectares of the 378,119 hectares covered by the Environmental Services Payment Program during this period, i.e., 20% of the total area. This means that almost one fifth of PSA resources were invested in one of the most arid and deforested regions of the country.

The Huetar Norte and Arenal-Tilarán Conservation Areas, in the north of the country, rank second in PSA coverage, with a combined total of 21% of their territory (79,428 hectares) being included in the program between 1997 and 2003.

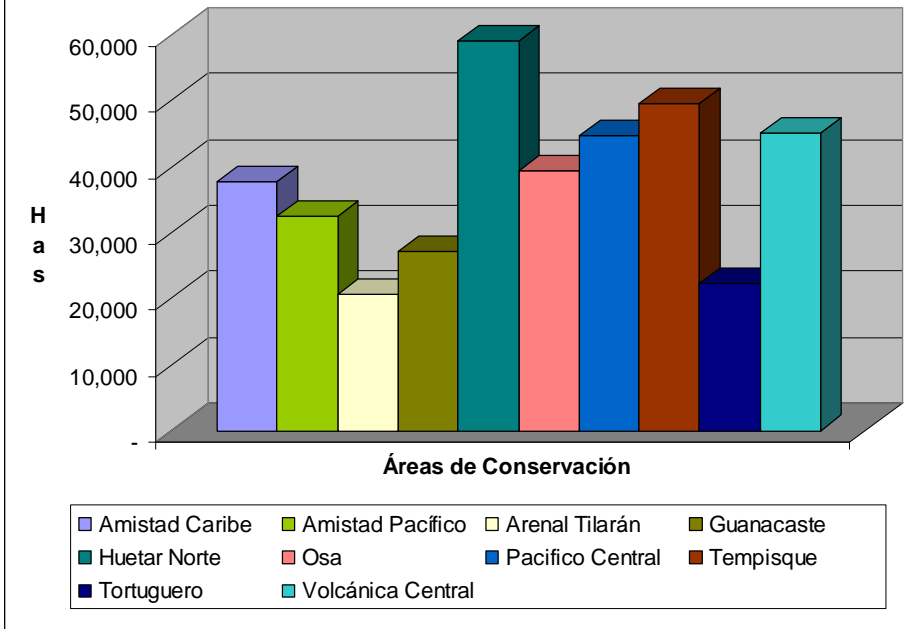
The Central Pacific and Southern Pacific (Osa Peninsula) Conservation Areas, in the province of Puntarenas, rank third, with a combined total of 81,350 hectares covered by environmental service payments (approximately 22% of the area covered by the Environmental Services Payment Program).

These three areas thus account for approximately 63% of the land covered by the Environmental Services Payment Program during the seven-year period mentioned above. The remaining 37% is located in the Central Volcanic Range, Tortuguero, Amistad-Pacífico and Amistad-Caribe conservation areas. The last two include the entire forested region along the Panamanian border, which is home to many indigenous communities.

Environmental Services Payments by Conservation Area
Area (in hectares) covered between 1997 and 2003, by category

Conservation Area	Protection	Management	Reforestation	Plantation	Total
Amistad-Caribe	36,251	487	1,026	-	37,764
Amistad-Pacífico	29,353	-	516	103	29,972
Arenal Tilarán	19,976	-	303	-	20,280
Guanacaste	25,574	846	374	44	26,838
Huetar Norte	35,820	15,278	8,033	18	59,148
Osa	37,411	1,211	650	-	39,272
Central Pacific	39,417	-	2,662	-	42,078
Tempisque	44,832	-	4,842	448	50,123
Tortuguero	19,280	2,441	213	400	22,335
Central Volcanic Range	44,161	3,874	2,134	141	50,310
	332,076	24,137	20,753	1,154	378,119

Area sometida al Pago por los Servicios Ambientales por Area de Conservación para el periodo 1997 - 2003



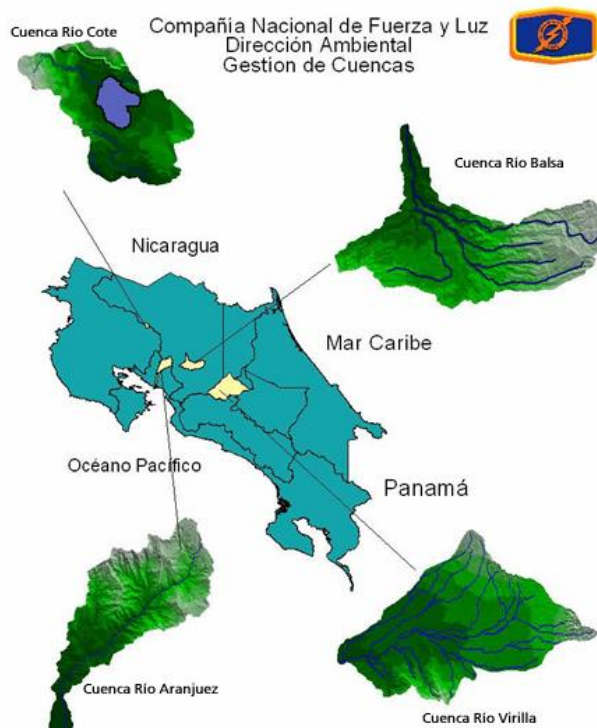
Protection of river basins

Another key benefit of the Environmental Services Payment Program is the large number of aquifers being protected throughout the country, through agreements FONAFIFO has signed with companies that use water for their activities.

