## community-based forest governance



# 

from resistance to proposals for sustainable use

amigos de la tierra • friends of the earth • les amis de la terre

## community-based forest governance

### from resistance to proposals for sustainable use

amigos de la tierra · friends of the earth · les amis de la terre

### friends of the earth our vision

Our vision is of a peaceful and sustainable world based on societies living in harmony with nature. We envision a society of interdependent people living in dignity, wholeness and fulfilment in which equity and human and peoples' rights are realized. This will be a society built upon peoples' sovereignty and participation. It will be founded on social, economic, gender and environmental justice and free from all forms of domination and exploitation, such as neoliberalism, corporate globalization, neo-colonialism and militarism. We believe that our children's future will be better because of what we do.

### our mission

I. To collectively ensure environmental and social justice, human dignity, and respect for human rights and peoples' rights so as to secure sustainable societies.

2. To halt and reverse environmental degradation and depletion of natural resources, nurture the earth's ecological and cultural diversity, and secure sustainable livelihoods.

3. To secure the empowerment of indigenous peoples, local communities, women, groups and individuals, and to ensure public participation in decision making.

4. To bring about transformation towards sustainability and equity between and within societies with creative approaches and solutions.

5. To engage in vibrant campaigns, raise awareness, mobilize people and build alliances with diverse movements, linking grassroots, national and global struggles.

6. To inspire one another and to harness, strengthen and complement each other's capacities, living the change we wish to see and working together in solidarity.

### community-based forest governance: from resistance to proposals for sustainable use

editors: Javier Baltodano, Luisa Paz and Janice Wormworth. pedagogical mediation and graphic concept: Luisa Paz. international coordination: Javier Baltodano and Ann Doherty. authors: Sylvain Angerand, FoE France; Javier Baltodano, FoE Costa Rica; Felix Díaz, FoE Costa Rica; Peter Bosip, FoE PNG; Aldrin Calixte, FoE Haiti; Antonis Diamantidis, World Rainforest Movement (WRM); FoE Malaysia; Daniela Gomes Pinto, FoE Brazilian Amazon; Angelo Martín Lozano Rocha, FoE Bolivia; Silvia Quiroa, FoE El Salvador; Hernán Verscheure, FoE Chile; Ville Veikko Hirvelä, FoE Finland; WALHI / FoE Indonesia; Diego Alejandro Cardona Calle, FoE Colombia; Ricardo Carrere, WRM; Longgena Ginting, FoEl International Financial Institutions Programme Coordinator; Ronnie Hall, Global Forest Coalition; Niki Johnson, FoEl Gender Programme Coordinator; Simone Lovera, Global Forest Coalition; Meena Raman, FoE Malaysia and FoEl Chair; Isaac Rojas, FoEl Forests and Biodiversity Campaign Coordinator; Danielle van Oijen, FoE Netherlands.

#### design: Paulina Veloso

**translations:** Lila Vega (English), Elena De Munno (French), Alberto Villareal (Spanish) and Luis Emilio Corrales (Spanish)

## table of contents

- 3 introduction
- 8 ideas for the use of this document

### general considerations

- 9 community-based forest governance (CFG)
- 10 shared characteristics of successful cases of CFG
- II community rights:
  - a tool for the strengthening of community forest and biodiversity governance
- 12 the importance of including women in community-based forest governance processes
- 14 forest restoration

### community experiences

- 17 india, the adivasi and the struggle for an ecological democracy
- 21 papúa new guinea, community forests of the bahía wide
- 25 malaysia borneo, reforestation project in long belok
- 27 indonesia borneo, communities in kalimantan besieged by violence and corruption
- 30 france, community resistance to save the morvan forests
- 32 greece, community governance of the randi forests on ikaria island
- 36 chile, network of community parks mapulahual
- 39 bolivia, sustainable use of the "saro" palm
- 42 amazonia, community initiatives of non-timber products
- 45 costa rica, fishing communities resist the destruction of the forest
- 48 el salvador, jiquilisco bay, rural communities govern their natural resources
- 51 haití, the pine forest reserve: the last forest



## table of contents

### alerts

- 53 forests and consumption
- 55 climate change and forests
- 57 selective logging, industrial logging, sustainable forest managment... technical terms justify the destruction of the forest to satisfy the voraciousness of the markets
- 59 international financial institutions and the forest: financing destruction
- 61 more trade...more pressure on the forests
- 62 forestry law in cameroon...
  - ....when the law is not obeyed, the communities and the forests suffer
- 64 colombia: when forestry law caters to large markets, communities and forests suffer
- 66 environmental services markets and community rights
- 69 land tenure and the destruction of tropical forests

### opportunities

- 71 forests and food sovereignty
- 73 forests and health
- 74 forests and disasters
- 75 decentralization and community-based forest governance
- 76 local production and fair timber markets to create sustainable societies in developing countries examples from a French perspective
- 78 forests and poverty
- 79 related readings
- 81 links





Workshop on tropical forest restoration, Zona Norte, Costa Rica, 2004.

## introduction

Human civilization has played a role in forest destruction for millennia. However, in the recent decades this devastation has become commonplace, and has reached a scale and pace of destruction that is unprecedented.

> Primary forests are the home and foundation for the rich cultures and lifestyles of more than I billion Indigenous people. Another four billion live in communities adjacent to, or dependent in some form or another, on forests.

"Local initiatives for sustainable development through communitybased resource governance necessarily imply a struggle for greater control over resources and institutions by those hitherto excluded from such control. Such struggles for self-empowerment are inevitably highly conflictive<sup>1"</sup>.

More than half the world's forests have disappeared, and a significant portion of remaining forests have been severely degraded. The forests that host the highest levels of biodiversity are shrinking quickly, their area diminished day by day.

- At least five million square kilometers of tropical forest were destroyed between 1960 and 1995.
- Now, as we begin the 21st century, we are losing forest at the rate of more than 12 million hectares every year, including approximately eight million hectares of tropical forest that is deforested or visibly degraded each year<sup>2</sup>.
- These extremely high figures of loss would likely be revised upward by a considerable amount if deforestation caused by selective logging activities were included; this type of logging is usually not taken into account by satellite image analysis studies<sup>3</sup>.

By the mid-20th century, developed countries (mainly the USA and Western European nations) had almost completely destroyed their primary forests, leading their demand for forest products to initiate severe forest devastation in developing countries. Thus forests in Asia, Africa and Latin America have lost more than 25 percent of their area in a relatively short period of time.

Forest-related problems - and unsustainable management of natural resources in general - originate from **unfair processes of distribution** of goods, **consumerism** and **lack of governance**. The roots of many of

I Baraclough, Krishna and Ghimire (2000). Agricultural Expansion and Tropical Deforestation. Earthscan, London

<sup>2</sup> Achard F. et al. (2002). Determination of Deforestation Rates of the World's Humid Tropical Forests. Science 297 (5583) pp. 999 - 1002.

<sup>3</sup> Fearnside P. and Lawrence W. (2007) Comment on Determination of Deforestation Rates of the World's Humid Tropical Forests Science 299 (5609) p. 1015.

Communities and villages dependent on forests for their survival and quality of life are indispensable actors in efforts to change the current scenario of radical and unsustainable forest destruction.

these problems stem from the Colonial Period. The lack of regional or global regulating structures has allowed forest product exports to continue to grow, putting an unsustainable pressure on forest resources which continues to this  $day^4$ .

There is a clear relationship between forest destruction and the increasing in global trade in forest and agricultural products. **Commercial logging** is possibly the greatest current threat confronting primary forests. However, **mining**, **oil exploitation**, road construction and agricultural **plantation expansion** - all **export**-oriented activities - are also spurring destruction<sup>5</sup>. The recent entry of **agro-fuels** in international markets is further increasing forest destruction, due to the substantial land demands for such fuels' production<sup>6</sup>.

The process of **resistance** to forest destruction is being led by the villages and communities that care for and need the forest. Furthermore, these communities possess a great deal of the **knowledge and experience** needed to create more socially just and environmentally-sound alternatives.

The examples of resistance and alternative proposals are numerous, and come from all over the world: from Indigenous communities with ancestral traditions of living in harmony with the forest, and little contact with western culture; to farming communities whose relationship to forests and recognition of their importance have only just begun<sup>7</sup>. One example of resistance is the David and Goliath struggle for more than two decades of Penan villagers, from the island of Borneo's Sarawak region, against the destruction of its territory by logging companies. "They have realized, sadly, that "development" is always on the logging companies' side and that it does not benefit them. They have realized that only a privileged few get wealthy and that this 'development' has degraded their forests and land. The impact, anger and anguish of this situation has been difficult to overcome. There is a general sentiment of injustice, betrayal and uncertainty for the future. They have confronted this situation with the only means they have been left with: resistance to and confrontation with the loggers."<sup>8</sup>

Around the world, many villages and communities have been exposed to sustained aggression from governments which is sanctioned by national laws, and from companies and other economic interests that have appropriated these communities' land and resources<sup>9</sup>.

The aggression has at times been brutal. In Papua New Guinea, for example, "a growing abuse on civil, political, economic, and cultural rights related to the logging industry"<sup>10</sup> has been cited, including cases of violence and assassination. Multiple cases of violence against farming communities resisting deforestation and agro-industrial monoculture expansion have also been documented in Central America. The campaign against the Ston Forestal Company in Costa Rica left four

- 4 Rice, Ozinga, Marijnissen/Gregory (2000). Trade Liberalisation and its Impacts on Forests. FERN.
- 5 Bryan, Nielsen and Tangle (1997) The Last Frontier Forest, WRI, 1997
- 6 Bravo E. and Ho M.-W. (2006) Las nuevas repúblicas de biocombustible Third World Network. www.redtercermundo.org.uy/texto\_completo.php?id=3064
- 7 Clay, J. (1988) Indigenous peoples and tropical forests: models of land use and management from Latin America. Cultural Survival Report #27. Cambridge, Massachusetts.
- 8 Hong E. 1987. Natives of Sarawak: survival en Borneo Vanishing Forest. Institut Masyarakat, Malaysia. 1987.
- 9 www.forestpeoples.org
- 10 ACF and CECOR- Foe-PNG.2006. Bulldozing Progress: Human Rights Abuses and Corruption in PNG Large Scale Logging Industry. 38pp. www.celcor.org.pg

**Agro-fuels:** fuels used as substitutes for petrol derivatives, that are made of materials produced through agricultural processes. Given rising petrol prices, the demand for these fuels is increasing day by day. The principle agrofuels include ethanol, which can be made from sugar cane, and biodiesel, made from soy, palm oil and other oil crops.





Workshop on biodiversity uses, Quebrada Grande Communal Forest, Zona Norte, Costa Rica.

ecologists dead<sup>11</sup>. Recently, in Honduras, community leaders who led a decade-long struggle for their communities' right to use and govern forests were assassinated<sup>12</sup>. In the Amazon, we remember Chico Méndez and various religious leaders, farmers and union members who have endured violence to defend the forests that sustain their communities.

These events have led Friends of the Earth to concentrate on supporting efforts to mobilise and resist forest destruction. We aim to provide documentation, and to generate and communicate alternatives and knowledge that will help create **sustainable communities**. This document addresses this new direction.

<sup>12</sup> Comité de Familiares de Detenidos-Desaparecidos en Honduras (2006) Ergidos como Pinos: Memoria sobre la construcción de la conciencia ambientalista. Ed. Guymurasm, Tegucigalpa Honduras. 123pp. www.cofadeh.org



II Van der Homberg, H. (1999) Gerreros del Golfo Dulce: industria forestal y conflicto en la península de Osa, CR. Editorial del departamento Ecuménico de Investigaciones (DEI). Aptdo 390-2070, Sabanilla, San José, CR. 339 pp

**Sustainable communities:** are those communities that govern or control and use natural resources in a sustainable, participatory and equitable manner.

### ideas on how to use this document

This is a didactic document for communities who work with the member groups of our federation, Indigenous organizations, allied ecologists and farmers, as well as all communities that advocate the vision of building a socially just and environmentally-sound world.

We present various cases we hope will illustrate community-based forest governance (CFG), pointing out opportunities, difficulties and possible directions to confront and facilitate processes of sustainable forest use. We hope this document will also be used as a tool to facilitate discussion of CFG processes in community workshops or participatory lectures.

We also present ideas and criteria to justify the urgent demands for sustainable integration of forest use within communities.

The document is divided in the following sections:

**General Considerations:** General ideas, concepts, and criteria that help contextualize the subject of community-based forest governance.

**Community Experiences:** Presented in light green. These are anecdotes about community experiences which serve as useful discussion points on forest resources and possibilities for building and consolidating sustainable communities. Questions included at the end of each article can be used to guide small-group discussions on ideas presented in the texts.

Windows of Opportunity: Presented in amber. These are ideas and comments on opportunities to create and strengthen processes of community-based forest governance. Again, questions at the end of the article can be used to guide small-group discussions on these comments and ideas.

Windows of Alarm: Presented in red. These are ideas and comments about aspects that demand new strategies and organizational processes. These will be needed to regain control of land and forest resources, or simply to facilitate community-based forest governance. At the end of each of these sections are questions and motivating activities for groups.





Workshop on community-based timber production, Osa Peninsula, Costa Rica.

## general considerations

### Community-based forest governance:

Refers to the regulations and practices used by many communities for the conservation and sustainable use of the forests with which they coexist.
This type of governance is collective-communal, and by tradition identifies with the protection of the forests with regard to their industrial and commercial use.
It also identifies itself with traditional knowledge as an alternative to the classic "forest science". The latter approach is based on simplified models, assumes that destruction is "reversible," and has facilitated multiple cases of forest devastation as well as severe social injustice.

### community-based forest governance

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

Community-based forest governance is a concept that opens new horizons and new spaces for communities to exercise political control of their territories and resources. Through horizontal decision-making mechanisms, it allows for community transparency and accountability.

The principle actors identified in this framework have typically been villagers who have traditionally lived in forests and maintained their timeheld knowledge and conditions. However, since many of these communities have suffered cultural and organizational deterioration, and because many other rural and urban communities have been increasing their efforts toward sustainable forestry, it is necessary to expand the range of possible actors.

As well as communities, entities such as rural organizations can relate to - or be formed- in relation to this concept of forest governance. Similarly, the presence of a forest at the outset may not be a necessity; it is possible that a forest or other type of original ecosystem could be restored as a result of CFG.

We identify the following potential or essential actors for communitybased forest governance:

- Indigenous villages living in a territorially-defined community
- Indigenous villages that have lost their communal territory and a considerable share of their traditional knowledge
- Rural communities that own communal forest areas
- Rural communities that own parcels of private property and can organize to restore, conserve and make use of forest areas
- Urban communities that conserve forest areas

**Community-based forest governance (CFG)** integrates a wide range of possible situations; from the knowledgeable, fine-tuned use of forests by some Indigenous societies, to rural and urban communities that use and care for natural reserve areas; from the small-scale commercial use of primary forests by Amazon rubber tappers, to the restoration by rural communities of forests that have been severely degraded.

### shared characteristics of successful cases of CFG

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

Communities that have successfully organized and sustainably governed their forests share a series of characteristics. The presence or absence of one or several of these characteristics can be decisive to the success or failure of community-based forest governance. Here we present some of these characteristics.

### clarity on community forest area boundaries

Having clarity on the area boundaries prevents conflict with other property owners, facilitates better resource knowledge and the production of maps and other helpful tools, and gives the community greater confidence about their land tenancy.

### community knowledge of resource characteristics

The more precise the inhabitants' knowledge of the forest and its elements, the better the planning and regulation of its use. Traditional or acquired knowledge of the area, along with information on climate, geography, biology and the use of biodiverse elements, among other things, is vital for the planning and governance of resources, and guarantees respect for their different components.

