

# Opening ceremony

**Payment for the environmental services of tropical forests is an idea whose time has come**

## Emmanuel Ze Meka

Executive Director, ITTO, Yokohama, Japan



Emmanuel Ze Meka speaks at the opening ceremony of the International Forum on Payments for Environmental Services of Tropical Forests.

*Photo: H.O. Ma/ITTO*

The important role of Costa Rica in pioneering the development of payments for environmental services (PES) is widely recognized and, indeed, Costa Rica has become one of the world's great champions of PES. I am certain that Costa Rica's PES experience will provide not only a valuable source of information but also considerable inspiration for many countries that are represented here today and are interested in exploring PES programs.

ITTO has always recognized the importance of maintaining a continuous supply of goods and services from forests to ensure their optimal contribution to socioeconomic development through SFM, with due consideration of social and environmental safeguards and biodiversity conservation. Achieving SFM requires sufficient financial resources as well as positive incentives that promote and support it. Payments for forest environmental services such as those associated with carbon sequestration, biodiversity conservation, watershed protection and the maintenance of landscape values can help finance SFM and tropical forest conservation.

In 2008, ITTO began implementing thematic programs on issues crucial to the attainment of SFM. One of these is known as "Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests", or REDDES. More than 20 countries have now received funding from ITTO under REDDES to promote the capacity of developing member countries and their stakeholders to ensure the continued provision of tropical forest environmental services and payments for them.

Local people make the best partners in the sustainable provision of environmental services and it is therefore essential that they have a strong incentive to be involved on an ongoing basis. PES schemes can provide a very strong incentive indeed. PES schemes can also be an effective framework for consultation, cooperation and policy development. They can be a vehicle for the sustainable delivery of environmental services, provide a

mechanism for compensating forest communities, owners and managers who maintain environmental services, and help engage indigenous peoples and local communities in conservation and sustainable development opportunities. PES schemes can also help improve forest law enforcement and governance because the services being paid for need to be monitored. The improved land and forest tenure systems and control mechanisms established under robust PES schemes discourage illegal activities while generating sustainable incomes for tenure-holders. PES schemes can also be a means by which tropical countries can secure payments from the international community for the environmental services their forests provide. For all these reasons, and others, PES is an important mechanism whose time has come.

I hope and expect that the diverse partnerships and networks that will be reinforced here in San José will help advance PES across the tropics. In this regard, I would like participants to consider the merits of establishing a platform for promoting PES in the tropics. The purpose of such a platform would be to take concrete actions in the field to make PES a reality in tropical countries. This could be done by:

- promoting policy reforms in tropical countries aimed at incorporating PES into forest laws and regulations;
- compiling and disseminating successful experiences on PES in tropical forests;
- building capacity and support programs and projects directed at PES; and
- analyzing, establishing and promoting linkages between PES and such global issues as biodiversity conservation, climate-change mitigation and adaptation, water regulation, food security and energy production.



Forest environmental services perform a range of functions, such as protecting stream and river channels from erosion.

*Photo: R. Carrillo/ITTO*

### What are forest environmental services?

The environmental services (also called ecosystem services) of forests are the benefits people obtain from forest ecosystems. They include provisioning services, such as food and water; regulating services, such as the regulation of floods, droughts, land degradation and disease; supporting services, such as soil formation and nutrient cycling; and cultural services, such as recreational, spiritual, religious and other nonmaterial benefits. Forest environmental services perform a range of functions, such as: moderating weather extremes and their impacts; dispersing seeds; mitigating drought and floods; cycling and moving nutrients; protecting stream and river channels and coastal shores from erosion; detoxifying and decomposing wastes; controlling agricultural pests; maintaining biodiversity; generating and preserving soils and renewing their fertility; contributing to climate stability; purifying air and water; and pollinating crops and natural vegetation. Tropical forests provide all these services and are often particularly important for carbon sequestration, biodiversity conservation, the protection of watersheds and the regulation of regional climates.

Sources: Ecological Society of America undated. Ecosystem services. Fact sheet. Washington, DC, USA; Hassan, R., Scholes, R. & Ash, N. 2005. *Ecosystems and human well-being: current state and trends*. Millennium Assessment. Island Press, Washington, DC, USA.

The aim of such a platform would be to build awareness of the importance of environmental services provided by tropical forests and to support field programs focused on globally agreed international policies in such domains as biodiversity conservation, climate-change mitigation and water catchment protection, and on designing ways to secure payments for these. ITTO would be a willing partner with FAO and other institutions represented here to make such a platform a reality.

### Eduardo Rojas Briales

Assistant Director-General, FAO, Rome, Italy



Eduardo Rojas Briales (left) at the opening ceremony of the International Forum on Payments for Environmental Services in Tropical Forests with René Castro and Emmanuel Ze Meka. Photo: H.O. Ma/ITTO

One of the bottlenecks in conserving our forests and ensuring their sustainable management is the lack of alignment between those who are implementing SFM and those who are benefiting from it through the provision of environmental services. PES schemes offer the hope of empowering local communities by paying them for their good management and the consequent provision of valuable environmental services.

Why is it important to pay for environmental services? Forestry has long been outcompeted as a land use

because markets do not remunerate many of the most important aspects of forests—the environmental services they provide. Agriculture generates an annual income; SFM has a much slower turnover and overexploitation, therefore, is likely. Today we know how to manage forests sustainably, but simple economics often leads to the depletion of the resource. Based on the products they grow, it is likely that few natural forests will ever generate a rate of return for owners and managers equal to or greater than most alternative land uses or even to meet the costs of sustainable, multifunctional forest management. The absence of markets for environmental services, the often great physical distances between the forests and the beneficiaries of those environmental services, and the lack of alignment between those who bear the costs of SFM and those who benefit from it help explain why most accessible forests in the world are under threat of overexploitation.