As mentioned earlier, these companies pay a pre-established annual per-hectare fee, which FONAFIFO uses to pay forest owners participating in the Environmental Services Payment Program.

Approximately 16,000 hectares are being protected through agreements between FONAFIFO and these companies, without counting other aquifers located in private forests, whose owners also receive environmental service payments.

The following table shows the location and area in hectares of each river basin being protected through agreements with four companies that use water resources (three of them private, one state-owned).



The Aranjuez, Cote and Balsa river basins are being protected through the Environmental Services Payment Program, thanks to an agreement between FONAFIFO and Compañía Nacional de Fuerza y Luz (CNFL), which uses water from these basins to generate electricity.

River basins protected through the PSA Program with private financing

COMPANY	PROTECTED BASIN	HECTARES COVERED BY AGREEMENT
Energía Global FONAFIFO-ENERGÍA GLOBAL-FUNDECOR Agreement.	San Fernando and Volcán river basins in Sarapiquí, Central Volcanic Range	2,493
Compañía Nacional de Fuerza y Luz (CNFL) FONAFIFO-CNFL Agreement.	Aranjuez, Cote Lake and upper Balsa river basins.	10,900
Hidroeléctrica Platanar FONAFIFO-Hidroeléctrica Platanar S.A.-FUNDECOR Agreement.	Part of the Platanar River basin, in San Carlos (northern region).	1,300
Florida Ice and Farm (Cervecería de Costa Rica) FONAFIFO-Florida Ice and Farm-FUNDECOR Contract.	Upper Segundo River basin.	1000
TOTAL	7 BASINS	15,693

A change of culture

The change in the country's perception and appreciation of its forests is the most important outcome of its environmental efforts of the past few years. FONAFIFO has played a significant role in that achievement. Farmers with heavily wooded lands used to be considered “slackers”, and their farms were viewed as abandoned property that was idle, useless and of no economic value.

Today, that perception has changed. Forests are seen as more than producers of wood – now they are viewed as areas that hold great riches and provide environmental services that are recognized from both the legal and the economic standpoint. Standing trees are increasingly viewed as more valuable and productive than cut trees, which can only be used once.

Today Costa Rica is a country that attaches political, environmental, social, cultural and economic value to the environmental services it receives from its natural resources, particularly its forests. It is also a country that adopts political and economic measures to develop this environmentally friendly culture.

This shift in the culture has also had an impact on society and business. The general public, entrepreneurs, farmers and especially the forestry sector of the country all have a stake in the Environmental Services Payment Program.

Private businesses have been made aware of the benefits of the environmental services provided by forests and plantations, and they actively mobilize financial resources for that purpose.

The change may also be observed in how Costa Rica is perceived abroad; the Environmental Services Payment Program is now viewed as an innovative mechanism that sets an example for the entire world.

The World Bank loan and the Global Environment Facility (GEF) grant, which are being used to fund the Ecomercados project, are a visible sign of the leap the country has made in the field of environmental services. Costa Rica is the first country in the world to become indebted by investing in the environmental services offered by its forest ecosystems in the same way it invests in health care, agriculture and education. This is a sign of the commitment of the Costa Rican state and its society to forestry activities.

The support of these two entities is indicative of their recognition of the country's efforts and the type of sustainable development Costa Rica has conceived, promoted and put in practice.

Support for the forestry sector and the Forestry Plan

One of the main accomplishments and one of the most important lines of action carried out by FONAFIFO since its creation, with the support of several administrations, has been the strengthening of Costa Rica's forestry sector.

Through reforestation loans and environmental services payments, the Fund has created momentum in Costa Rica's forestry sector. New micro- and small businesses – sawmills, furniture factories and nurseries – have emerged, and people are more likely than before to devote farmland to forest protection or management rather than to subsistence operations, farming or cattle raising. All this has helped strengthen the forestry sector.

FONAFIFO has supported the National Forestry Office (ONF), which is represented on the Fund's Board of Directors. Along with the National Conservation Areas System, these bodies have worked on the National Forestry Development Plan (PNDF), which was drafted between 1998 and 2001 with the participation of all stakeholders in the forestry sector. The Plan was published in March 2001 and was updated and confirmed in 2003 and 2004.

“The support of FONAFIFO has been crucial to the development and monitoring of this Plan, and its implementation is heavily dependent upon the financial backing of FONAFIFO and on its soundness as an institution,” says Alfonso Barrantes, Executive Director of the National Forestry Office (ONF).

The purpose of the National Forestry Development Plan is to consolidate all activities in the forestry sector under a single comprehensive plan covering issues ranging from the relationship between forests and protected wildlife areas to the production and sale of timber and non-timber products. This will enable the forestry sector to contribute to the recovery of the country's forest cover, as well as to its economic development and the improvement of living standards.