### vision for the future

The sustainable governance of a resource will be challenging if one does not consider long-term co-existence with that resource. If the long-term view is not taken, there is a tendency to make immediate short-term use of the resource, which is generally unsustainable. This is therefore a decisive consideration. A vision for the future implies that the community takes ownership of the forest and the area in general; that older as well as younger generations understand that negotiations made now determine future well being, so that they will manage the resource decisively and with care.

### participatory community design of resource-use regulation

In successful cases of CFG there is ample participation in the regulation of resource use, good information, and good agreement with respect to the norms. Achieving this is part of a process, whereby effective forms of education and communication need to be developed.

### system of vigilance and flexible monitoring

Complying with forest-use regulation demands some type of fiscalization of the community governance processes, accountability, and a flexible, effective monitoring system.

### capacity for conflict resolution

When it comes to governing community resources, conflicts are common. It is helpful to develop mechanisms to encourage dialogue, for monitoring, and for accountability, along with other tools to enable the community to resolve internal conflicts in a creative and transparent manner.

### legal recognition by the state and state legislation

In today's world of politically-defined states, community governance of resources is seen as a decentralizing action. Yet community governance is not about taking strength away from the state, but rather supporting it through promotion of sustainable resource use. The recognition and normalization of community governance facilitates and legalizes this kind of relationship with the forest.

### capacity for resource governance and administration

The community and organizations responsible for CFG need to have basic tools for administration, decision making, governance, innovation, and creativity in the face of change.

### to generate dialogue

B

10

All of these points can be developed further in a community meeting or workshop, to establish a community's status with respect to each of the above characteristics: if they have progressed, their challenges, their opportunities, and how they can improve...

### community rights:

### a tool to strengthen community forest and biodiversity governance

Isaac Rojas / Forest and Biodiversity Programme Coordinator, Friends of the Earth International

Community rights are an element of Fundamental Human Rights and, due to their collective nature, are encompassed under Human Solidarity Rights.

Community rights strengthen the role of local and Indigenous communities in the following diverse ways:

- Environmentally-speaking, through the support of relationships that foster equilibrium of ecosystems through their sustainable use and conservation
- Through the improvement and discovery of uses for biodiversity
- Through acknowledgement of the diversity of communities' organization, culture, judicial systems, and world view.

These rights are universal, indivisible and interdependent. They are based on culture, traditions and practices of Indigenous villages and local communities. They are also historical, and are not based on land property.

Community rights can be used as a tool to defend community forms of natural resource use, in contrast to damaging forms imposed by the current prevailing development model. Similarly, they can be an important instrument to guarantee communities' collective control over their territories, cultural practices, traditional knowledge and natural resources.



Community-based forest and biodiversity governance allows many villages and communities to:

- Live in an integrated way with the local ecosystem
- Satisfy their needs while simultaneously conserving and enriching resources
- Maintain equal and just relationships within the community itself and with others
- Promote horizontal integration of decision making
- Take advantage of traditional knowledge to help a large number of villages and communities fulfill essential needs

All of these practices also promote community rights over the biological diversity associated with their traditional knowledge. This means that, in a defined area, these practices facilitate control of natural resources by those communities who use them to satisfy their basic needs.



A Tupiniki-Guarani man gives a speech defending the territories of his people, Espíritu Santo, Brazil.

### to generate dialogue



Based on this article, communities can carry out a group exercise in which participants make a list of elements they consider to be their acquired community rights, taking into account their history and use of their territories.

### the importance of including women in community-based forest government processes

Niki Johnson / Gender Programme Coordinator, Friends of the Earth International

Millions of people throughout the world, many of them Indigenous, depend on the forests to survive. Forests provide their communities with food, material for shelter and fuel, and medicines and products that can be sold to generate income. The benefits of community governance are increasingly recognized in international agreements as well as in the formulation of national policies.

Frequently, the processes of community-based forest governance continue to consider communities as homogenous groups, with common interests and needs regarding the natural resources that provide their subsistence. However, accumulated experiences, continually growing in number, show the importance of **taking social and cultural differences into account** with these initiatives<sup>1</sup>.

Both communities, and organizations or institutions that support them, should translate their commitments regarding gender equality into coherent actions. Traditionally, forest governance experiences, especially those focused on logging, have been considered a male dominion. However, documentation shows that in the majority of communities both women and men use forest resources for their subsistence activities<sup>2</sup>.

The differences between women and men's use derive from socially-assigned gender roles. Women, who in all societies have primary responsibilities with respect to social reproduction - child rearing, domestic chores, caring for the elderly and the sick - frequently use the forest to collect wood for fuel, food products and medicinal plants. In other words, their interest in forest governance is not necessarily related to activities which generate income, but rather to protecting essential forest products for community well-being.

Women are responsible for water collection. Therefore they have an interest in protecting forests that play a role in maintaining ecosystem balance, and in preventing the introduction of non-native tree species that can destroy their water sources.



Any governance experience and use of the forests that proposes to benefit the community in an integral way should be cognizant of and account for men and women's different relationships with the forests, at all levels of planning and implementation.

I Jeffery P; Mishra A.I; Singh M. (1998) Estereotipos de género y manejo conjunto del bosque", Centro para Estudios Sur Asiáticos, Universidad de Edimburgo.

<sup>2</sup> WRM (2005) Las mujeres y los bosques: un enfoque de género. WRM, Montevideo, Uruguay. www.wrm.org.uy

The principle of autonomous and participatory decision making is central to community-based forest governance. This principle requires that everyone in the community, including women, feel involved in the decision-making process with respect to forest governance.

Ensuring equal participation in decision making can help overcome two main obstacles derived from the existing gender division of work in any community:

- The first relates to women's multiple roles, in reproductive and productive activities, such as their responsibilities in their homes and to their children. In many cases this can mean women have less time than men to attend meetings. As a result, women may feel the benefits of getting involved in their community's forest governance do not compensate for the implied increase in workload.
- The second obstacle refers to the gender division of work based on unequal power relations. Frequently, it is considered "natural", both by women and men, that the father/husband/son speak in place of the woman, leaving the voices, experiences, and opinions of women unheard. This situation becomes even more radical in communities where cultural norms impose gender segregation; there it is necessary to create parallel spaces for women, to enable them to express their points of view.

Even when the women themselves do not protest their exclusion, experience has informed us that women's specific knowledge of forest resources, as well as their needs and interests in relation to these, tend to be left out. This is in detriment to the women, the project and the community as a whole.

Finally, if it is necessary to account for gender differences with regard to CFG, it is also important to avoid lumping all women together as if they were a homogenous group sharing the same interests.

Many studies show how differences between women (for example, age, socio-economic class, or specific circumstances related to their domestic and extra-domestic work) can imply different opportunities and limitations to participate in forest governance. For example, young mothers may not only have less time to participate in the decision making processes, they may also be given, for cultural reasons, less space and opportunity to express their opinions in comparison to older women. The same can be said about poor women in comparison to higher-income women in the community. Yet it may be these young or poor women who are most dependent upon forest products, and who stand to be most affected by decisions of the wider community.

### to generate dialogue 🧭

- Do you know how men and women use the forest in your communities? What are the differences?
- In your own experience: Are women's opinions and participation taken into account? Why? How?
- How would you facilitate the participation of women in forest maintenance and community-based forest governance plans?
- How would the community gain from this?



### forest restoration

#### Félix Díaz / COECOCEIBA / Friends of the Earth Costa Rica

Fortunately, despite massive forest destruction, many of the world's deforested areas can be restored. Many beneficial results can be achieved that conserve biodiversity, support food security, and decrease the level of vulnerability of communities confronting disasters. The regeneration of the forests can be accomplished by using creativity and traditional knowledge.

Forest regeneration in deforested areas depends on the condition of the land, its topography, the availability of seeds and proximity to other forests. But the most important factor is likely to be communities, which are of the most help when it comes to restoring tropical forests. The natural regeneration of forests, in the absence of support from humans, generally produces forests relatively low in biodiversity and poor in terms of their contribution to food security. However, a tropical forest restored by a family or community can, after 20 or 30 years, reach similar conditions to the original forest in terms of plant and animal species richness.

In the low tropical plains of Costa Rica, there are numerous documented cases of rural families restoring forests, following traditional practices, achieving their aim of producing an ecosystem rich in high-value woods, food, and wildlife. These forests often host greater biodiversity than forests that regenerate naturally.

One such documented case in Costs Rica's north presented the following characteristics 20 years after the regeneration process began in an area that was in a grassland<sup>1</sup> condition:

# of tree species / hectare	65
# of trees in total / hectare	554
# of species for wood production	83
Wood production / year	10 cubic meters
Volume of first-class wood / hectare	56 cubic meters
Total volume of wood / hectare	160 cubic meters

To regenerate forests in tropical areas, we propose the following methods and activities:



Worker in a forestry nursery, Zona Norte, Costa Rica.

I Coecoceiba. ATCR (2002) La restauración Ecologista del Bosque Tropical: una alternativa de reforestación ambientalmente justa y socialmente sana

General planning	Document and map the area to be restored, specifying important activities, dates and observations.
Natural regeneration	When a restoration process is initiated on grassland or agricultural land, it is beneficial to let the land regenerate itself for one to two years. Grass will naturally give way to a few trees, bushes and other plant species. Later this regeneration can be enriched through the planting of desired species.
Tree nurseries	High-value wood, food, medicinal, and rare or nearly extinct species are incorporated. For tropical zones, naturally regenera- ted forest can be further enriched with an estimated 100 - 200 trees per hectare.
Rows	In the middle of the vegetation, 1.5-meter-wide rows are made every five to seven meters. These rows are preferably made in an east-west direction to facilitate the entry of light.
Planting of trees or enrichment	Trees from nurseries are planted in a spatial organization that reflects their natural incidence in a forest, so that each species has the appropriate conditions to grow.
Fertilization with humus	It is helpful to apply humus from neighboring forests to each planted tree. This supplies mycorrhizas and other microorganisms that are necessary for soil functioning and tree growth.
Cleaning and maintenance	The rows are maintained for five or more years to guarantee that the planted trees and other established species are kept free of vines and excessive competition.
Pruning	Depending on the conditions, it may be beneficial to occasionally prune the trees destined for wood production to guarantee optimal trunk formation.
Log book	It is helpful to keep a log of activities and observations.
Protection against fire	In cases where fire is a threat, it is helpful to establish fire rings and other preventative practices.



Twenty-year-old, restored tropical forest, Zona Norte, Costa Rica.

### to generate dialogue

In your work group or workshop you can reflect on what you would take for your communities from the methodology described in this text. You may also discuss whether you have had experience in one of these activities or actions, and what the results were. You could also reflect on the space in your community that could be made available for forest restoration.



## community experiences

forests of morvan

greece mediterranean forests of randi

haití caribbean pine forests

el salvador mangroves of jiquilisco costa rica dry forests of caballo island

> • brazil tropical forests of the amazon

• bolivia palms of the guaraní

chile temperate forests of mapulahual india tropical forests of the adivasi

> borneo tropical forests of long belok

kalimantan of tropical forest of runtu

tropical forests of the sulka and mengen



### **india** the adivasi's struggle for ecological democracy

Ville Veikko Hirvelä / Friends of the Earth Finland

### communities marginalized since colonial times

India is home to the world's largest Indigenous population, with approximately 90 million people belonging to tribal groups. Collectively referred to as the Adivasi, these peoples have since ancient times inhabited and sustained India's primordial tropical forests, developing their way of life and culture around these wild forests that serve as their homes and their resource base. In contrast to modern settlements, cultivation, and "development" - which displace wild forests - the Adivasi's homes, cultivation, food gathering and general livelihood are integrated with the forests' sustenance and regeneration.

The environmental laws and norms that India inherited from the British Crown have historically excluded the Adivasi from the forests. They have further worked to convert this land into reserves administered under criteria that favor the rights for forests' commercial, rather than sustainable, use. Those Adivasi who have been able to continue living in the forests have been treated as "illegal encroachers" for simply living in their ancestral Indigenous homelands without legal property documents for the land.

Throughout India's 60 years of independence, approximately 30 million Adivasis have been officially displaced from their natural territory, for "development" projects including tourism, logging concessions, monoculture plantations, mining, reservoirs and roads.

Various interests have attempted to claim that the Adivasi settlements are harmful and degrade tropical forests. But this discourse has merely been used to justify the exclusion of many communities and has facilitated commercial harvesting of India's forests. The process has often begun with the creation of reserves, national parks and wildlife "sanc"Large quantities of laws have been imposed by force to take our natural rights away. Monoculture plantations are being planted everywhere. Many plants which we used for food have disappeared."

- An Adivasi woman during recent protests to reclaim their territories.



tuaries"; and continued with the construction of roads to provide access for hotel infrastructure, turning these zones into tourist areas with greater resultant impacts than those generated by the communities originally inhabiting them.

The construction of infrastructure has facilitated illegal tree felling (as is the case of the Nagarhole sanctuary). Within sanctuaries, large teakwood or eucalyptus monoculture plantations are often permitted. Plans and measures for developing mega-mining projects also exist in sanctuary areas such as Lanjigarh (bauxite) and Sitanadi/Udanti (diamonds).

India faces a dilemma: Does it continue to displace the Adivasi communities into urban and rural settlements, which harm the forests, or does it recognize their rights to live in forests?

An Adivasi demonstration, in their bid to reclaim control of their forests.





### the adivasi prompt a new forest law in 2006

In December 2006, as a result of the Adivasi movement's long struggle, the Indian Parliament approved the Tribal Forest Rights Act, which officially recognises and promises to correct "historical injustice" done to Adivasi forest communities.

"Our forest was clearly in a more natural condition before the existence of the sanctuaries. We protected the forest. Now the timber is taken, everything has collapsed ... We want to live in the forest to protect and govern it our way. If the Adivasi were not taken out of the forests they would not be so easily destroyed".



- an Adivasi from the Nagarhole sanctuary

The Tribal Forest Rights Act acknowledges the Adivasi's and other traditional forest dwellers' rights to live, cultivate, and collect forest products where they have traditionally settled. The Gram Sabha, or council of the forest village communities, is authorized to define individual and community property, and the rights to use of land, forests and water, according to traditional village methods. This law was supported by a call to the Indian Parliament, signed by Friends of the Earth International (FOEI), the World Rain Forest Movement (WRM), and many other ecological and social organizations. Other expressions of support were signed by important European parliamentarians, two former environment ministers, and the presidents and vice presidents of European parliamentary committees related to environment and development.

The Act allows for the development of collective rights for forest communities, and could contribute to the fulfillment of the UN Convention on Biodiversity. It also serves to inspire other forest communities to continue their struggles and efforts to recover their territories and establish equitable legal protection. The law authorizes forest communities to document their traditional rights and customary laws on the use and sustainable conservation of the forest's biodiversity, land and water. Once documented, these laws can be recognized, registered and included as official rights in legal documents. Adivasis are now demanding that India's Tribal Ministry and Parliament produce sound guidelines for the new law's implementation, to make explicit the powers it grants forest communities to initiate the definition of their rights within the community.

To legally validate the traditional rights and customary laws of the Adivasi, it is necessary to consider their vision on life and the forest.

### recovering a harmonious relationship with the forest

The word "Adivasi" means original inhabitant, or "those who live without beginning". For the Adivasi, this word refers not only to people but also to trees, rivers, wild animals, air, and wind (my spirit). As they say, "We are part of our ancestors ... the rock is also my ancestor. It would be a mistake to separate the Adivasi from the ancestors, we survive thanks to them, and they survive thanks to us." The Adivasi see their lives as an inheritance, "not only from their mothers and fathers, but also their ancestors that are rivers, the changing seasons," according to Raimotin Markam, a Gond Adivasi woman. She says, "We live by these traditions, while the modern concept of nature and its law oblige us to separate it. You should learn to be part of the rock, the tree, the forest."