This is a blatant failure of the market to account and compensate for the positive externalities of forest management. Environmental policies have sometimes attempted to mitigate negative externalities but, for a combination of reasons, including intellectual inertia, few environmental policy instruments have been designed to address the positive externalities, and the lack of such instruments perpetuates gross inefficiencies and inequities in forests.

Payments for environmental services have been emerging timidly as a spontaneous response with great potential. Despite its lack of comprehensive design, the PES concept has spread worldwide, and considerable experience has been accumulated and should be consolidated, which is one of the tasks of this forum.

There are many questions to be answered and many issues to be resolved. One of the most critical is the risk that managed forests will not qualify for PES schemes. We should recall that wood production still accounts for 98 percent of forest revenues globally, and there is no scientific justification for excluding these actively managed forests from PES schemes. To the contrary, PES schemes require active management to induce forest restoration and to minimize a range of risk factors, such as wildfire, pests and illegal activities. SFM, therefore, helps forests deliver their environmental services. Monitoring the implementation of forest management plans is essential.

A PES scheme that requires forest communities to live without work would be conceptually perverse and may constitute a new form of rent seeking. The goal must be to ensure that PES schemes do not become a block to development but, rather, a support. From a social perspective, PES schemes could be the missing economic link that will enable forest communities to live in conditions comparable with their counterparts in agricultural and urban areas, and from an environmental perspective they can be integrated into management decisions to help solve the Gordian knot of SFM, in which

a mono-functional income (from wood) must pay for the achievement of multiple objectives.

But we cannot just focus on the output of the process; we must also look at the inputs—sustainable sources of funding. REDD+<sup>1</sup> may eventually provide a significant source of finance from the international community. In the medium to long term, however, PES schemes will need to be based on sound national funding. Costa Rica has taken the lead by addressing the parallel needs for a reliable funding source (a tax on fossil fuels, for example) and an institutional arrangement for managing this funding—FONAFIFO. Nevertheless, funding through taxation must be understood as a temporary option until the consolidation of markets for environmental services.

### René Castro Salazar

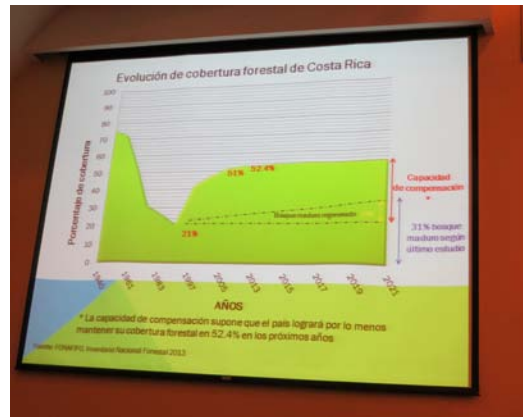
Minister of Environment, San José, Costa Rica



René Castro speaks at the opening ceremony of the International Forum on Payments for Environmental Services of Tropical Forests. Photo: H.O. Ma/ITTO

I am on my second tour of duty as Minister of Environment—I was also minister from 1994 to 1998—and now my second term is almost over. PES schemes are a mechanism by which Costa Rica will achieve carbon neutrality. It is one reason why Costa Rica dared to set a date, 2021, by when it will become a carbon-neutral country—possibly the first in the world. Many people say we’ve gone crazy. But I want to share with you how this 20-year effort on PES has helped us get to a position where this is possible.

Thirty years ago, in 1983, Costa Rica’s forest cover had declined dramatically—to 21 percent of the national land area. Then we made an important change. We, as a country, decided we would no longer reward people to clear forest, and we started to recover the forest. By 1998, we were able to say publicly that Costa Rica had turned an environmental disaster around. A few days ago, we received the latest estimate of forest cover, which showed that 52.4 percent of the country is now forested.



A slide from Dr Castro’s presentation, showing deforestation in Costa Rica between 1940 and the 1990s, and the subsequent forest recovery.

Photo: H.O. Ma/ITTO

Some people don’t agree with the way we are paying for environmental services because of the opportunity cost of spending those funds for environmental services instead of on other things. The nation has to pay this opportunity cost, but the nation is not capable of paying it. Money for the environment has to compete with spending on hospitals, schools and so on. But the rest of the world is not willing to pay the opportunity cost, either. We have a tax on fossil fuels, which in the last two decades has generated us\$900 million; 80 percent of our PES scheme has been paid by this tax and 20 percent has come from other sources. So I say to the United Nations Framework Convention on Climate Change, don’t tell me there is no money to fight climate change, because Costa Rica is investing this sort of money out of its own pocket.

Some people think that “carbon neutral” means zero emissions, but in fact it means that greenhouse gas emissions minus sequestration equals zero. By 2020 we will be emitting four tonnes of carbon per capita in Costa Rica, but we also have an expanding forest biomass, and we have calculated that the amount of carbon absorbed in this biomass accounts for 81 percent of the goal. The remainder we need to achieve by reducing emissions through investments in, for example, the transportation system, energy efficiency and renewable energy.

One of the reasons I am mentioning Costa Rica’s goal of carbon neutrality is because of upcoming global meetings on climate change. In Costa Rica we believe it is possible to test what we have done here elsewhere, through REDD, and to show that the forest sector is the only realistic option the world has to mitigate climate change—the only option that the developed world can pay for. It would cost US\$7–8 billion per year. We hope that the international community will show leadership and push for forest PES as a least-cost solution to climate-change mitigation. We hope the international community is prepared to do more than just talk.

1 Reducing emissions from deforestation and forest degradation, plus the role of conservation, sustainable management of forests and enhancement of forest stocks in developing countries.