FONAFIFO has worked with other institutions in the sector to raise awareness of the role of forestry in the gross domestic product (GDP), as well as the number of people directly or indirectly involved in the sector. The latest statistics show that 18,000 people are directly involved in forestry, while another 30,000 hold jobs that are indirectly related to the sector.

“We recognize that FONAFIFO is the strongest institution in the Costa Rican forestry sector, and that we can expect it to play a greater role in meeting the goals of the National Forestry Development Plan”, says Alfonso Barrantes.

The keys to success

The positive impact and success of FONAFIFO are possible thanks to its sound legal and institutional foundation, combined with unwavering political and governmental support, regardless of who is in power. The Executive Branch has undertaken several initiatives to strengthen FONAFIFO as a part of MINAE. The Fund's capacity for innovation, its openness to change and the administrative efficiency made possible by its small, effective staff have also been factors in its success.

The type and quantity of fund-raising tools developed by FONAFIFO have also contributed to its success. Its efforts in that regard have been supported by strategic partners, both national and international, public and private.

Rounding out these efforts are the payment mechanisms FONAFIFO has designed to put those funds in the hands of owners of forest land, namely, the various forms of payment for environmental services

The use of trust funds to administer those resources has also provided security and strength, ensuring the proper management of the funds raised by FONAFIFO.

Staying close to the people involved in its programs, especially in the private forestry sector, and securing their support and participation, has been another highly effective strategy. FONAFIFO has managed to bring public and private interests together, as evidenced in the very makeup of its board of directors.

Accordingly, FONAFIFO maintains close ties with the National Forestry Office (ONF), which functions as an interlocutor with the private forestry sector. In addition, there are many well-equipped institutions in the country, including NGOs, agricultural centers, co-ops, associations and business chambers that are seriously committed to working in the forestry sector. The fact that FONAFIFO works hand in hand with its partners in the private sector has led to the success it has enjoyed up to now. Without that partnership, these achievements would not have been possible.

Keys to the success of FONAFIFO

- § Creation of Environmental Services Payment Program and enactment of legislation establishing funding sources.
- § Support of different administrations and of the private forestry sector.
- § Convergence of public and private interests.
- § Development of private institutional capability, with the National Forestry Office as intermediary.
- § Benefits targeting different sectors of society, especially small and medium-size producers.
- § National and international strategic partners.
- § Management of funds through trust arrangements.
- § Innovative fund-raising tools, such as bonds and environmental certificates.
- § Innovative instruments for the payment of forestry services (such as PSAs and SAFs).
- § A small, efficient administrative staff.
- § Ability to adapt and change.
- § High-quality forestry training programs in Costa Rican universities.
- § The cumulative experience of many different individuals and institutions.

The country has the added advantage of having two universities with forestry programs – the National University (Universidad Nacional) and the Costa Rican Institute of Technology (Instituto Tecnológico de Costa Rica). Thus, there are approximately 550 academically trained forestry engineers who also have considerable field experience. Costa Rica also has mid-level technical experts specializing in nursery development. Examples such as that of CODEFORSA – which operates a hi-tech nursery that produces one million plants per year on one hectare – are especially noteworthy.

Thus, a number of different factors have worked together to strengthen FONAFIFO: multiple sources of funding, a well-defined legal framework, a sound institutional structure, organizations and institutions with experience in the forestry sector, a significant private forestry infrastructure, and local universities and institutes that offer strong academic and technical programs.

FONAFIFO is clearly a product of the cumulative experience of many individuals, public and private institutions, non-profit organizations, state institutions, private sector organizations and international agencies. With this background, it has earned the respect and trust of the country's forestry and environmental sectors, as well as of its international partners.

“The country's social sectors – especially those involved with forestry and the conservation of biodiversity – view FONAFIFO as a successful instrument which generates change and facilitates the implementation of forestry policies that would otherwise be unlikely to achieve their objective”, says Carlos Manuel Rodríguez, Minister of the Environment and Energy.

The experience and respect gained over the course of ten years of work have consolidated FONAFIFO as the financial arm and the driving force of Costa Rica's forestry sector and an example and inspiration for other sectors of the country's economy.

Towards sustainable rural development



FONAFIFO

FONAFIFO looks ahead

The two main challenges facing FONAFIFO in the future will be its development as a tool for sustainable rural development and the preservation of its financial viability.

In the words of Carlos Manuel Rodríguez, who has engineered the most recent changes in FONAFIFO, “The Environmental Services Payment Program is a valuable instrument in the fight against poverty and the quest for sustainable rural development. I think that most of all, we need to stop viewing the program as merely a tool for preserving biodiversity and promoting the planting of forests. Instead, we need to see it as a tool for rural development that also includes reforestation and biodiversity conservation.”

According to Minister Rodríguez, this new approach will bring the Fund’s activities into line with the country’s social programs, thereby enabling it to work more closely with the Ministry of Agriculture and the state’s social institutions. This will improve the ability of the Ministry, the social sector and MINAE to combat rural poverty and contribute to the achievement of the Millennium Development Goals.