"We feel that the forest is our mother, and our mother protects us and provides everything. But today they make us believe that the forest does not belong to us, it belongs to the Forest Department. Wherever the Adivasi are in the forest, the forest is intact and protected."

- J.P. Raju of the Jenukuruba Adivasi community

"The Adivasi can understand the calling of the tree, the chirp of the bird, the language of the rock or of the sand ... the language and appreciation for the environment which surrounds us, its outcries and tears ... the movements of the birds and animals, and capture their message, what it is that they are trying to say."

Raimotin Markam, a Gond Adivasi woman



On the Andaman and Nicobar islands of the Indian Ocean, people of some tribes understand animals, wind and ocean as all belonging within "inyabonge" ("my spirit"). So tribes in these islands used their ability to interpret the messages from animals and the ocean's shore in order to survive the Tsunami. They fled, along with animals, to the islands' highest ground shortly before the arrival of the massive waves.

The Adivasi can be thought of as living in dialogue with the trees, plants, wind or related spirits. For example, they believe these spirits can transmit a message about a plant that will, "help me to see the necessary plant for the cure of an illness," according to Astu, a tribal healer. His assistant added that, "What we take, we also leave after us," and this allows nature to regenerate.

However, Markam laments that, "the trees and the wild do not have a language that can be understood by corporations and globalization ... they kill not only us, but also our ancestors."

According to Indu Netam, another Gond Adivasi woman, "We were accustomed to respect all types of life," including plants and animals. Markam says that, "each tribe, and each family circle had its own protector animal or plant, which they in turn also protected."

However, in the modern sense of the law, Netam says, "we did not have laws for ourselves or the animals. We, along with all other forms of life were free to wander the forests and sustain ourselves. Now ... we are destroying that base, which is the freedom of existence. Before, there was no government, everything belonged to us. The entire forest was our property; Even the word property is wrong. It was a value with us rather than property for us. Property is a word from outside".

According to Markam, "The modern laws are forcing us to domesticate the wild, which, effectively, will destroy nature, our freedom, and that of nature itself ... We never domesticate pigs, hens or cows. They are available, wandering in the forest, and they can be used by everyone, and do not belong to anyone". She adds that without the modern concept of property, "we were living on our own account; when we saw a usable field, we subsisted from it; but now it is cordoned off so that one does not trespass, or use it." According to Netam, "We do not accept territorial categories introduced as commercial territory or forest reserve."

"We collect roots, honey, green leaves...bamboo. Eating this we prevent illness."

#### - Jenukurubas

"If we are born in the mountains, we should not, ever, descend from them ... This is our forest, our hills, and we belong in this area ... We do not sell fruits or vegetables to others. The vegetables are only our food which God gives us. We do not go to doctors ... we use our own herbs. We live up to 120 years."

- Elder, Paliyar Adivasi community.

"In the wilds the issue of property simply does not exist, not even collective property ... given that man, himself, is part of it."

- Narendra, a researcher who lived with the Adivasi for three years

According to Sita, a Gond Adivasi woman, "There was so much available in the forest, that an Adivasi never worried about what he/she would eat, because all one had to do was go into the forest, collect roots and herbs ... fruits, seeds, and hunt. In terms of food, everything was provided." Netam asks, "Why are we now told not to go into the forest so that the greater environment is saved? Doesn't the rest of the world have its own environment, which it has used and could save?" Markam adds that, "After living in the forests for millennia, this is the first time we are confronted with the necessity to save them."

"When this land belonged to us we did not permit any cutting or wrongful use of the land or excavation. We subsisted from whatever grew. The property of land came with this occupation of strangers, who do not belong here"

- An Adivasi from the Bhil tribe of the Thar Desert

Netam tells that the Adivasi "are going to the forest to look for birds, rats, hares, rabbits, but most importantly we are going to wander there. No greater pleasure exists than that of simply wandering through there, even if we return empty-handed ... The Adivasi do not think unnecessarily ... any thought that is necessary will be made an action."

She adds that, "Today it is said that everyone has a right to education; but we do not want that education ... Our children did not go to study in schools. We received our education by climbing trees, collecting flowers, wandering the forest ... According to today's education systems, the majority of us would fail. But, according to our ancient education system no one would ever fail." Two Jenukuruba women assert that, "We were more equal in our traditional society. Women were more respected. We did everything together."







Adivasi dwellings.

### to generate dialogue

- What is your opinion about the vision of the Adivasi villages?
- Is it similar or very different to yours? Why?
- What do you think is the importance of the approving laws like those mentioned in this case study?
- What kinds of conditions are found at the native villages of your country today? Do these people have autonomy over their land and resources? Why?
- What kind of national or transnational companies generate environmental deterioration in your communities? What kind of governance and protection are required for the forests in the territories where you live?

### papua new guinea community forests of the bahía wide

Peter Bosip / CELCOR / Friends of the Earth PNG

The Mengen and Sulka are Indigenous peoples from the villages of Teimtop, Sampun and Klampun. These villages are found in the Bahía Wide area, in the Pornio district of East New Britain in Papua New Guinea (PNG). The last census, dated 1998, estimated the Bahía area's population at 5,158 people. The population of the Teimtop, Sampun and Klampun villages is 100, 200, and 400 families respectively. Approximately 80 percent of the inhabitants speak Tok Pisin as their principal language.

### the bahía wide communities

For these peoples, subsistence agriculture is a daily activity. On average, each family depends on an area of half a hectare for cultivation. According to the societies' matrilineal traditions, women are land owners, and most elderly women of the clan distribute it according to this tradition. Approximately 40 percent of the land in the Pornio district is rugged, and due to the low population there, the mountainous slopes and valleys are almost never used.

Since the 19th century, the entire island of New Britain has been subjected to destructive development, including deforestation for monoculture plantations. In East Pornio, cacao occupies an area of approximately 378,801 hectares (ha); coconut 76,000 ha; vanilla 1,742 ha; and oranges 2,720 ha. Settlements have also contributed to forest degradation and devastation. As a result, towards the end of the last century the Mengen and Sulka communities looked for support and assistance to protect their environment and cultural inheritance.



Intensive logging.

### principle aspects of community-based forest governance

These communities have organized themselves, and with the support of various ecological organizations, have developed the Bahia Wide Project. The project's principal objective is to "promote the sustainable use of natural resources through the improvement and conservation of traditional production practices and to develop incentives for forest conservation."

21

The Sampun and Klampun communities want a more traditional type of development. Many Papua New Guineans conceive of development as being synonymous with roads, bridges, help posts, hospitals, automobiles, or the generation of large sums of money.

The Bahía Wide communities consider development to be related to having a healthy population, locally-produced healthy foods, and above all, having total control over their land and resources. They hope that future generations will live in harmony with nature, to continue and maintain their rich natural and cultural inheritance.



The forests supply the needs of family and community.

The communities' principle activities to reach their objectives include:

### • developing community capabilities

Community training in diverse aspects is a continual effort. Training is especially focused on the development of organizational abilities. These include the formation of community organizations that are registered, can coordinate economic and social activities, have political impact, develop productive projects, and campaign against monoculture farming, large-scale logging, and other destructive activities.

The communities articulate their work, create alliances with other groups and organizations, and have succeeded in getting the local Pornio Government to consider the need to recognize local organizations in order to develop consistent resources and policies that benefit the community.

### • legal assistance

The communities have looked to allied NGOs for assistance on legal issues related to land ownership inside the proposed conservation areas and neighbouring villages. They contacted CELCOR/FOE Papua New Guinea for assistance to take legal action against a logging company that was looking for a franchise in the customary lands of the Sule clan. CEL-COR responded with legal assistance to the communities in 2002, and a resolution to this case is still pending. In 2006, CELCOR succeeded in denouncing the National Forest Service, and forced it to give the Teimptop local community documents regarding a forestry project; this allowed the communities to appropriately negotiate with the company. These documents will also be used to present a case against the company, in the hope that it will leave the area given that the logging franchise was granted without appropriate community consultation. In addition, CELCOR supports efforts to promote awareness of the impact of logging activities, palm monoculture plantations, and other large-scale development activities.

### • community activities based on forests and biodiversity

After a process of deliberation organized by the communities, a sustainable strategy for the province was identified based on these three points:

- Nutritional sovereignty in grains and protein food sources
- Development of local markets, and
- Promotion of high-value goods for external markets.

The community has focused on developing skill and capacity in areas such as rice production, butterfly farms, post-harvest managing and marketing of goods, ecotourism, communal micro-businesses, and the development of technical skills, cooperative development, and transportation.

These communities encourage the continued focus on forest governance and conservation - in spite of foreign companies that try to tempt the communities with the illusion of fast cash and sophisticated new goods in exchange for use of their forests.

Companies use many tricks to secure the land and use of natural resources for their own means, leaving ancestral native villages as the losers.



Considerable challenges remain in terms of corruption and violence, along with a chronic threat that community rights will be sacrificed in favour of large companies. However, the majority of communities in this region still have control of their land and resources. The responsibility for sustainable resource use still lies, for the most part, in the hands of the local communities. It is they who should decide their preferred options for the present and the future. They should decide whether to allow large logging companies to destroy their forests in exchange for illusory wealth, or to resist them and instead develop substantive long-term projects that improve their quality of life and maintain their traditions.

The sustainable use of forests and resources managed by the communities depends entirely on their intentions of either defending or tossing aside the systems that give sustenance to life. If there is a conviction that comes from their hearts, souls, and minds, the community management systems of the forest will be sustained. If there is no more than the will to attract monetary dividends, however, all of the systems will collapse.

### wildlife management areas (WMAs)

The communities proposed two WMAs to protect the wildlife and stop the destruction caused by logging projects. In 2004, after considerable effort and lobbying, the communities achieved victory in the form of a declaration for 5,200 ha of WMAs. These areas will be governed by the Sulka and Mengen communities, as well as others in the region.

The regulations for the management and use of these protected areas were drawn up by the Conservation Committee in consultation with the communities. These regulations are based on their customary knowledge, and concerns about the sustainable management of resources. The communities also establish the consequences for the violation of these regulations. These laws are made according to the Control and Protection of the Fauna Act, Chapter 154 of the revised Papua New Guinea laws, and fulfill a requirement of the Office of Environment and Conservation of Papua New Guinea to establish WMAs. The regulations also establish norms for the Conservation Committee, and the community in general, for the sustainable governance of biodiversity, cultural sites, customs and traditions of the Sulka and Mengen towns.

The regulations of the WMA include some development plans for small-scale businesses identified as being viable options for the area, such as ecotourism and butterfly farms.





Papua New Guineans have lived peacefully and in harmony with nature. It was a birth right to enjoy the richness of nature. This was the case until the beginning of the 1980s when there was a sudden increase in demand for forest resources to supply the fierce consumption of large markets in developed countries. Little information and false visions about "development" led many community leaders to sell their resources, including land and forests, to foreign corporations.

It is clear that a compromise between land owners and the available resources is needed to ensure resources are protected and the resource base of future generations is not compromised.

Bahía Wide is a practical example of communities of Indigenous people who have created an organized process for managing their resources; and who, against all odds and predictions, were finally able to obtain their 5,200 ha of land for Wildlife Management Areas. This is a very positive sign for local communities who see development from an alternative perspective to the business-oriented vision; it demonstrates that they can achieve the necessary conditions to conserve their land and resources for the survival of future generations.

### to generate dialogue

- Have your communities developed a strategy for sustainability similar to the one mentioned in this case? Why? What sort of strategy?
- If you have developed such a strategy, describe the experience with regards to the steps that you've taken, what you've accomplished, and what difficulties you've faced.
- What lessons can you take from this case?
- What impacts do logging projects have in your communities?
- Do you think that your communities could achieve the protection of resources? Why? How?



### malaysia - borneo reforestation project in long belok

#### Friends of the Earth Malaysia

Located in the Penan area of Sungai Apoh in Borneo's Sarawak region, Long Belok is one of the five communities engaged in reforestation projects with the technical support of Friends of the Earth Malaysia. In August 2005, when the reforestation project began, this community collected seedlings of native trees and fine wood species such as Kapur, Meranti, and Engkabang, to plant in their own nurseries.

For a long time now, the entire Sungai Apoh territory has been officially defined as "forest reserve". This designation allows and facilitates concessions for logging exploitation by large companies. In 2001, this socalled reserve was provisionally rented to the Shin Yang Company, one of Sarawak's largest forest exploitation and tree monoculture plantation companies. Previous to that, the company Rimbunan Hijau Sdn. Bhd had logged the area through a permit granted by the Forestry Department.



Inside the forest clearings of Sungai Apoh, communities planted seedlings as part of a program for defending their territories.

The forest around Long Belok village is one of the few in Sarawak that has not been exploited since the 1990s. The Long Belok community argues that a portion of the denominated "forest reserve" belongs to them, and that they have long conserved the area as a communal forest. This claim for their acquired rights reveals defects in forest legislation, which declares this area to be a forest reserve. This categorization implies that an area is fundamentally and exclusively reserved for permanent forest exploitation activities.

Legislation such as this, which assigns a particular category to a forest area, violates the rights of communities. It overlooks the fact that adequate information processes are required, as is the preliminary consent of affected villages.

In mid-2006, the community received information that (the company) Rimbunan Hijau was to enter the community forests again for logging. The villagers responded by putting up barricades and signs, saying that the area was for the Long Belok reforestation program. They erected the barricades and signs at the edge of the forested area where they had planted more than 3,000 trees of different species.

The Long Belok community leader, Mr. Alah Beling, spoke with company representatives. He warned them to stay outside the village area and not to log within the village limits; he warned that doing so would have a catastrophic impact on the reforestation project and would waste the efforts that had long been invested in this project.

In March 2006, the communities transplanted seedlings from the greenhouse to the reforestation project site in Ulu Sungai Belok. One year later, the logging company left, leaving the land of the Long Belok to the community. The community now has plans to expand their reforestation project. In fact, one month prior to the company's departure the communities had planted a further 2,000 trees in their greenhouse, which soon afterwards were transplanted to the project site. The reforestation project was successful partly due to exchanges between Long Belok and the Neighbours Association of Uma Bawan (UBRA) of Sungai Keluan, which had previously started its own reforestation project. Friends of the Earth Malaysia helped both projects and facilitated exchanges.



Native species tree nursery.

The duel purposes of reforestation with native species are being more and more widely recognized: the forests are enriched with high-value tree species; and communities prove that they are using these reforested areas and thereby override companies' attempts to claim logging concessions in these zones from the government.

### to generate dialogue

- In your communities are there any similar situations to the above mentioned case?
- Are there any reforestation projects in your communities? Which are they?
- What kind of community consciousness have these projects generated?
- What is the status of native species in your community?
- What kind of governance and protection do they require?
- Which national or transnational companies generate environmental degradation in your communities?
- Have your communities taken actions to stop environmental deterioration and protect the forests? What type of action?



### **indonesia-borneo** communities in kalimantan besieged by violence and corruption

#### Walhi / Friends of the Earth, Indonesia

The village of Runtu is located in the Anut Selatan sub district, in the Kotawaringin Barat regency in Central Kalimantan, on the Indonesian portion of Borneo Island (which is known as Kalimantan). It is an area of rolling hills, and reddish and yellowish soils that make the land around Runtus generally favourable for agriculture - including monoculture palm plantations.

The Runtu village area extends 491 km<sup>2</sup>, and has a population of 937 people, or 305 families. These people represent several different ethnic, cultural and religious groups. These ethnic groups are the Kayak Ngaju, Banjar, Melayu, Bugis, Jawa and Madura, while the religions to which they belong include Islam, Christianity and Kaharingan (the original religion of the Kayak tribe).