Rodríguez adds: “Conservation in Costa Rica is a profitable business, more so for some than for others, but it is generating more and more incentives for people to preserve the forests and receive economic benefits in return, without having to destroy them.”

With this objective in mind, the Ministry of the Environment and Energy (MINAE) has promoted a number of changes aimed at strengthening the structure and operations of FONAFIFO. In 2003, the Ministry issued a directive instructing the Fund to take full

responsibility for the Environmental Services Payment Program, which had until then been operated partly by the National Conservation Area System.

Without severing its ties to the National Conservation Area System, which now acts as its policy strategy arm, the Environmental Services Payment Program now depends solely on FONAFIFO for operational matters. This has enhanced the efficiency of the entire system.

The change has also strengthened the institution, as it has been able to hire more professionals, technical experts and administrative personnel. It has also created an urgent need for regional offices.

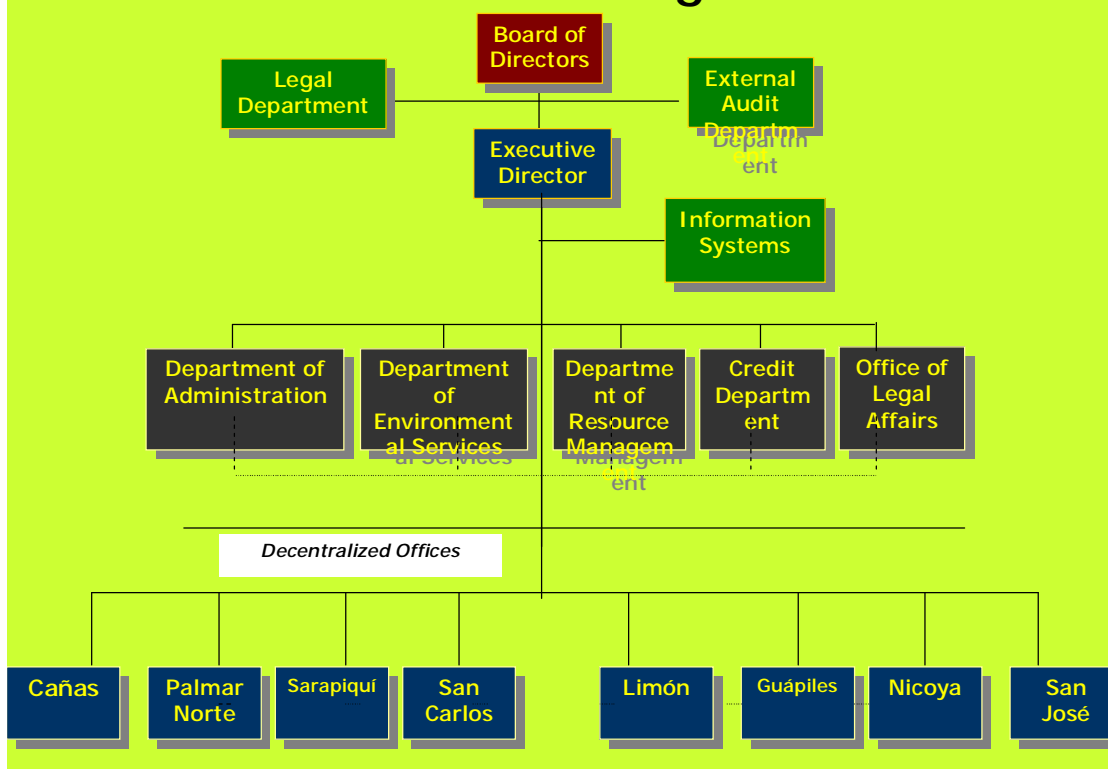
Closer to the people

After taking over the Environmental Services Payment Program in March 2003, FONAFIFO opened eight regional offices in strategic areas of the country: Nicoya, San Carlos, Cañas, Puerto Viejo de Sarapiquí, Guápiles, Limón and Palmar Norte. It also opened a regional office in San José, to cover the Central Volcanic Range and Amistad-Pacífico areas.

The location of these eight regional offices was determined according to the priorities of the Environmental Services Payment Program and in consultation with the public and private sectors. These offices, which occupy the same premises as the National Conservation Area System, have helped streamline the program and improve its efficiency.

The offices, each staffed by two people, are small and efficient, applying modern technology and making extensive use of the Internet, as well as personal contacts, in their operations. With these new facilities and personnel, the structure of FONAFIFO has expanded to the point that it now has 45 people on its payroll. Its organizational structure has also changed, as shown below.

FONAFIFO: Organizational Chart



(As of October 2004)

Faster and cheaper

The changes made in the Environmental Services Payment Program as a result of the transfer of control to FONAFIFO have worked to the advantage of the program beneficiaries.

Time and transportation costs have been significantly reduced. The time required to process a PSA application has been shortened to 75 days between the submission of an application and the disbursement of payment, whereas it used to take six, eight or nine months to process an application.

Transportation costs have also been reduced, since many people from rural areas can now go to a regional office instead of having to travel to FONAFIFO headquarters in San José.