In 1972 the village regional government was run by the village leader. At that time Runtu society's main economic activity was the cultivation of its own lands. It was an autonomous society in terms of the use of its lands and resources. In fact, these were used with great care, and were ascribed a sacred character, as being inherited from the ancestors. In general, there was great solidarity in the village and daily activities were in large part shared by the community. Before the construction of roads, the rivers were the principle means of transport.

### the arrival of companies

In 1982, palm-oil producing companies descended on Runtu village. Among them was PT Astra Agro Lestari (PT.AAL). From that time, the communities began to come under impacts as significant portions of their land were taken by the companies without fair payment. About 6,000 hectares of land continues to be under dispute today.



Oil palm monoculture.

The agreement between the regional government of Kobar and the PT.AAL company forced each family to provide two hectares or more of land, for which the company paid a minimal sum, over a period of four years. Furthermore, thousands of hectares occupied by the company have not been paid for; worse still, central government policies with respect to facilitating the companies' presence prevent these situations from being taken to court.

Another palm oil company, PT.MMS, has further magnified the hardship of the Runtu community. This company has occupied and deforested other lands belonging to the community, without consent or an expropriation process.

### chronology of the bloody tragedy in runtu

The presence of PT.MMS resulted in a struggle between the people of Runtu and this company. The Runtu held a demonstration in December 2004; they refused to work in the areas where there was no agreement between the company and the community. Hasanudin (the current leader of Runtu) and Jamaludin (the leader of the village of Umpang) acted as spokesmen and mobilized the community to struggle against the company. However, after being elected leader of the village, Hasanudin became a public relations official for the PT.MMS Company. He was put in charge of handling the dispute between the people and the company officials, a development which caused tremendous pain to the people from Runtu. The community decided to hold a peaceful demonstration, and on May 26th, 2005, approximately 500 people from Runtu, Umpang Muayap and surrounding villages marched towards the PT.MMS company camp. Their goal was to meet with Hasanudin and Jamaludin, but their efforts to find them were not successful. Suddenly, while the protesters and the company were negotiating, six armed members of BRIMOB, the mobile brigade of the Indonesian police, emerged accompanied by two civil representatives of the company.

The villagers clearly indicated they would not leave until Hasanudin and Jamaludin presented themselves. In response, two company representatives demanded that the BRIMOB begin to shoot, to use violence to disperse the crowd. The BRIMOB gave a warning shot, which angered the crowd, and led the people to lose control, argue and riot. During the uproar two police members of the BRIMOB and two others suffered injuries. One of the villagers, Saridon, was hit in the head with a rifle, and the Runtu people responded by throwing the BRIMOB member who injured him into the Tiberau River and taking his rifle and bullets.



Observing that the situation was potentially dangerous and that they lacked sufficient force, the company representatives and police retreated to another company camp at Simpang Sulung, some 8 km away from the disturbance. After the police, two company representatives and several other company employees had left, the villagers began to destroy the camp using a road roller, and then burned everything. Rumors spread that there was violence against company functionaries, but according to eyewitnesses these rumors are untrue, and were used as a pretext to corner the villagers.

By the time the hostilities had ceased, officials had fired bullets and the police had detained 43 people, three of whom were injured. Men named Edi and Edon were shot in the upper part of their legs. Another man named Eyos suffered a fracture in his left leg when an official stepped on him. Many people suffered bruises from the beatings they received from the police.

The 43 detained villagers were forced to remove their clothes, and were transported in a truck to Pangkalan Bun dressed only in their under clothing. During the trip they were tortured by officials who kicked, assaulted and verbally abused them. Five members of the BRI-MOB police traveled inside the truck. Edon, one of those shot, was constantly beaten, kicked and insulted by the BRIMOB members. Later, the police said that Edon had died instantly in the truck.

By the time they arrived at regional police headquarters, one of the 43 people detained had died and two were seriously injured and taken to the hospital. Meanwhile, the other 40 were dealt with by the officials. After addressing their minor injuries, they asked the 40 people to give their testimonies about the incident.

### after the tragedy...

A few days after Edon's funeral, the Kobar regional police visited his family offering them compensation, which was accepted by Edon's mother. They also asked her to sign a reconciliation agreement, which prohibits the family from denouncing the Kobar regional police. Some 30 days after the incident more BRIMOB police were posted to the Simpang Sulung province boundaries, the road to Kalteng-Kalbar, and the gate of the PT.MMS base in the plantation to increase security. This produced unrest in the community because there had never been this kind of paramilitary presence.

According to Hamihan, a member of the Regional Committee of Representative of Kalteng, some regional officials in charge of monitoring the Runtu tragedy tried to bribe them with large sums of money to prevent people from taking this case to court. Hamihan rejected the money.

### crisis over sought-after commodity

The root cause of this conflict, however, was the development of the palm oil plantation. We could say it was a conflict between the people who rejected it and those who were proponents of its existence. The conflict between civil society and government officials stems from the system of granting licenses for the plantations.

- The law has not been applied in the case of Runtu.
- The media is weak and its bias makes it insensitive to the existing injustices; it is never on the side of the people.
- The conflict-resolution mechanisms between communities and palm oil companies have not been successful.
- The police, instead of caring for and protecting the people, brutally assaulted them, killing one man and injuring others.
- The security members of the PT.MMS company in the Runtu village have attempted homicide, kidnapping, intimidation, torture and other violent actions to convince the families of the victims not to sue the company. Human rights were also violated when the company took possession of the land that belonged to the local people by common law or customary practice.

Palm oil has become a highly desirable business for investors. Markets in developing countries have grown exponentially over the last decade due to palm oil's widespread use in the food and cosmetic industries. The situation for villagers like those of Runtu is further worsened due to palm oil being one of the most efficient sources of bio-fuel.

The development and growth of palm oil plantations has generated an abundance of capital for a few people and has caused much pain and hardship for many others. The development of plantations has generated deforestation and agrochemical contamination across immense expanses of the tropics. Furthermore, as we illustrated earlier, palm oil companies have provoked violence and corruption in areas where these monoculture plantations have expanded.



Forest clearcut for planting oil palm

### to generate dialogue

- Do palm oil companies or other similar monoculture companies exist in your communities? Which ones?
- What is the impact of these companies on the communities and the forests?
- What lessons can you take from this case?
- Have there been similar cases of violence in your communities? Do you think that there could be? Why?
- What condition are the forests of your region in?

### **france** community resistance to save the morvan forests

#### Sylvain Angerand / Friends of the Earth France

In the heart of Burgundy you can find one of France's most picturesque regions, a place where its history, culture and forests are intimately linked. In centuries past, this region experienced a strong economic surge thanks to forestry trade; at the end of every summer, firewood was taken from the forest, and down on the Yonne and Seine rivers for transport, destined for the Parisian furnaces.

At the beginning of the 20th century the emergence of coal as a fuel, along with railroad transportation, put an end to the firewood trade and river transportation, leaving many without employment. A major change came again after the Second World War, when investors became interested in the region's forests. They promoted their use as plantations for resinous trees, in particular the Douglas pine. The forest was brutally transformed: the original trees were replaced with resinous pines, which represent 50 percent of the current forest area. Confronted with these transformations, the inhabitants organized a resistance.

The substitution of the original forest for pine trees causes a loss of diversity and an acidification of the soil. In addition, increasingly shorter crop rotations, combined with clear cutting using specialized machinery, compacts and depletes the soil

### community proposals

Confronted with the disappearance of native trees and the degradation of the environment, a local forest organization was formed. This organization has launched petition campaigns directed at investors and other private property owners, interests which control nearly 80 percent of the Morvan forests.



Clearcut in Morvan.

30

In an effort to act quickly, awareness and mobilization campaigns for the residents have been initiated. Funds have been collected to either individually or collectively buy parcels of the forest. Initially, 270 hectares of forest were bought with the Autun community and other partners who share the goal of saving the Morvan trees. This first inspiring effort sparked a dynamic that further motivated many more people to join the organization and buy parcels of land. A total of four new forests have been acquired.

The forest was previously considered part of our heritage, and its longterm governance was passed down from generation to generation. Increasingly, however, investors limit themselves to looking for short-term profits.

### use of community forests

These community forests are not regulated under models used for National Parks or conservation areas. On the contrary, the communities involved have sought to prove that alternative uses of the forest exist, and that the monoculture plantations of Douglas pine are not the only solution. Thanks to innovative ideas and the support of forestry technicians, they have demonstrated that the forest's sustainable use is possible through an alternative form of governance, one more closely related to the forest's natural functioning. They have successfully prevented clear cutting, allowing the continuity of forest cover to be maintained. At the same time, they have selectively harvested trees that produce highquality wood. This has also favoured diversity in terms of species and the age of the trees. Through this kind of forest governance, they have shown it is possible to maintain a biodiverse community of trees that is resistant to natural phenomenon and disease.





### to generate dialogue

- What vision of the forest does your community have? What use do they make of the forest?
- Has your community developed actions for the conservation of the forests and natural resources? If so, which ones and what have the results been?
- What is your experience and opinion with regard to national parks?
- In your criteria: Can the framework of the national park coexist with the activities and necessities of communities? If so, how?
- What kinds of actions do communities with forests need to take for the sustainable management of their resources?
- Have your communities carried out actions of resistance against tourism, logging, or agro-forestry companies? Why? When? What were the results?
- What lessons can you take from the case presented here?



A forest in Morvan.

### **grecia** community governance of the randi forests on ikaria island<sup>1</sup>

Antonis Diamantidis / World Rainforest Movement

Ikaria (also spelled Icaria) Island is situated in the east Aegean Sea, and covers an area of 267 km<sup>2</sup>. It has 8,000 inhabitants (according to a 2001 census) and is geographically characterized by its rectangular form and by the rough, uneven Atheras mountain range which traverses the island horizontally, dividing it into two sections.



According to mythology, Ikaria owes its name to Icarus, son of Daedalus. Icarus constructed wings using wax to escape confinement imposed by King Midas on the island of Crete. Fascinated by the feeling of flying, Icarus disobeyed his father's orders not to fly too close to the sun, and fell from the sky when his wings melted from the heat. It is believed that from Samos Island, Heracles saw Icarus fall; he went to recover his body, and buried him on the island which today carries Icarus's name. Ikaria is also known as the birthplace of the god Dionysus, inspiring the wine tradition of the island's inhabitants.





lkaria island.

The hilly terrain and absence of natural ports on the island's coasts shaped the life of its people who, in their isolation, developed their own forms of self government. Due to its topography, the island served as an ideal base for pirates who navigated the Mediterranean throughout a large part of its history. This forced its inhabitants to look for refuge on the higher parts of the island which were once completely covered with forest.

The two principal economic activities of the Ikarians have traditionally been small-scale agriculture and rural livestock husbandry. The necessity of carrying out these activities with a limited amount of land engendered a strong sense of cooperation. It also promoted the creation of a system of rules for the land's use, which has contributed to the maintenance of its forests.

The lack of natural ports and the constant danger posed by pirates meant that neither fishing nor trade developed significantly on Ikaria. Although livestock and agriculture provided subsistence, they did not generate much monetary income. However, the community members recognize that protecting the forests, as their ancestors did, enabled them to produce goods for trade. Their most important export products were: wood (any dead wood surplus in the forest was sold), honey, wax, leather, and to a lesser extent, meat and barley. The Ikaria forests are representative of primary forest ecosystems found in the Aegean region; they are home to species including the Holm oak tree (Quercus ilex), the strawberry tree (Arbutus unedo), the Greek strawberry tree (Arbutus andrachne) and the Phillyrea (Phillyrea latifolia).



This combination of native trees and bushes can still be found in the 800-hectare core area of the Randi forest, as it is locally known. This is the last remaining primary forest on the island, and one of the last primary forests in the region.

### traditional community governance of the randi forests

Over time an extensive network of rock terraces was constructed to facilitate agriculture. Some parts of this network - which also served to protect the crops from livestock - are used even today, despite a large portion of it having fallen into complete disuse. This neglect is due to massive emigration during the 1950s which left many mountain villages completely abandoned.

The agricultural system using **rock terraces and fences** had as its impetus the control of grazing livestock. This was practiced as an annual rotation: during summer months, the animals stayed at high altitudes where the forest provided abundant fodder and protection from the heat. In winter, the animals were taken to lower ground to obtain refuge from the snow. The livestock was continually shifted throughout the year to different parcels of land marked by the elaborate rock fence system. This fence system separated the land of different communities, the agricultural forest terrain, and the mountainous forest region of the plains.

The forests were an integral part of the productive system of the communities. The dead wood was collected to cook and provide heating and the tree branches to feed the animals. The acorns of the oaks were used to make flour, while the production of honey depended on the forest's biodiversity. The forests guaranteed the supply of water and helped secure the terraces.



Terraces in Ikaria.

Everything thus depended upon the **maintenance of the forest**: from construction material, to shelter, to herbs and mushrooms. By clearing the forests of dead wood, the communities helped it regenerate and protected it from a worm that eats wood as it decomposes. Those who violated the rule of only collecting dead wood from the forest were socially condemned and fined. Furthermore, as Hradis, a farmer who lives on the edge of the Randi forest, explains: "... fresh wood is much heavier to carry for the animals ..."

Tree felling of the forest for agriculture was permitted only for those families whose particular needs demanded it; this was carried out with the permission of the village elders. Once an area was assigned to them, a family cleared the land of trees and constructed a rock fence around it.

This long history of practices has given way to thousands of years of human presence in Ikaria. For this reason, the existence of the Randi forest to this day provides fundamental proof of the **ecological rationality** of this form of human intervention.

Livestock was permitted to freely graze in the community forests and was important to the protection and regeneration of the grounds. The animals contributed waste and nutrients to the soil, and their impact was regulated by strict controls on the number of animals. Each family was allotted a quota of animals according to their family size and needs. Each family also paid a tax to the community, which was used to support a shepherd, chosen by the community, who cared for everyone's livestock. The constant presence of people in the forests due to their various activities was also a very effective mechanism to control forest fires.

### resistance to defend the randi forests

Members of the Ikarian community of Fradato, a village clinging to a hillside adjacent to the Randi forest, can recount numerous examples of modern community resistance to local and external authorities that have tried to usurp their forest lands. Even during the long Ottoman Empire occupation, Ikaria Island communities were given privileges in terms of self governance over their forests; whenever logging efforts were initiated, they were countered with armed rebellions.



Degraded oak forest.

From a legal point of view, however, only a small portion of the forest belongs to the community. When the island was incorporated into the Greek state in 1912, the villages and community authorities were asked to present their land titles for official recognition. They were told that if they did not do this, it would be declared public land (i.e. belonging to the state). This process has not been completed due to bureaucratic failures, and lack of interest on the part of the villagers who continue to subsist on Ikaria. The local people have the strong belief that Randi forest is community property, and that no one outside the island can decide its destiny. Currently, "the forest is in bad condition... it is being extinguished" say the villagers, "and the traditional processes of regeneration are not being permitted". This is due to the fact that the system of communal use has been practically abandoned.

There are a series of factors that have contributed to this deterioration. The austere conditions on the island, exacerbated during the Nazi occupation, and complete isolation from external provisions led more than half the population to emigrate and abandon their homes, farms and forests. Other changes, such as the emergence of electricity and petroleum (in the beginning of the 1960s), facilitated by new ports constructed during the years Greece was governed by a military junta (1967-1974), reduced natives' dependency on the forests and destabilized local community institutions.

Finally, the lack of planning with regard to EU and Greek agricultural subsidies has caused inhabitants to seek higher profits by increasing livestock numbers without full consideration of future impacts. In fact, the quantity of livestock on Ikaria has been increasing, putting pressure on the Randi forest.

Significantly, on this island which now has an estimated 50,000 sheep and goats, there is no production of milk and cheese; there is no slaughterhouse, and no installations for wool processing. This is explained by the fact that people buy livestock and then rent part of the forest from the local authorities for pastoral fields, a practice which is illegal given that Randi forest was officially declared a protected area to allow for its regeneration.

More of the same: new policies increase the pressure on the forests.

The current government, led by the conservative party, has emphasized its intentions to promote constitutional amendments<sup>2</sup>- which further liberalize the situation with the forests. This reform considers removing the protected status from approximately one fourth of the national territory. The intention is clear: expand the spaces for construction development, increase infrastructure and decrease means to protect the environment<sup>3</sup>.

### to generate dialogue

- What advantages do small-scale agriculture and controlled livestock husbandry have for the sustainability of resources?
- Have your communities experienced impacts from the development of large monoculture plantations? How?
- Have actions to conserve forests and natural resources been developed? Which and with what results?
- Of the federal government policies that affect your communities, which ones would you eliminate? What policies would you promote to improve your quality of life and your relationship with the environment?
- What lessons can you take from the case presented here?



I Special thanks to Giorgos Giouzepas, whose thesis, "Evaluation of the Factors Which Influence the Viability of a Community Based Forest Governance System on the Island of Ikaria, Greece" University of Egeo, November 2004, served as an invaluable source of information for this work.

<sup>2</sup> Ana Psarouda Benaki, President of the Hellenic Parliament: http://anatheorisi.Parliament.gr. Translation by the author.

<sup>3</sup> Carl Schlyter (Verts/ALE), "Amendment to the Greek National Constitution, undermining the protection of the environment and the forests."
## **chile** the "mapulahual" network of community parks

Hernan Verscheure / CODEFF, Friends of the Earth Chile

Chile is home to some of the planet's most noted temperate forests. This is because such a high number of the tree species found in these forests exist only in this region of the world. Furthermore, some of these trees are known to reach an age of more than 3,000 years. Historically, the native forests provided Indigenous communities with an important share of their subsistence needs, in terms of material for their homes, small boats, domestic utensils, food, and so on. Some of these uses are still seen today.



Despite the biological and social relevance of these forests, their area has been reduced by half, and they cover an area of 13 million hectares today. This forest destruction stemmed largely from agriculture and livestock activities developed after European colonization of the lands, beginning in the sixteenth century. These activities also led to the expulsion of many communities from their ancestral territories. Today, these forests are still under threat because of the forest management model established during the 1974-1990 Pinochet dictatorship. This model supports the development of vast plantations of exotic species (including eucalyptus and radiata pine, also known as "remarkable pine"). It transformed Chile into a major world cellulose producer, while generating a chain of negative social and environmental impacts.

- The southward advancement of plantations across the country.
- The lack of policy to support the recovery and sustainable management of native forests.
- The urgent need to secure control of their land, now that a major share of Chilean land is privately held.

The factors that have led rural and Indigenous communities to organize.

Organizing themselves has allowed the communities to develop initiatives enabling them to further the recovery of their territories. They have also improved their living conditions through the responsible use of the native forests, and influenced a shift towards a forest development model that considers social and environmental justice.

### network of community parks mapulahual

(www.mapulahual.cl)

A notable example is the work of the Mapuche - Huilliches communities in the south coast part of the Coastal Mountain range, in Osorno province. The communities involved include: the Maicolpi, Maicolpi South River, Hueyelhue, Nirehue, Caleta Cóndor, Manquemapu, Mahui Dantu and Melillanca Huanque. Together they have created the "Network of Community Parks MAPULAHUAL".

The territory of these communities covers an area of 37,335 ha, 1,000 ha of which is protected by an established Network of Community Parks.

The objectives of the Network of Community Parks are to:

- Protect the forests and associated biodiversity that forms a fundamental part of the communities' culture
- Consolidate their right to access and control their territories
- Generate income that helps them improve their living conditions

MAPULAHUAL in Chezungun (the local language) means "land of alerce". The alerce (Fitzroya cupressoides) is a type of cypress, and one of the most notable trees in the southern temperate forests. It can live up to 4,000 years and its wood is very beautiful and extremely resistant to humidity, which is why it has been used by these communities since ancient times. Yet it has also been overexploited by companies and individuals who see the wood as an easy way to make money.

For 30 years now, the alerce has been legally protected; however, its dead wood can be extracted for small-scale consumption. This measure has made it possible for Huilliche communities to maintain, to a certain extent, this ancestral harvesting activity that forms an important part of the local economy and cultural heritage.

However, the overexploitation of alerce forests by numerous companies and businesses threatens its long term availability. Large cellulose consortiums also have an interest in establishing eucalyptus plantations on these lands, which increases pressure on the forests. This motivated the above-mentioned communities to develop activities that will enable them to keep their land and value the native forests through eco-tourism enterprises. They have accomplished this, without excluding the possibility of using timber and non-timber forest products on a small scale.

working together

Organizing the Network of Community Parks MAPULAHUAL required coordination between the communities. Each community, through its General Assembly, decided which area they would dedicate to the Network. Later, each community assumed the necessary work in their territory under the direction of community leaders. In this way the first phase saw four Cultural and Environmental Information Centers built, and in seven of the eight communities, "Community Parks" were established that included 70 kilometers of trails with ethnic and environmental information.

This process had the financial support and technical assistance of several agencies, including the Temperate Forests Fund which is an initiative of various environmental NGOs including CODEFF/Friends of the Earth Chile.

To facilitate the coordination, the communities established a commission formed by:

- The presidents of each council;
- Members of the General Council of "Caciques" (community leaders); and
- Representatives of the public services: CONADI (National Commission of Indigenous Development), CONAF (National Forest Service) and SERNATUR (National Tourism Service).

This commission advocates the development of adequate action plans, and coordinates technical assistance with the Indigenous Association Mapu Lahual of the Butahuillimapu, which acquired its legal status in 2002 under Indigenous Law 19.253.

The development of this initiative has required the preparation of a series of projects to:



Strengthen community members' skills for the management of these areas

Generate services for ecotourism There are still many challenges ahead. These include improving participation of youth who will be responsible for maintaining this initiative in the long term; and achieving tenancy recognition of all the territories held by the communities who are part of this initiative.

The positive impacts of the Network are enormous, including for example:

- The diversification of productive activities, which has permitted the generation of new incomes for the communities;
- The creation of the Indigenous Association Mapulahual of Butahuillimapu which facilitated the participation of the communities in political decision-making with respect to their territory, transforming its leaders into respected spokespersons who communicate with public and private institutions;
- The protection of a coastal mountain area considered to be a priority for biodiversity conservation.

The experience of these communities encourages us to be optimistic about the future for others who follow their example of conserving the important natural heritage of humanity, such as the temperate forests of southern Chile's Coastal Mountain range.



Trail in Pichi-Mallay community forest, Maicolpi, Rio Sur, X Region, Chile.

### to generate dialogue

- How do your governments plan the use of the forests at the national level? Which is the forest management model applied in your country?
- Does this forest management model affect life in the communities? Why? How?
- Are there tree species in danger of extinction in the forests of your communities? Which ones? And why are they in danger?
- What measures or actions have the communities taken or could they take to protect these species?
- Is there a network of forests in your country? If not, could an initiative like the one in this case be developed? Where would you develop it? What would be needed to make it a reality?
- What role have the indigenous communities taken in the protection of the country's natural resources?
- What lessons can you take from this case?

Bibliographic References:

- "Bosques Fronteras de Chile: Un patrimonio a conservar", OMB-CHILE, CODEFF, UACH, WRI (2002).
- "Red de Parques Comunitarios Mapu Lahual: Una experiencia de las comunidades indígenas de la cordillera de la Costa" de Luis Cardenas.
- En Bosques y Comunidades del Sur de Chile. Editorial Universitaria (2006).



Environmental educational centre, Mahuidantu community, Caleta San Pedro; X Region, Chile.

## **bolivia** sustainable use of the "saro" palm

Itika Guasu, Guaraní territory

Angelo Martin Lozano Rocha / CERDET-Friends of the Earth Bolivia

The ancestral lands of the Itika Guasu Guaraní village include a vast territory located in Northeast Bolivia's O'Connor province, in the Tarija department. Since 1996 the town's Assembly has demanded title to lands totaling 216,002 hectares. However, a Bolivian government Study of the Identification of Special Needs (EINE) carried out in 2000 reported that these communities needed even more territory to guarantee their subsistence and maintain their cultural practices. Thus in 2003 an additional 70,000 hectares of land was given to the Naurenda community, under executive title, increasing the total area of their lands to 293,584 hectares. Today this territory is inhabited by 3,800 people belonging to 546 families and 36 communities.

The legal control over their land that the Guaraní people of ltika Guasu have worked to acquire has enabled these forest dwellers to develop better governance and planning of their resources and biodiversity. The case of saro palm is a prime example.

Traditionally Guaraní men and women have used the resources that nature provides for them, dedicating themselves to hunting, fishing and agriculture. They use both timber and non-timber forest products, including honey, natural medicines, and specifically the leaves of saro palms (Trithrinax schizophylla, also called the Brazilian needle palm) to produce handicrafts and build their family homes.

Currently, the palm products are actively and exclusively hand made by Guaraní women to complement their family's food security. This activity is also a means to strengthen the organization of women, and support their effective participation in decision making in the Guaraní town Assembly.



Saro palm leaf.

### challenges in the use of saro palms

The saro palm is in demand throughout the region for commercial-scale construction of roofs and cabins, and for craft making. Its construction use demands a far greater quantity of leaves in comparison to the demand for handicrafts. It is estimated that 198 leaves of mature fronds are needed for one square meter of roof. Therefore, a typical house in the region, with a roof surface area of  $31 \text{ m}^2$ , requires 6,237 leaves.

Young (yellow) fronds are used for the elaboration of craft products. This is because the central leaves are of a softer, easier-to-work material, and their characteristic yellow color makes them more attractive and produces good-quality products.

To begin to plan for this palm's sustainable use in the Itika Guasu's territory, estimates of the raw material required were made, in kilograms of palm per year. The following chart lays out the requirements for various crafts made in the region.



Guarani woman making handicrafts from saro leaves.

Handicrafts	Units per year	Weight of units (grams)	Total weight of palm used (kilograms)
Pot holders	600	125	75.0
Pencil holder	360	80	28.8
Fans	120	100	12.0
Sieves	360	140	50.4
Bread baskets	2.400	250	600.0
Baskets	1.440	600	864.0
Knits	780	375	292.5
Totals			1.922.8
Source: CERDET - FOE Bolivia			



Saro palm stands in the Itika Guasu forests.

While the Indigenous territory is vast, saro palm's distribution within it is irregular. Some areas have a very low concentration of palms, while others have a high concentration, and so are called "palmar". Historically, the palm has been intensively exploited by large livestock companies and palm businesses in general. This has caused a decline in the number of palms, and it is possible that the resource will soon deteriorate substantially. Furthermore, population growth and the emergence of new regional markets for crafts make it necessary to plan the harvest of saro palm leaves more carefully.

### sustainable use

The Indigenous communities, with the support of organizations including Friends of the Earth Bolivia, have been studying the life cycle of the saro palm and developing methods for its sustainable use, with the aim of increasing levels of the leaves' production, without impacting on the palm population. Palm-friendly harvesting techniques:

The method under trial is based on partial collection of the young and adult palm leaves, over a one-year harvest cycle. Under this system, only plants that have reached sexual maturity and a height of 1.5 meters are used. About 20 percent of mature plants are left undisturbed, so that they can be used for their seeds and can provide food for animals. Additionally, all palms less than 1.5 meters tall are left in reserve, so that they continue grow and ultimately become ready for production.

The type of leaf harvested from the palm depends on its intended use. For example, leaves to be used for roofing or cabins must be mature, and so are extracted from the exterior portion of the palm's leafy growth.

For handicrafts, the leaves from the core or central part of the plant's growth are harvested. In this case, just one or two leaves per palm are taken; it is important to leave behind one or two young shoots, to prevent the plant from drying out or dying.



### territory planning

A system for the saro palm's sustainable use must also include basic planning of the territory. This entails dividing up production areas into four administrative units that differ significantly in terms of their abundance and concentration of palms, and the type of forest found. These allow for separate regimes of cutting cycles and rest periods, adapted to the conditions found in each unit.

Planning for the territory also demands that protected areas be defined. Areas to be protected include zones with steep slopes and rocky terrain; and zones of 100 meters on both sides of rivers, and 20 meters on each side of intermittent streams.

- What importance does the legal control over their land have for Indigenous and other communities?
- Do your communities have control over the land? Why or why not?
- In your communities, do you plan the use of natural resources? Why? How do you do it?
- Do you or your community make hand-crafted products derived from the forest? Which ones? How are they commercialized?
- Does the fabrication of these crafts have negative consequences for natural resources, or is the use of these resources well-planned?
- What lessons can you take from the case presented here?



Saro palm flowers.

### amazonia community initiatives for non-timber products

Daniela Gomes Pinto / Friends of the Earth Brazilian Amazon

In Brazil, small-scale producers in forests face many difficulties in accessing markets, credit and technology. This is especially challenging for those who live in remote areas of the Amazon. However, an impressive diversity of local communities are increasingly adopting sustainable practices, a development that has recently been attracting the attention of local and foreign businesses.

Friends of the Earth Brazilian Amazon has supported community-based forestry activities and small-scale community experiences in Brazil since 2002. This support has primarily concentrated on non-timber forest products (NTP), taking the form of legal assistance, capacity building and enabling access to incentives and exemption schemes (with regards to tax and permits). Other assistance aims to help establish connections between producers and industries, including helping producers gain certification for their products.

Overall, the goal of our initiative is to help generate income and other long-term social benefits for the local communities, while at the same time mitigating the risks that would be associated with destruction of their natural resources. A preliminary evaluation of four communities involved in these activities indicates striking outcomes in terms income generation, conservation of natural resources and increased security of land tenure.





Ita palm (Mauritia flexuosa).

The Santo Antonio do Abonari Community Association (Abonari), in the municipality of Presidente Figueiredo, Amazonas state, consists of 17 families. FOE Brazilian Amazon has been supporting the association since 2003, with the aim of improving its ability to extract and process oil from the ita palm (Mauritia flexuosa).

Until 2001, individual community members were responsible for selling their own products in local markets. During the four harvesting months of 2002 the association obtained an income of US \$700. During the same harvesting period in 2003, 4,745 kg of ita palm pulp was sold to the national cosmetic industry, generating a total income for the association of US \$4,400. This translates into a per capita income increase of 470 percent over this period. The community then acquired a mini-processor for ita palm oil production, which will allow it to produce pulp and oil from other abundant natural resources (for example, a fruit from palms of the genus Euterpe called açaí, and a wild cacao species called cupuacu).



Brazil nuts (Bertholletia excelsa)

The **Comaru Producers Cooperative** at the Iratapuru (Comaru) River, in Naranjal do Jari, Amapá state, consists of 32 families who produce oil from Brazil nuts (Bertholletia excelsa). In this case, the Comaru people's contact with buyers has been increased, and this has prompted them to augment their range of extraction products to include, for example, resins and oils of breu branco trees (Protium pallidum) and copaiba balsam trees (Copaifera sp).

The Indigenous community of Baú (which belongs to the Kayapó tribal group) has 164 members. They have received support to obtain certification for their Brazil nut oil production process. In 2005, they were able to sell 4,295 liters of Brazil nut oil to the cosmetic sector, which provided a per capita income of approximately US \$330. This marks a significant achievement for a community with no other sources of monetary income. Brazil nuts can also be used to produce a type of flour for cakes, cookies and other food products, and enrich the Indigenous diet thanks to their high protein content.