Citizens participating in the program have also benefited from improvements in the quality of service. The presence of regional staffers working full-time for the Environmental Services Payment Program has made it possible to provide more specialized services.

This geographical proximity and personalized attention have produced visible results. In 2003, when FONAFIFO took over the Environmental Services Payment Program, the amount of funds available for environmental service payments increased, enabling the organization to finance an additional 100,000 hectares. Thus, in 2003, with a bigger staff, a new approach, new procedures and new offices, 5.085 billion colones were raised, and applications were processed in record time.

The executive decree and the procedural handbook published every year by the Ministry of the Environment and Energy (MINEC), which shows the areas given priority for environmental services payments and the availability and uses of funding, were also completed expeditiously. These tools, on which consensus must be sought in the public and private sectors, took far less time to prepare in 2003 than they had in previous years.

Simplified procedures

FONAFIFO has also succeeded in simplifying and streamlining the processing of PSA applications and forestry loans.

Thanks to the new technology now available in the country, producers are no longer required to submit Property Registry certifications. The Fund's outside lawyers handle that task, reducing costs for producers. Similarly, producers are no longer required to submit a certificate showing that they are up-to-date with their contributions to the Costa Rican Social Security Fund (Caja Costarricense de Seguro Social – CCSS). FONAFIFO now takes care of checking the CCSS database. These measures have simplified procedures and reduced costs for producers.

By the same token, the requirements for submission of a management plan have also been simplified. Instead of having to submit a protected area management plan, applicants need only provide a certificate signed by a forestry engineer attesting to the fact that the area to be included in the program meets the Forestry Act's definition of "forest". The lengthy document originally required, which entailed a considerable expense for producers, has been replaced with a simple certificate, at a lower cost.

"I believe all of these changes are positive, because we have learned to reduce PSA management costs through the regionalized system we have developed. We have also given more people an opportunity to benefit from the program – not only those who lack property titles, but also those who are eligible for Agroforestry System (SAF) payments", says Carlos Manuel Rodríguez.

Ready for new challenges

With changes in its structure and procedures, more than ten years of experience in the implementation of innovative forestry financial instruments, and sustainable rural development as its objective, FONAFIFO is ready to enter a new phase of challenges and achievements.

One of the Fund's main objectives is to diversify its financial instruments, both locally and internationally, in order to ensure its long-term financial viability.

"I see a more efficient FONAFIFO – much more experienced, more focused on the social impact of its activities, strongly geared toward sustainable rural development and making use of a wide range of financial instruments. Our main contribution to the Fund over the coming years will be in those two areas: financial sustainability and a holistic vision of the Environmental Services Payment Program as an instrument of sustainable rural development", stresses Carlos Manuel Rodríguez, Minister of the Environment and Energy.

Where financial instruments are concerned, the Fund will work to access fresh resources, grants, and soft and long-term funds. It will also offer the private sector financial products capable of fueling the forest development process over the long term.

“Generally speaking, FONAFIFO plans to obtain increased funding for its work in two essential areas: expanding the Environmental Services Payment Program and offering more loans for forestry activities, especially reforestation and industrial development that will add value to forestry products”, says Jorge Mario Rodríguez, Executive Director of FONAFIFO.

The overall objective of these efforts will continue to be the expansion of the country’s forest cover and the improvement of the living standards of many rural producers. Maximizing the recovery of forest cover through different forestry activities is one of the best ways to ensure that land ownership remains in the hands of a large number of people, that land is used for forests and that rural populations are able to develop with dignity.

To that end, FONAFIFO will not only continue the Environmental Services Payment Program, but will also increase its support for reforestation activities in the country.

Reactivating reforestation and related industries

Reforestation and related forestry industries are the subsector’s biggest generators of employment in rural areas. Demand for labor on plantations is high, as many temporary and permanent workers are needed for jobs such as nursery production, seed gathering (a job often performed by women), land preparation and plantation management.

During the processing stage, the forestry industry also requires considerable manpower for activities such as sawmill operation, furniture production, marketing of lumber, or production of arts and crafts. The Costa Rican forestry industry needs to be brought in line with modern standards.

In light of all the above, reforestation and related activities can make a significant contribution towards alleviating the economic and social problems currently afflicting rural areas.

Reforestation offers the added benefit of restoring areas that have the potential to become sources of timber supply in future, thus reducing pressure on natural forests.

In that regard, the REFORESTA project, one of the Fund’s more innovative initiatives, will help to energize reforestation and industrial forestry production in Costa Rica.

Another initiative that will encourage reforestation is the Agroforestry System (SAF) payment program. This incentive consists of a payment offered in exchange for the environmental service of planting trees in grazing areas to serve as windbreaks or fences or to provide shade.

The idea is to get people to plant trees; accordingly, the incentive is only granted for new trees. This system is intended to encourage small farmers to receive benefits from the Environmental Services Payment Program by planting trees.

A dynamic contribution to the national economy

Another long-term objective of FONAFIFO is to enhance the forestry sector's already substantial contribution to the economy and to rural development.