Traditional processing.

Improved practices for sustainable resource use have contributed to greater income stability through diversification of production. This was the case for the small company **Amazonfruit in Belém**, in the state of Pará. The company is made up of 109 families who, since 2004, received assistance to purchase açaí fruit (*Euterpe oleracea*), with the aim of producing and exporting a mix of its juices. In this case, the açaí seeds that were previously discarded during the production process are now being used for the production of crafts for export, generating additional income.



Improved processing plant.

Of the four business cases discussed above, two experienced a big improvement in their land tenure security, and were able to obtain official recognition of their property rights. In the Abonari and Amazonfruit cases, the local establishment of territory boundaries has been achieved and the process to obtain official title for the land has been initiated. Furthermore, by reducing insecurity over land tenure by obtaining land titles, the communities have opened up the possibility of greater access to credit, both public and private.

At least one company, the Abonari Community Association, changed its extraction practices during the period of support. The community members committed to clear procedures for the management and extraction of ita palm, to reduce the risk of over-exploiting this resource. In the case of the Baú community, certification for their Brazil nut production process has indirectly assured formal protection for their native forest land, which was under constant threat of illegal settlement, gold mining and fishing.

There was also a significant increase in awareness with respect to the risks associated with illegal practices in a certified area, and an increase in profile for the areas in terms of awareness of external actors such as government bodies, NGOs and certifiers. Lastly, the additional income expected will help fulfill the aim of improving maintenance of boats and other vehicles used by the communities to protect their land from invasion.

- Do you have experience with non-timber forest products? If so, which ones?
- What kinds of micro-businesses exist in your communities? What effect do these micro-businesses have on families, communities and environment?
- How is your community's access to credit, incentives and exemptions?
- Have you as producers developed the experience to certify your agricultural or forest products? How has your experience been? Do you think it is important to learn more on this subject? Why?
- What lessons can you take from this case?



## **COSTA rica** fishing communities resist forest destruction

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

Costa Rica is a small country of 52,000 km<sup>2</sup>, with coastlines on both oceans. On the northern Pacific side the coast forms a pronounced gulf, called the Gulf of Nicoya, where a series of islands of diverse sizes are found. On one of these islands is a community, whose unfolding story shows us how they are defending local resources against a large tourism industry that is devastating forests and displacing surrounding communities.

### the islands of the gulf of nicoya

In pre-Columbian times the Gulf of Nicoya's islands were inhabited, or at least regularly visited, by Indigenous villagers. The islands host abundant remains of these cultures. After the Spanish Conquest, the islands were de-populated because constraints including potable water availability and access made them relatively inhospitable places to live. It was not until the twentieth century that the current communities began to come into being. Originally they formed subsistence economies. They planted corn and beans and fished, and augmented their income by making charcoal, which they sold in Puntarenas, the country's main Pacific port. Later, as fishing became more widespread with the opening of local and international markets, the other activities were gradually abandoned.

According to current legislation, Costa Rica's islands, as well as a 200meter band along its coastlines, are considered state property. However, these villagers have developed a type of community right to the land, after having lived there for nearly a century.

Today, the gulf's island communities are mainly based on fishing. Smallscale fishing is the occupation of both men and women. Although some





Caballo Island.

problems have arisen due to declining stocks, fishing is still a vital activity. Their boats and infrastructure are constantly renewed and the fishers provide a good share of the fish and seafood consumed nationally. But it was not always like this. Previously these communities lived from the forest. They used quebracho (an evergreen tree with hard wood) and other tree species to produce charcoal.

### caballo island communities and the forest

Rising from the ocean as a prominent mountain, Caballo Island covers approximately 300 hectares. It is home to approximately two hundred people, consisting of forty families who live in two communities on the island's main beaches.

On Caballo Island the people's traditional relationship with the forest is evident and kept very much alive. The island is completely covered with forest. Because it is a dry forest and susceptible to fire, the community strives to prevent the start or spread of such forest fires. Most inhabitants still enjoy walking the forest trails that thread across the island, and older islanders recognize most of the forest's tree and plant species. Next to their houses, located on the island's few relatively flat areas, the communities cultivate orchards that complement their family diet. A couple of days' walk with neighbours through the island's woods allowed almost 90 plant species to be identified. The following chart illustrates some key characteristics of the island's biological richness, and the uses the inhabitants have for these plants.

The families of the island form a fishing community that participates in community-based forest governance, meaning:

- They work towards fire prevention and against deforestation
- They are knowledgeable about the forest and use its resources for recreation, nutrition and health
- They have enriched the forest with fruit, medicinal and ornamental species.



Community meeting on Caballo Island.

## caballo island plant diversity and its community uses, gulf of nicoya, costa rica

Number of plants identified in community forest	88
Number of wood-producing trees	31
Plants used for food	28
Plants used for medicine	13
Species threatened or in danger of extinction	4
Species endemic to Costa Rica	

Despite harsh conditions including forest dryness, rocky soil, and a generally semi-arid regional climate, the island maintains important, rich plant biodiversity; what's more, there is clearly community knowledge of this diversity.

### tourist businesses threaten

In the mid-1990s the situation on the islands began to change. The beauty of the countryside caught the eye of several transnational tourist companies. In alliance with national political leaders, they sought to appropriate these lands.

The first moves to obtain tourist concessions on the islands have been assisted by laws, which most members of the public do not know or understand, and were never consulted on. Some companies even contracted people who have used violent means to pressure families into abandoning the islands.

The few families who inhabited Bejuco Island, also in the Gulf of Nicoya, left their land under strong pressure that included acts of violence, and with little compensation from the company involved. Subsequently, during the dry season, a forest fire developed and destroyed a large share of this island's forests.

The plans of the companies are clear: destroy the forest, displace the population and build luxury homes for foreign pensioners and hotels for sports fishing.

For Caballo Island, the regulatory plan proposed to the local government by the company involved is clear: 35 percent of Caballo Island will be dedicated to zoning for luxury homes; 35 percent to a hotel zone; and 12 percent to forest conservation. This plan defines a mere two hectares, in a corner of the island, as a "local residential zone". The developers thus propose to reduce the residential area for the local community to less than one percent of the island. Worse still, of the many tourist harbours planned, all are for recreational use. The intent is clear: dedicate the island to luxury tourism, dedicate the ocean to sports fishing, and confine the local workforce to providing cheap labour, such as cleaning buildings and other service activities for tourism.

However, the island populations have been organizing, and with the support of ecological and social organizations, have consolidated into a resistance movement. On Caballo Island, despite historical internal divisions, the communities have united in their efforts to use legal avenues to launch an appeal against the proposed company plan. Their goal is to claim their community right to live on the island, close to the ocean, so they can continue to fish and govern their forests.



Community members study the proposed regulatory plan.

- Is small-scale fishing practiced in your communities? Where?
- Do you sell the products of your fishing, or are they only for family consumption?
- What relationship exists between fishing resources and the forests?
- What is tourist industry expansion like in your communities? Does it affect you positively, negatively, or both?
- Have your communities initiated acts of resistance against tourist, timber, or agro-forestry companies? Why? When? What were the results?
- Are there regulatory plans for the natural resources in your community? Where? Who has developed them? How have they worked?
- Are there regulatory plans at the national level? Who has developed them? How have they worked?
- What do you think should be included in a regulatory plan for your communities?
- What lessons can you take from this case?



## el salvador jiquilisco bay

### rural communities govern their natural resources

Silvia Quiroa / CESTA / Friends of the Earth El Salvador

Jiquilisco Bay is located in the Usulután department of east El Salvador. Its average temperature is between 22°C and 27°C, a range that is characteristic of tropical savannahs. It is an area of great natural beauty with an abundance of natural resources and ecosystems. It provides sustenance to countless species, and communities that inhabit the area as well as other populations outside of the region. This zone also includes El Salvador's most extensive mangrove forest, covering about 15,000 hectares.

The bay is 50 kilometers long, and is bordered by the Lempa River and the Rio Grande de San Miguel. It is inhabited by rural communities that dedicate themselves to agricultural production, livestock husbandry, and small-scale fishing. It borders the coasts of the Jiquilisco, El Triunfo Port, Usulután, San Dionisio, Concepción Batres and Jucuarán municipalities. Despite being the country's most extensive mangrove forest area, it is seriously threatened by the tourism industry. Conventional tourism is one of the economic strategies being strongly pushed by the central government, and this is putting the Jiquilisco Bay area's communities and biodiversity at risk.

### main elements of community governance

#### description of the area

At least six types of plant ecosystems have been identified in the bay area. Among these are ecosystems that give rise to productive agroforestry systems and mangrove forests. The latter is made up of various mangrove tree species adapted to living in the inter-tidal zone and able to withstand high levels of salinity. Because of its wetland characteristics (that it, its regular inundation by tidal or river floods), and its great biological richness, the bay has been declared a Ramsar Site. Inhabiting this zone is an abundant diversity of birds (both native and migratory), amphibians, reptiles, and mammals, as well as invertebrates, many of which are threatened or in danger of extinction. The book, "List of El Salvadorian Birds"<sup>I</sup> indicates that the majority of marine coastal birds in the country inhabit this area, and that it is the only nesting place for many of them, such as the oystercatcher (Haematopus palliatus), and black skimmer (Rynchops niger).

**A Ramsar Site** is a wetland that has international importance due to its biological characteristics, including; the presence of bird and fish species that are unique or in danger of extinction; nesting areas for birds or fish; and sources of sustenance and protection for neighbouring human populations.



Mangrove forests.

I Komar, O. and Domínguez, J. P. (2001). Libro de Aves de El Salvador. San Salvador.

In this zone we find three families, four genera and seven species of trees that predominate in the salt-water tolerant forest :

Common name	Scientific name	Family
Red mangrove	Rhyzophoraceae mangle	Rhyzophoraceae
Yellow mangrove	Rhizophora harrisonii	
Sincahuite	Laguncularia racemosa	Combretaceae
Green buttonwood	Conocarpus erecta	
Black mangrove	Avicennia nitida	Verbenaceae
Black mangrove	Avicennia bicolor	
Black mangrove	Avicennia germinans	

### the experience

The Corral de Mulas community of Puerto El Triunfo, in Jiquilisco Bay, has begun a process of community governance over their natural resources. The community has a population of 200 families, and its Community Development Association is responsible for taking action to resolve the most pressing community needs. Within the community there is also a group of farmers who have organized themselves to start processes of environmental rehabilitation and agro-ecological production.

This area was greatly affected by Hurricane Mitch (1998) and Storm Stan (2005). It is very vulnerable to climate change, floods and droughts, on top of having been significantly impacted by the earthquake of February 13th, 2001. The cultivation of cotton also greatly impacted the zone in the 1960s. Large parts of the dry forest that surrounded the wetlands were destroyed to make way for cotton. Despite these obstacles, and because their permanent stay in the zone is dependent on its natural resources, the local population has demonstrated an interest in improving management practices. They want to restore and sustainably use their natural resources, in order to improve their living conditions.

Under these circumstances, community actions have developed to balance practical needs with the conservation of the environment and natural resources. Through these actions the community hopes to find a balance between traditional knowledge, survival as a rural community, and respect for the soil, forest and water.

### management practices

The community began with rehabilitating the deforested areas, and cultivating short, medium and long-term fruit tree species, timber-producing species, medicinal species, and forage, etc., which in turn are combined with agricultural crops and forage species for animal feed. The tree species planted are mainly native to the zone; however, also included are species that have adapted to the soil characteristics of the area.

Actions that have been initiated:

- Use of non-contaminating agricultural techniques.
- Recovery of, and respect for, traditional knowledge.
- Community organization as a means of uniting efforts and knowledge to tackle the demands of reality.
- Strengthening the community's capacity to critically analyze the realities they face.
- Protection and conservation of natural resources, which are a sure path toward social and environmental sustainability for El Salvadorian rural families.

Emphasis is also made on optimizing the use of local resources to make organic agricultural inputs, such as repellants, insecticides, and solid, liquid and leaf fertilizer, etc. The community has also initiated a process of capacity building on how to control crop pest infestations and diseases, with an agro-ecological focus, and on the genetic improvement of plants through grafting. In addition, the group of farmers involved has received training on farm administration and basic accounting, which enables them to make more efficient use of their material resources.

These initiatives are not about seeking quick economic profits, but rather about being productive without negatively affecting the vital foundations of life: the soil, forests, biodiversity, air and water. The production systems they are developing consume little energy and can be sustained over the long term. These systems have efficient soil nutrient restoration characteristics, integrated mechanisms for the regulation of pest infestations, and efficient use of water. What the community is looking for is the establishment of agro-forestry systems that contribute to improving the soil, increasing vegetation cover, and improving the economic conditions of beneficiaries directly, and the community indirectly.

This initiative developed with the aim of generating local experiences that demonstrate, through local knowledge and practices, that the creation of sustainable communities is possible. To date, at least three other communities in the area have initiated similar processes to those developed in Corral de Mulas.

Currently, the communities are threatened. The central government plans to initiate a mega-tourism project which will increase the risk of deforestation, and give way to large-scale infrastructure, hotels, roads, runways, water contamination, as well as to real estate speculation which will increase pressure on rural and small-scale fishing families to sell their land for very low prices.





Planting trees in agro-ecological farms.

- Are your communities near any region that is declared as a Ramsar Site? Which one? Is there a wetland that should be declared?
- If there are Ramsar Sites, how has the experience been? What have been the advantages and disadvantages?
- Which traditional practices do you consider beneficial for the environment? Which are detrimental?
- What modern practices do you consider beneficial for the environment? Which are detrimental? Why?
- Do you know of any experiences that involve developing integrated governance of natural resources?
- In your communities, are traditional, cultural or ancestral experiences integrated into forest governance? Which ones? Have you collected and systemized these experiences? Why?
- What lessons can you take from this case?

## **haití** the pine forest reserve: the last forest



Aldrin Calixte / Haiti Survie, Friends of the Earth Haiti

Forested areas are very limited in Haití, and the Pine Forest Reserve is practically the last relict of Haiti's former forests. This reserve is situated between the East and Southeast departments of Haiti. More specifically, it is located between 1,200 and 1,500 meters in altitude, with the largest part of the forest lying on the eastern part of the La Selle mountain range.

The forest is known to have covered a surface area of 38,419 hectares in 2000. However, it has suffered constant incursion due to the lack of protection from the Haitian state, which has been unable to implement the political and institutional solutions necessary to secure its conservation.

Through the history of Haiti's human occupation, the pine forest has gone through different stages:

- During the period of slavery the "maroons" (fugitive slaves) took refuge in zones of the forest that were difficult to access.
- During the "cacos" war and U.S. military occupation, the pine forest was the setting of many guerilla resistance activities.
- Cyclone Hazel in 1954 resulted in the colonization of the Mozoranj locality, by people who came from Fonds Verettes, a locality not far from the forest.
- In the Badaud region, the first occupants arrived in the 1960s. The occupation of these territories was facilitated by the government, as compensation for this group's participation in the struggle against those who opposed to the Duvalier regime.
- After 1986 there was a wave of colonization due to the weakening of State control.
- The low fertility of cultivated lands, along with other associated problems, has led to the constant encroachment of agricultural land into the forest borders.

### principal elements of current community governance

The pine forest is used by the local population for a variety of purposes. The majority of people who live on the forest borders are from farming areas. These populations consider the Pine Forest Reserve to be a source of both timber and non-timber materials that complement their livelihoods. Furthermore, the pine forest plays an important social and cultural role in the region.

A study conducted in 1996 outlines the many uses of the pine forests, and the various roles assumed by the families in surrounding communities.

Use of the forest	Benefits	
Charcoal production	Economic complement during difficult times	
Wood supply for energy	Production of food, heat, & store maintenance	
Source of leaves and plants for traditional medicine	Treatment of illnesses, wounds, pain, and general health maintenance	
Production of burnt lime (also called quick lime, or calcium oxide)	Construction of cisterns, family tombs, house decorations	
Wood material for construction	Fabrication of furniture, construc- tion of houses	
Environmental benefits	Conservation of plants, water, air quality, protection against some natural disasters	
Gathering food	Fruits consumed by children	

### threats and limitations to good community governance

The Haitian forestry sector is affected by many environmental, economic and social factors. The principal driver of problems affecting the Pine Forest Reserve is poverty, and the cultural erosion that many communities in the area suffer. This has caused a loss of community awareness of the importance of the forests, and has made processes of education and understanding more difficult.

The country's general poverty creates pressure on its resources and furthers their inefficient and unsustainable use. In addition there is a lack of strong community and government institutions. Unregulated and rising production of burnt lime and charcoal, and exploitation for resins, are affecting the area's biodiversity. Hunting and illegal logging also threaten to cause the extinction of some species.

The farming sector also faces problems that are directly or indirectly related to forest governance. This sector lacks expertise in agro-ecological practices that would allow for sustainable agricultural production, for example, strategies that would allow them to control pest infestations. This lack of expertise compels these populations to expand their agricultural boundaries through the use of fire, and deforestation.

At the same time, the degradation of the forest in some sectors threatens to increase the vulnerability of these communities to natural disasters. Devastation from hurricanes, landslides, drought and desertification are threats intimately related to the governance of these pine forests.



### to generate dialogue

- What is the history of the forests in your communities? What processes of conservation or destruction have you suffered in the last 100 years?
- What is the condition of the forests in the territories you inhabit?
- What positive lessons can you take from this case?
- What kind of community consciousness is needed to conserve and govern the forests?
- What type of governance and protection do they require?
- How are livestock, logging and hunting related to the forests in your community?



Pine forest, Haití.



## alerts

The nearly 20 percent of the world's population that lives in developed countries consumes nearly 70 percent of global paper production.

In the year 2000, paper consumption was five times greater than in 1950 and it is estimated to double by the end of 2010.

### forests and consumption

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

When working to establish sustainable communities, a crucial consideration is the levels of resource consumption. Excessive consumption of forest products - that which goes beyond meeting basic needs and reflects overall inequality of consumption between societies - negatively affects forests and communities<sup>1</sup>.

Paper and products derived from cellulose are an illustrative case. The raw materials used to produce them come from clear cutting the forest and from large monoculture plantations. There is also great inequality in consumption levels.

This inequity in paper consumption reflects the excessive consumption of some societies to the detriment of other societies in which people cannot fulfill their basic needs. Furthermore, consumption of paper products is increasing faster than for any other forest product.

The rapid expansion of wood production for paper is mainly taking place in developing countries where there are severe conflicts over land, including areas that belong to Indigenous villages. Brazil, a country where pulp production increased by 74 percent in the last 10 years, is an illustrative case<sup>2</sup>. Single-crop plantations are mainly located in areas in which:

- Historically, tenancy and distribution of the land have been under conflict
- There is an agrarian reform process developing, and
- Some of the ecosystems with the greatest concentration of biodiversity and level of destruction in the world are located, including the Atlantic Forest of Brazil.

2 Raymond Colitt (2005) FT: Brazil is top of the tree in tale that is no pulp fiction. 21 June

I Greenpeace (2004) El Papel y el Medio Ambiente:una mirada crítica sobre la importación, producción y consumo de papel en España. www.greenpeace.org/raw/content/espana/reports/el-papel-yel-medioambiente.pdf

Social movements of farmers in Brazil (Landless Workers Movement [MST]; Rural Working Women's Movement [MMC]; Movement of Small Farmers [MPA]; and Vía Campesina)<sup>3</sup> are in perpetual conflict with large transnational companies such as Veracel, Suzano-BahíaSul and Aracruz<sup>4</sup>. These farmers' organizations argue that the large, single-crop plantations have negatively interfered with the agrarian reform and fair distribution of land in some Brazilian states<sup>5</sup>.

Many indigenous groups also have major conflicts with large eucalyptus monoculture plantations. The Tupinikis-Guaraní people, for example, from the south of Espíritu Santo, claim that more than 11,000 hectares of their territory was taken during Brazil's military dictatorship period, to establish eucalyptus plantations.

Furthermore, the consumption of forest products in developed countries has in turn generated the growth of emerging economies, and dynamics which allow consuming countries to evade their responsibilities. This is the case with the increase in China's wood imports<sup>6</sup>, from \$6 to \$16 billon during the period from 1996 to 2005. Due to its consumption of wood, China has been accused of fostering illegal logging in primary forests in countries including Indonesia, Malaysia and Papua New Guinea.

During the same time period, Chinese exports of manufactured forest products, mainly to the United States and Europe, increased from \$4 to \$17 billon. The majority of wood imported by China is converted into products that are exported to American and European markets, the largest importers of furniture, plywood, and other Chinese forest products. Both markets have increased Chinese imports by between 800 and 1,000 percent between 1997 and 2005.

At the end of the day it is developed countries which consume the majority of timber and which are ultimately responsible for the illegal consumption of wood, or wood produced in a way that endangers the environment.



Pulp plant, Sumatra.

### to generate dialogue

- Do tree plantations for the export of timber exist near your communities?
- If they exist, or if you know of other cases, where are these plantations established? What are the consequences for the environment and the forests?
- In your community, are a lot of paper, cardboard and other wood derivatives consumed? What is the national level of consumption?
- What can you do as communities and individuals, to decrease the consumption of forest products in your countries, as well as those in developed countries?
- What could developed countries do to decrease their consumption of products derived from our forests?

3 Acronyms are for the Portuguese titles.

- 4 Revista Sem Terra (2006) Eucalipto: Devastacao e violencia no Brasil. #36, Dic 2006, page 21 semterra@mst.org.br
- 5 Secretaria Nacional MST (2005) Brasil: Símbolos de la Modernidad del Agronegocio. En: Tierra, publicación agrocientífica y cultural del Centro de Estudios Rurales y Agricultura Internacional, Valencia, España. Enero 2005. www.cerai.es
- 6 White, X. Sun, K. Canby, J. Xu, C. Barr, E. Katsigris, G. Bull, C. Cossalter, and S. Nilsson. (2006) China and the Global Market for Forest Products: Trends, Implications, and Steps to Transform the Trade to Benefit Forests and Livelihoods, Washington D.C.: Forest Trends, Center for International Forestry Research, and Chinese Center for Agricultural Policy

### forests and climate change

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

Our planet Earth is getting hotter, and the build-up of greenhouse gases in the atmosphere, caused by human activity including vehicles and factories, is to blame. This buildup prevents heat from the sun's rays from escaping. Unless we take action to curtail emissions, we face major impacts, including a global average temperature rise of between two and six degrees Centigrade this century, melting polar icecaps, and flooding of coastal zones. Forest destruction is a major source of the rising greenhouse gas concentrations in our atmosphere; yet forests also have a major role to play in tackling the problem.

### forests and the carbon cycle:

Forests are related in many ways to the climate change phenomenon. Firstly, forests help to store or sequester carbon . Trees and plants take up the greenhouse gas carbon dioxide as they grow, and the carbon is stored in leaves, wood and forest litter and soils. When a forest burns or is destroyed, the rotting or degrading organic matter again releases carbon dioxide and other carbon-containing greenhouse gases into the atmosphere. It is estimated that the destruction of forests is responsible for nearly one fourth of current greenhouse gas emissions. If we want to stop climate change, **conserving and restoring forests** are clearly important components of this strategy.

### the other roles of forests:

Forests are also important elements for climate change adaptation strategies. They are fundamental to the regulation of the hydrologic cycle, because they aid in the conservation of water in areas where climate change generates drought. In this way, forests protect soil from erosion and decrease the vulnerability of communities facing natural disasters like hurricanes, floods, and increasing irregular patterns of rain. Given these benefits, it is clear that forests play an important role in mitigating both the climate change phenomenon and its impacts.

However, these forests which we so dearly need are also threatened by human development. To confront climate change, industrial societies have generated controversial agreements which, among other things, tend to promote the creation of large monoculture tree plantations, which are theoretically supposed to act as a means of carbon sequestration<sup>1</sup>.

Paradoxically, these plantations are one of the principle drivers of deforestation. In addition, there have been many recorded instances of the displacement of indigenous communities as forests are destroyed to establish them<sup>2</sup>.



- I Lohman L, Ed. (2006) Carbon Trading. A critical conversation on climate change, privatisation and power. The Developmental Dialogue #48, September, The Dag Hammarskjold Foundation. www.dhf.uu.se
- 2 Gain P. (2002) The last forests of Bangladesh. Society for Environment and Human Development (SEHD), Dhaka, Bangladesh. sehd@citechco.net. WRM, 2005; Mujer, bosques y plantaciones, una dimension de género. Movimiento Mundial por los bosques, Uruguay. www.wrm.org.uy.

In the quest for new fuels as alternatives to petroleum-based fuels, biofuels are being developed. Production of these fuels from agricultural crops also requires considerable new areas for cultivation, and their demand threatens to become another important driver of deforestation.

Finally, we must not overlook the direct impact of climate change on forests and forest biodiversity, especially in tropical areas. Many experts agree that rising carbon dioxide levels together with patterns of drought are conditions that favour fast-growing soft wood species, to the detriment of slow-growing species and hard woods<sup>3</sup>. In the not-so-distant future this impact could become a major driver of biodiversity loss and of the transformation of tropical forests into different, unknown habitat types.

### to generate dialogue 🧷

- Have you perceived any climatic changes in the past few years? Which ones?
- Are your communities vulnerable to natural disasters? Where and why?
- Are those situations related to the forests, and if so how?
- If there have been changes in climate, what have the consequences been for you and your community?
- Do you think it is possible to improve the conditions that create vulnerability in your community? How?
- What can you do, as communities and people, to protect us from climate change?



3 Michael Hopkin (2004) Untouched rainforest hit by climate change. Nature Science Update. www.nature.com



### selective logging, industrial logging, sustainable forest management...

### technical terms that justify forest destruction to satisfy voracious markets

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

The practice of selective logging of the tropical forests consists of cutting one or more trees per hectare, depending on existing species and their density. Selective logging is often considered a sustainable alternative to deforestation caused by clear cutting. However, this practice has also shown to be extremely destructive.

Selective logging has also been called industrial logging because it is based on the use of machinery and heavy equipment to cut and extract wood. More recently the use of the term "sustainable management of forests" has begun, to justify this activity to the public and consumers.

The clearings formed by naturally-falling trees and branches are a fundamental aspect of tropical forests and cover approximately 1.5 percent of the forest surface, distributed in small areas of an average size of 100 m<sup>2.1</sup> In some countries designated "plans for sustainable forest management" allow up to 29 percent of a particular area's forest cover to be destroyed in a short time period through the opening up of spaces for tractors, tree dragging, tree felling and yards to collect the cut trunks<sup>2</sup>.

In general, selective logging pursues the cutting of the most high-value species. Mahogany and marantíes are examples of species desireable to loggers operating in American and Asian forests. However, hundreds of other species exist are also currently exploited in the tropics.

On average, for each tree cut, up to 30 more can be seriously damaged during the logging process. This occurs when the trees fall and the vines that connect them are pulled down or damage the neighbouring trees.



Several recent scientific studies have pointed to the unsustainability of selective logging<sup>3</sup>. Selective deforestation implies the use of tractors and machinery that compact the soil surface, facilitating severe erosion processes. The roads which are built tend to enlarge over time, facilitating colonization and more deforestation processes. Selective logging is generally the first step of more severe deforestation processes.

Forest fragmentation by road construction and creation of clearings decreases the natural moisture levels, which in turn increases the risk of fires, decreases the regeneration potential of some species and increases the mortality levels of others.

I Harstshorn G. (1990) An overview of neotropical forest dynamics. In: Four Neotropical Rainforests. Ed: Gentry A., Yale University Press, London, UK.

<sup>2</sup> Coecoceiba (2003) La madera, el bosque y la gente: propuesta ecologista para producir madera respetando el bosque y las comunidades. Neovisión, San José, Costa Rica. www.coecoeiba.org

<sup>3</sup> Barrantes et al. (1999) Evaluación de los planes de manejo forestal autorizados en la Península de Osa, CR. Informe Fundación Cecropia, Zona Sur, Costa Rica; Laurance W.F. et al. (2006) Rapid decay of tree-community composition in Amazonian forest fragments PNAS vol. 103 | no. 50 | 19010-19014; Asier G. (2005) Selective Logging in the Brazilian Amazon. Science 21 October 2005: Vol. 310. No. 5747, pp. 480–482.

**Industrial logging** also severely affects communities around the world. In Africa, records show how this type of exploitation has a devastating effect on local communities which are completely dependent on forests, destroying their resources and means of subsistence, and increasing risks of illness and conflict<sup>4</sup>. In one particular case in the Congo, it is estimated that millions of people will be at risk if continued concessions are granted to exploit the forest in this manner. In addition, documentation from Africa, Asia, and Latin America show that logging concessions often foment corruption and violence<sup>5</sup>.

#### what can we do?

Confronted with this reality, a few options have presented themselves. One is "community forestry" whereby the communities control the concessions and in some cases carry out the selective logging themselves. This type of communal forest governance does bring benefits to the communities, or at the very least is an improvement over the granting of logging concessions to large corporations. Some benefits have been reported in Indonesia<sup>6</sup>, in the Guatemalan Petén<sup>7</sup> and in Chiapas, México. However, these processes are highly dependent on external markets. They are also risky due to the lack control over markets, the high investment needed, and the constant threat in terms of the potential for complete destruction or degradation of the forest.

Under stable conditions, one or two cubic meters of good-quality wood falls naturally each year in one hectare of tropical forests in the Americas. This could be removed by the use of animal power through organized community work and used for craft-making production schemes. There are many successful cases of communities producing wood products without causing drastic impacts, while maintaining the biodiversity and structural characteristics of the forests they use. The wood produced is important for the economy of these communities. It is increasingly evident that the rhythms of nature cannot support the pressures of large markets. Because of this, from an ecological perspective, it is proposed that diminishing forest product consumption by developed countries is the first action that should be taken. Once demand has been curtailed, more time and resources would be available to permit truly sustainable alternatives.

- What is the experience in your communities of selective and industrial logging?
- What benefits does this type of logging contribute to the communities?
- What problems arise in your community due to logging of the forest?
- Do you know or participate in community- based forest governance initiatives? What do you think of these experiences?
- How would it be possible to decrease the consumption of forest products in developed countries?
- How would it be possible to sustainably govern the forests in your communities?



Using animal power in tropical forests avoids forest fragmentation and other impacts caused by tractors.

- 4 Rainforest Foundation and Forests Monitor (2007) Concessions to Poverty: The Environmental, Social and Economic Impacts of Industrial Logging Concessions in Africa's Rainforests. Ed.: S. Counsell, C. Long and S. Wilson, Feb 2007. www.rainforestfoundationuk.org/s-Concessions%20to%20poverty
- 5 ACF and CECOR- FoE-PNG (2006) Bulldozing Progress: Human Rights Abuses and Corruption in Papua New Guinea's Large Scale Logging Industry. 38pp. www.celcor.org.pg; Comité de Familiares de Detenidos-Desaparecidos en Honduras (2006) Erguidos como Pinos: Memoria sobre la construcción de la conciencia ambientalista. Ed. Guymurasm, Tegucigalpa Honduras. 123pp. www. cofadeh.org.
- 6 Gunter J., Ed. (2004) The Community Forestry Guidebook: Tools and Techniques for Communities in British Columbia. British Columbia Community Forest Asociation. info@bccfa.ca
- 7 Mollinedo et al. (2002) Beneficios sociales y rentabilidad financiera del manejo forestal comunitario en la reserve de la Biosfera Maya, Guatemala, CATIE, Serie Técnica, informe #327. Colección Manejo diversificado de bosques #25, Turrilaba, CR 37pp. www.catie.org

### international financial institutions and the forest: financing destruction

Longgena Ginting / Coordinator IFIs, Friends of the Earth International

International Financial Institutions (IFIs) have been identified as responsible for provoking processes that lead to deforestation and forest degradation. There are many IFIs, but the World Bank and the International Monetary Fund (IMF) have central roles. IFIs stand accused as the principle facilitators of the destruction of the world's forests. The projects they finance and policies they promote result in massive loss of forests and violate the rights of people who depend on these resources.