The forestry sector currently generates 18,247 permanent jobs, and 80% of its resources are invested in job creation. Almost all of those jobs go to the country's poorest cantons, some of which are the most heavily reforested, such as San Carlos, Sarapiquí, Upala, Los Chiles, Nicoya and Nandayure.

Forest plantations are the country's most widespread permanent crop, covering 171,094 hectares – more than bananas (49,000 hectares), coffee (108,000 hectares) and sugar cane (47,000 Has). Thus, it is no surprise that these plantations generate a high amount of value added for the national economy, i.e., the equivalent of 5,602,500 colones per hectare planted and harvested.

According to Jorge Rodríguez Quirós, Chairman of the Board of Directors of FONAFIFO, "One third of the value added by the use of timber is generated directly by forest plantations. This means that the poorest, most marginalized regions of the country contributed over US\$ 47 million to the economy in 2001."

Ninety-eight percent of small-diameter forestry enterprises that process raw materials from plantations are located in the most economically underdeveloped regions – 41% in the Huetar Norte region, 30% in the Brunca region, 18% in the Huetar Atlántica region, 9% in the Chorotega region and 2% in the Central Region.

Quirós adds: "It should also be borne in mind that the average plantation size is 28 hectares per project, which indicates strong participation by small and medium-size owners."

The production linkages generated by investment in the forestry sector are also of key importance. Most small-diameter forestry enterprises are turning into genuine forestry clusters, spurring the creation of other small businesses that provide goods and services for or derived from the original enterprise. One example of this phenomenon is the Los Nacientes company, which has given rise to nine small felling businesses and provides work for 36 ox drivers, 7 tractor drivers who haul sawn logs, 6 logging and forestry microenterprises and 28 contractors who transport the timber to industries.

"FONAFIFO must continue to encourage this type of dynamic action in the Costa Rican forestry sector, in addition to reforestation", says Quirós.

Water rates

FONAFIFO will continue its work in the four areas of environmental services established in the 1996 Forestry Act, while emphasizing one in particular: the protection of water resources.

"In order to make the Environmental Services Payment Program sustainable, MINAE plans to recover the cost of environmental services through utility rates, both for water and electricity", explains Alexandra Sáenz Faerrón, Coordinator of the Fund's Resource Management Department.

Both the water used for public consumption and the water used to generate electricity comes from watersheds; hence, watershed protection is a matter of strategic importance to the country. Unfortunately, it is widely believed that water is an inexhaustible resource with no economic value. Recent studies have made it increasingly clear that water resources are limited. Mechanisms must therefore be found to change that perception and generate the funds necessary to protect “water factories”.

Accordingly, the Ministry of the Environment and Energy has begun the process of updating the water rates or fees charged for various production and service-related activities. An executive decree to that effect is being drafted which should enter into force by the end of 2004 or the beginning of 2005. It will establish that all companies and public or private users that benefit from the use of water have a duty to pay for the environmental services provided by forests, and that they must do so by paying a water rate.

The water rate is projected to generate approximately 60 billion colones per year (about US\$ 135 million), once it is fully operational and the right level of collection has been reached; this may take about seven years after its entry into force. The rate will be implemented gradually in order to minimize its economic impact.

In the words of Carlos Manuel Rodríguez, “We must all pay for the production of water. Water factories are national parks or private forests that generate highly favorable conditions for the perpetuation of the water cycle in a given area within a watershed. But we don’t pay for that. We are all aware of the substantial investment Costa Rica has made over the years in water infrastructure (for the drinking water supply, hydroelectric dams, irrigation); what we haven’t done as a country is invest in water factories.”

The use of water rates to recover the environmental cost of water used by public utilities should significantly strengthen the financial sustainability of FONAFIFO and enable it to develop new environmental services payment instruments associated with water production. It will facilitate investment in watershed management and private forest conservation, with water as the key element.

“These water factories are threatened and vulnerable in many ways. The quality and quantity of our country’s water supply will suffer if we fail to invest directly in the national parks and private forests that produce it”, says Minister Rodríguez.

The carbon market

The mitigation of greenhouse gases associated with climate change is a potential source of funding and provides an environmental service as well. The international market for this service is referred to as the “sale of carbon emission reduction certificates”.

Costa Rica also has comparative advantages in this regard. Mitigation of greenhouse gases is one of the environmental services FONAFIFO has been developing. The Fund plans to take advantage of the entry into force of the Kyoto Protocol and its Clean Development Mechanism, which provides for payments to developing countries whose forests fix or sequester carbon emissions, thereby helping to mitigate the impact of greenhouse gases.

In anticipation of the Clean Development Mechanism (CDM), FONAFIFO has already submitted its first fund-raising proposals to the World Bank, which has set up a number of different programs to finance and promote this type of projects (Prototype Carbon Fund, BioCarbon Fund, Community Development Carbon Fund). Eight projects, including the one submitted by Costa Rica, have been selected from an overall total of 120. The Costa Rican project, developed by FONAFIFO and an agricultural co-op from the south of the country (COOPEAGRI), would allocate approximately US\$ 1.8 million for the establishment of agroforestry and reforestation systems. Its total budget would be US\$ 2.77 million, including national counterpart funding.

FONAFIFO is also negotiating other projects that would enable it to access funds from the world carbon market. These funds would then be used to cover environmental service payments in Costa Rica.

FONAFIFO moves forward

There can be no doubt that thanks to FONAFIFO, Costa Rica possesses the tools, the projects and the experience necessary to continue implementing the Environmental Services Payment Program and its forestry loans program throughout the country.

The mechanisms already created, along with those still in development, will enhance forest protection efforts and accelerate recovery of the country's forest cover.

The specific goal of FONAFIFO is to protect one million hectares through the Environmental Services Payment Program (hopefully in the near future). This would be equivalent to 20% of the total area of the country.

“In addition to the water rate, we are working to raise awareness among private businesses, in order to persuade them to pay for the environmental services provided by forests, from which they benefit. We are referring not only to hydroelectric and water supply enterprises, but also to the tourist industry, among others”, says Alexandra Sáenz Faerrón, Coordinator of the Fund's Resource Management Department.

The Fund is also developing an international cooperation strategy to pursue the search for resources from donors and international banks, as well as from new mechanisms and funds. FONAFIFO will also continue giving priority to initiatives such as Ecomercados (financed by the World Bank) and projects carried out through the BioCarbon Fund (also a World Bank program) and other carbon funds.

In addition to the resources it has already obtained and those it receives on a regular basis from the fuel tax, FONAFIFO is negotiating new national projects (as of October 2004) worth US\$ 6.43 million. The international initiatives under development are valued at approximately US\$ 65 million.

Special mention should be made of the Fund's participation, in support of MINAE, in the negotiations on the Free Trade Agreement between Central America and the United States. Its involvement in these talks has opened up a wide range of possibilities, in the event the Agreement is approved.

These negotiations were accorded high priority by the government, and MINAE asked FONAFIFO to support its delegation throughout the process. FONAFIFO, being well aware of the national significance of these negotiations, set aside funds for that purpose, but first developed parameters to guide its participation. Accordingly, a working group on forestry issues was created; this group was made up of representatives of all stakeholders, including the government, the private sector and civil society. It identified those aspects of the free trade agreement (FTA) that might have a negative impact on the economy of the national and regional forestry sector and outlined national positions to serve as reference points for the negotiators, led by the Ministry of Foreign Trade.

As a result of these efforts, a proposal was prepared which included guidelines for the protection of the forestry sector's interests in connection with exports and imports of timber products and by-products. At the end of the process, the national sectors involved expressed satisfaction at the results obtained.

In addition to their involvement in the negotiations on the environment chapter of the free trade agreement, FONAFIFO and MINAE drew up a joint strategy for placing issues that are important to the institution on the cooperation agenda being developed at parallel meetings. Simultaneously with the FTA negotiations, an environmental cooperation agreement was being discussed, in an effort to create a framework for cooperation aimed at improving the ability of countries to meet their legal obligations on environmental issues, particularly those that might have an impact on trade relations.

The free trade agreement includes a chapter on the environment (Chapter 17), which, in turn, contains an annex (Annex 17.9) on future areas of cooperation. These areas, which have a bearing on the work of FONAFIFO, include the following:

- Developing and promoting incentives and other flexible and voluntary mechanisms in order to encourage environmental protection, including the development of market-based initiatives and economic incentives for environmental management.
- Fostering partnerships to address current or emerging conservation and management issues, including personnel training and capacity building.
- Promoting best practices leading to sustainable management of the environment.
- Facilitating technology development and transfer and training to promote the use, proper operation, and maintenance of clean production technologies.
- Developing and promoting environmentally beneficial goods and services.

These concepts, which are contained in the chapter on the environment in the free trade agreement, will enable FONAFIFO to take advantage of the opportunities it opens up so as to promote its forestry finance mechanisms, particularly the Environmental Services Payment Program and the Environmental Services Certificates.

This is without a doubt one of the first times in history that environmental service payments have been included in a free trade agreement. This was made possible by the active and

coordinated participation of different sectors. Now it is important to follow up with the drafting of the plan of work for the cooperation agreement, in order to ensure that it includes activities that designed to translate plans into action. The future involvement of the United States business sector in efforts to expand environmental services payment programs is especially important.

The Fund is clearly charting an upward, innovative course, thanks to the commitment and interest of Costa Rican society in the protection of its forest resources, its appreciation for the environmental services that forests provide and its efforts to attain sustainable rural development. In that endeavor, Costa Rica has been joined by a growing number of strategic partners around the world; most important of all, however, is the fact that it has the backing of many partners and fellow travelers inside the country. FONAFIFO is a creation of the Costa Rican people and the fruit of their efforts, and that is the best guarantee of its continued existence.

The world comes to visit



FONAFIFO

International recognition

Costa Rica stands today as an example of success in the development and implementation of environmental service payments. The work done by the country and its environmental and forestry institutions, headed by the Ministry of the Environment and Energy, has earned it the recognition of the international community.

As the driving force of the Environmental Services Payment program, the National Forestry Financing Fund (FONAFIFO) receives numerous inquiries and visits from friendly countries and international delegations interested in learning more about how the program works.

“FONAFIFO is a highly regarded institution that has created an organizational framework people can trust, to the point that private sector enterprises have requested its support in connection with the implementation of the Environmental Services Payments Program in their specific areas of interest. The framework has worked well, and many other countries look to it as a model and try to find ways to adapt the concept to their own situation. Costa Rica is the most advanced country in this regard, and the system is being strengthened to increase its financial sustainability”, says Gunnars Platais, World Bank Environmental Advisor for Central America assigned to the RUTA (Regional Unit for Technical Assistance) Program.

RUTA has been supporting and supervising the Ecomercados Project, which has been implemented by FONAFIFO, with World Bank funding, since 2000.

Platais adds: “It is wonderful, a real privilege, to be working here with all these people, helping to share this experience with other countries. People are constantly coming to Costa Rica to learn about this experiment.”

The growing interest of other countries in the Costa Rican experiment has led FONAFIFO to enter into an agreement with the Ministry for Foreign Affairs, with a view to cooperating and

“exporting” the PSA experience to interested members of the international community, through programs aimed at promoting best practices.

In 2003 alone, FONAFIFO welcomed over 40 delegations from different countries who came to the country to learn about its forest management system. Another example of the international usefulness and success of Costa Rica's program is the agreement signed in January 2004 with the Ministry of the Environment of Brazil for the Amazon region. This agreement seeks to transfer certain aspects of the Costa Rican model to that region of Brazil.

The Environmental Services Payment Program was also one of the main attractions at the Environmental Solutions Fair organized by MINAE and the United Nations Development Programme (UNDP) in San José in December 2003. The fair was attended by people from many different countries.

In general, the Costa Rican experience is well regarded by the international forestry community, and the country realizes that this entails a responsibility and a commitment that transcend generational differences and national boundaries. Good ideas and achievements resulting from years of struggle and effort must be shared with those who wish to protect their forest resources and contribute to sustainable development anywhere in the world.

This publication represents an effort on the part of FONAFIFO to summarize its experiences and briefly explain how it has done what it has done. It also reflects the institution's desire to share with the Costa Rican people and with friendly countries an experience that has yielded positive results for Costa Rica and could do the same for other countries or regions. The story recounted in these pages is intended as a contribution to the ongoing effort to attain the sustainable development we all want, as well as an analytical tool to help us find new ways, renewed commitment and feasible projects that can lead us toward that goal.

Bibliography



FONAFIFO

Costa Rica hacia la Sostenibilidad de sus Recursos Naturales. Ministry of the Environment and Energy (MINAE), FONAFIFO. San José, 1998.

El Desarrollo del Sistema de Pago de Servicios Ambientales en Costa Rica. Fondo Nacional de Financiamiento Forestal (FONAFIFO), MINAE. San José, 2000.

El Éxito Forestal de Costa Rica, en cinco casos. Ministry of the Environment and Energy (MINAE), Oficina Nacional Forestal (ONF), Global Forestry Programme (PROFOR - UNDP). San José, 2002.

El Rostro Ambiental de Costa Rica. MINAE, Fondo Nacional de Financiamiento Forestal (FONAFIFO). San José, 2002.

FONAFIFO: Memoria 1993-1997. Fondo Nacional de Financiamiento Forestal. San José, 1998.

Fondo Nacional de Financiamiento Forestal, a la Vanguardia en el Pago de Servicios Ambientales en el Mundo. FONAFIFO. San José, 2003.

Los Bosques y el Servicio Ambiental de Protección del Recurso Hídrico en Costa Rica. MINAE/FONAFIFO. San José, 2000.

Plan Nacional de Desarrollo Forestal 2001-2010. MINAE/UNDP/Oficina Nacional Forestal (ONF). San José, 2001.

FINAL REFLECTION, LAST PAGE OF THE BOOK:

My Green Homeland

(translation)

For you, Costa Rica,
Beautiful land garbed in green,
where every tree extends a greeting to give life,
where waters bring song and nourishment,
where sunsets are intoxicating
and the dawn is an embrace.

For you, Costa Rica,
we shall continue offering our fresh days,
that what has come this far may not be destroyed
and what is destroyed may be restored.
A forest salute to your fertile soil.

FONAFIFO, 2005

(Gabriela Hernández)

BACK FLAP TEXT (BACK COVER):

The National Forestry Financing Fund (FONAFIFO) is the driving force of the forestry sector in Costa Rica. It is also its financial arm and a dynamic promoter of sustainable development for the nation. This book encapsulates the experiences of FONAFIFO since 1996, the year it was granted legal standing, although it actually began operations in the early 1990s.

The Fund has worked for the Costa Rican forestry sector for over ten years, under the leadership of the Ministry of the Environment and Energy and with the support of the private sector and the National Conservation Area System (SINAC). It was instrumental in designing the Environmental Services Payment Program (PSA), an innovative forestry development tool that has benefited over 7,000 Costa Ricans, especially small and medium-size forest owners.

We invite you to learn about the history of FONAFIFO in these pages. It is the story of a young tree planted on sound legal and institutional soil that has enabled it to grow strong and spread its branches wide.