The **World Bank** has been a major actor in forest destruction, by financing commercial forest exploitation projects, mining operations, and energy production projects. The negative legacy of these projects is easily seen in the Amazon, Southeast Asia and East Africa.

The World Bank works closely with the IMF and the World Trade Organization; these three institutions consistently impose the same economic model onto developing countries, with major resulting impacts on their forests and communities.

A large portion of World Bank financing is channeled through the **International Finance Corporation (IFC)**, the private arm of the World Bank. The **IFC** uses its contributors' money to support a large number of projects that, while they may alleviate poverty, also have negative results for local populations and their forests.

For many decades, the IFC has been the most important sponsor of monoculture plantations, mining, and pulp and paper projects throughout the world. Although the IFC has a series of policies that should guarantee social and environmental norms, in reality their priority is business. A recent IFC-sponsored project was the paper pulp industry development of the huge transnational company, Aracruz, on the Brazilian coast. The IFC gave Aracruz a \$50 million loan, despite land disputes in progress against the company. Among these disputes is a claim by the Tupinikis and Guaraníes villages in Brazil's Espíritu Santo state over almost 11,000 hectares of their land, which was planted with eucalyptus by Aracruz with the aid of military forces in the 1960s.

IFIs not only generate conflict by granting credits to governments, but also through the policies they promote. For example, through political lobbying of governments and conditionality of credits, the International Monetary Fund has imposed **Structural Adjustment Programs (SAPs)** on many developing countries.



The extensive eucalyptus monoculture plantations in some regions are known as "green deserts".





These programs have encouraged the planting of large monoculture plantation extensions dedicated to fruit and raw material production for export. In addition, the IMF has financed many large-scale forest exploitation projects that exhaust forests; mining companies that severely contaminate the environment; and petroleum exploitation projects that degrade ecosystems and essential community resources. Large hydroelectricity plants have flooded and destroyed extensive forest areas, leaving shrimp farmers dependent on export due to the disappearance of their wetlands.

Severe social impacts and increased poverty are the result of IMF-imposed Structural Adjustment Programs. Countries rich in natural resources have ended up socially, economically and environmentally impoverished due to exploitation and unsustainable and corrupt systems for resource exports.

IFI's power lies in their decision-making model. They are not regulated by a system in which each member country has a vote. Instead the quotas of power are defined according to a country's investment capacity. This "democracy" of **one dollar one vote** has inevitably pushed the political equilibrium in favour of industrialized countries. The **unequal assignment of votes** is further reflected in the system of assigning positions in IMF and World Bank executive meetings, in which IFIs are clearly seen as a tool for industrialized countries to pursue economic and political goals abroad.

- What presence do IFIs have in your country?
- Do you know any projects financed by one of the above-mentioned institutions?
- What were the results of these projects?
- What can communities do to confront the power of IFIs?
- What other sources of investment exists in your region?
- Do you know what is done with your investments, and those of the workers in your country?



### more trade ... more pressure on forests

Ronnie Hall / Global Forest Coalition

In response to the failure of the World Trade Organization negotiations, many regional or bilateral treaties have emerged which try to accomplish a similar function. These treaties include the elimination of economic and non-economic barriers to facilitate trade liberalization, and specific measures to promote investment.

The elimination of non-economic barriers often has a particularly negative impact on efforts to protect and sustainably use forests<sup>1,2</sup> Specifically, it is feared that these types of actions would affect timber product certification processes, local or zoning measures to reduce negative social and environmental impacts, and even environmental legislation that regulates the use of timber<sup>3</sup>.

Given the current lack of effective regulatory structures, and the continuing growth of global forestry exports, unsustainable pressure is being placed upon forest ecosystems<sup>4</sup>. Studies also indicate that an increase in trade levels can increase the pressure on forests and forest resources, especially in developing countries where monitoring institutions and actions are weak<sup>5</sup>.

Not everyone gains from the liberalization of economies and trade. In most developing countries, a large sector of the population has gotten poorer in the last two decades of neo-liberal policies as a result of structural adjustment programs and it has also been predicted that the poorest countries in the world would almost definitely be amongst the losers in any likely outcome of the WTO's Doha negotiations<sup>6</sup>. The 1.6 billion people that are heavily dependent upon both forests and trees outside forests, for their livelihoods, food, shelter and medicines are increasing their risk<sup>7</sup>.

The price of creating a richer but less just world has caused critical environmental problems, including climate change, loss of biodiversity, a decrease in fish stocks, over-consumption of mining products and the destruction of the majority of the world's forests.

The case of Mexico is illustrative. According to the conclusions of a study developed by the Solidarity and Defense of Human Rights Commission (Comisión de Solidaridad y Defensa de los Derechos Humanos) in partnership with the Texas Center for Political Studies:

The expansion of trade is largely related to processes of consumption and unequal distribution of its benefits. It typically results in a very unequal distribution of any benefits, with already wealthy investors and consumers tending to profit at the expense of poorer people and the environment. Twenty percent of the world's population reaps the benefits of eighty percent of trade and almost seventy percent of foreign investment<sup>8</sup>. It is estimated that eighty percent of forest products are consumed by twenty percent of the world population<sup>9</sup>. Free trade in this sense facilitates this inequality in consumption.

"NAFTA (North American Free Trade Agreement) has had a negative impact on the forests in the state of Chihuahua. Pulp and paper imports from the United States increased rapidly which forced national products to maintain prices low despite environmental regulations. After the signing of that agreement, illegal logging has increased and Indigenous organizations as well as ecological NGOs have called attention to this situation."<sup>10</sup>

- 5 Katila Marko and Simula Markku (2005) Sustainability impact assessment of proposed WTO negotiations: final report for the forest sector study. Finland: Impact Assessment Research Centre, Institute for Development Policy and Management, University of Manchester, UK http://www.sia-trade. org
- 6 (reference is at http://www.carnegieendowment.org/files/Winners.Losers.final.pdf)
- 7 http://www.fao.org/forestry/site/livelihoods/en/
- 8 ibid
- 9 Hunter D., Salzman J. and Zaelke .D (2005) International Environmental Law and Policy. Foundation Press-American University. Washington College of Law: http://www.wcl.american.edu/environment/ iel/index.cfm
- 10Rice T. Ozinga Saskia, Marijnissen Chantal, Gregory Mark (2000) Trade Liberalisation and its Impacts on Forest. Utrecht-Netherlands: FERN. www.fern.org

I Rice T. Ozinga Saskia, Marijnissen Chantal, Gregory Mark (2000) Trade Liberalisation and its Impacts on Forest. Utrecht-Netherlands: FERN. www.fern.org

<sup>2</sup> Sizer Nigel, Downes David, Kaimowitz David (1999) Tree Trade: liberalization of international commerce in forest products: risks and opportunities. Washington DC: WRI. www.wri.org/wri

<sup>3</sup> Rice et al., (2000)

<sup>4</sup> Rice et al., (2000)

### cameroon: when the law is flouted, communities and forests suffer

Danielle van Oijen / Milieudefensie/ Friends of the Earth Netherlands

Cameroon has more than 20 million hectares of humid tropical forest. Thus it may not be surprising that timber is the country's second-largest export product. However, illegal and destructive logging has threatened these forests and the people who depend on them. In this article, we describe a few central points about the impacts the forestry law and its infractions have on communities.

In 1994, the Cameroonian Government, under pressure from international donors demanding change, created a new forestry law. This law was supposed to benefit communities through the use of community forests, and through the redistribution of taxes levied on companies that harvest forest areas, to the rural committees that manage them. The law was created to increase transparency in the forest sector through a bidding system for Forest Management Units (FMUs), and through the promotion of sustainable forest management.

After years of failure to implement this law, an independent monitor (an international organization that monitors law enforcement and governance) was sent to report on infractions, and provide recommendations to the government on how to improve application of the law. The independent monitor (Resource Extraction Monitoring, or REM) detected a recent change in the nature of infractions in Cameroon.

One of their findings was a tendency to commit document fraud in the Forest Management Units. This includes cases in which the authorized quantity of harvest is exceeded; false permits are used to illegally transport wood; and counterfeit official marks are used on tree trunks. These illegal activities result in significant losses for the state and communities, and cause a negative environmental impact by paving the way for excessive forest exploitation. Various Cameroonian organizations have similarly reported violations related to exceeding authorized logging limits, indiscriminate logging without permission, numerous social conflicts over rights of use and territorial limits, and the destruction of roads by logging trucks and other trucks transporting heavy material. Illegal logging continues to be commonplace in Cameroon.

Two other types of logging permits under Cameroonian forestry law, the abuse of which was found to facilitate illegal logging, are sales of standing volume (SSV) and timber recuperation permits (TRP). SSV are logging permits which do not require a management plan. And although an approval process is necessary, the permits are given randomly, without consulting the population, and are even granted for logging in protected areas. SSV permits more closely resemble mining projects than forest governance projects. The government has said it would stop the distribution of SSVs, and instead favour community forests. However, this has not happened. Furthermore, if the number of SSVs has decreased, they have in any case been substituted by a growing number of Timber Recuperation Permits. TRPs do not provide any benefit to communities, as the permit holders are not required to pay any taxes on forest areas they harvest.

REM concluded that the violations and irregularities related to the use and granting of SSVs and TRPs are frequent. A few examples are largescale operations exceeding their authorized limits, changes to the assigned areas of harvest, and illegal granting of permits.

**Illegal logging:** Illegal logging occurs when wood is cut, transported, bought and sold in violation of national laws. Illegal activities related to logging include: corruption in order to obtain access to forests; the extraction of wood without permission or from protected areas; the harvesting of protected species; and exceeding the permitted harvest limit. Violations can also occur during the transport of the wood, its processing, its illegal export, mis-declarations to customs, and through the evasion of taxes and other legal obligations. Cameroonian forestry law is still very weakly applied. There is a severe shortfall in terms of the logistical means and materials required to organize forest monitoring mechanisms, especially for agencies outside the central government. For example, the administration of the Haut-Nyong division in the East province must somehow supervise 17 Forest Management Units over an area of 36,040 km<sup>2</sup> - without a vehicle. In Ma'an, the administration does not even have a motor bike, despite the fact that they have five FMUs under their direction. As a result of this lack of supervision, illegally cut wood is "legalized" by the administration with its official mark at checkpoints.

Furthermore, even when illegal logging and its consequences have been documented and fines have been levied, few cases reach the courts and few fines are paid. In every case where fines have been paid, 50-98 percent reductions in the stipulated fines have been given after negotiations with the companies involved.

We have already mentioned the decline in tax revenue brought about by fraud on the part of logging companies. Furthermore, the revenue from taxes that are actually paid is often not distributed properly. The government is required to distribute tax revenue accrued from the forest area in a proportion of 50-40-10 to the state, local councils, and the local population, respectively. The law's intention is that local populations should benefit from logging activities by directly receiving taxes, and also indirectly through the services provided by local councils. In reality, the taxes stay in the hands of a new forest elite and are used for their own benefit

Communities do not easily commit themselves to community-based forest management; when they do try, they find themselves struggling against a lengthy and difficult bureaucratic process due to the many requirements for a management plan.

Even more discouraging is a 2006 government measure which prohibits wood exports from community forests, thus limiting this trade to domestic markets. We must ask ourselves, how does this fit into a strategy which promotes community forests? For communities to gain benefits from Cameroon's forest sector, and for harvesting in this sector to shift from illegal logging to sustainable forest management, a true compromise is needed from the government.



Recently, the government has shown its intention to negotiate a Voluntary Partnership Agreement (VPA) with the European Union, to confront the trade in illegal timber. The VPA includes legal reform and its objective is to work towards sustainable forest management. The inclusion of credible consultation will be of the utmost importance to this process, as will be the reform and enforcement of forestry laws, in order to actually start promoting community forestry and realize more benefits for communities from Cameroon's logging operations. This includes getting rid of the deep-rooted problem of vested interests and corruption surrounding forest area taxes within the government, and reforming or shutting down the system for small permits (i.e. SSVs or TRPs). If this does not happen, communities will continue to suffer from illegal logging and social conflict, instead of being able to build local sustainability.

63

- Does illegal logging occur in or near your communities? Where?
- What consequences does illegal logging have for the environment, the forests, and communities?
- Is there a forestry law in your country?
- If one exists, does it benefit the communities and effectively protect the forests? How?
- Have you had experiences with logging companies? Which ones?
- What government policies have been damaging for the forests in your communities?
- What can you do as communities and people to confront illegal logging of the forests?

### colombia: when forestry law caters to large markets, communities and forests suffer

Diego Alejandro Cardona Calle / CENSAT Agua Viva / Friends of the Earth Colombia

Colombia's native forests are among the world's richest in terms of biological diversity, and are a vital source of sustenance for the many cultures that live amongst them. A long list of obstacles has faced local communities in Colombia in their attempts to govern their forests in an autonomous and traditional manner. Now newly-created environmental laws are putting our natural heritage into the hands of the market and limiting community rights. These new laws do not seek to promote a sustainable relationship with the environment.

In recent years the Colombian Government presented new laws to its national congress that reflected a strategy that aims to erode debate and governance of the environment. Among them were the Law on Moors, Water Law, Rural Development Law and General Forestry Law. All of these laws were approved, the last of them in April 2006. They serve to fragment the discussion, management and defense of Colombians' environmental heritage. They fundamentally conflict with the need for holistic management of our essential natural resources, as nature itself is not divided into discrete compartments.



Peasant organizations march against the expansion of forest monoculture plantations, Brazil.

Seven months after the General Forestry Law's approval, and having barely begun the government's intended process of regulation, issues and risks we feared at the start of this process have already become a reality.

The Government's drive to establish new forest plantations has a set goal to increase their area from 150,000 hectares to 3,000,000 hectares. This measure's impacts are already being felt. Multinationals which own large monoculture plantations, as well as packaging and paper manufacturing plants, have begun to push for the curtailment of community participation processes.

Furthermore, the new law has completely eliminated monitoring mechanisms that formerly guided the environmental authorities that regulated the establishment and management of plantations. The permit system has been abolished, and this has allowed for expanded growth of new monoculture plantations and timber transportation. At the same time, complete liberty has been granted to a forest industry activity with some of the greatest environmental impacts: construction of roads to allow for forest exploitation.

The above-mentioned changes also mean that the work being done on accountability, monitoring and education of timber transporters, and processors of timber products, has ceased. The environmental authorities have no idea how this is affecting the volume of illegal logging activities, as they no longer have the means to monitor these activities.

The new law not only eliminated the plantation permit system and related monitoring, it also paved the way for lower levels of compliance with the former process of community consultation. It has also meant the **elimination of spaces for citizens' participation**, such as community environmental meetings. These developments correspond with a government strategy to further limit the obligation of companies to consult. Now consultation is only required for projects which require an environmental license; this is not a requirement placed on plantations. This change has occurred despite the fact that the previous law and its regulations were enshrined under the International Labour Organisation Convention 169 (Concerning Indigenous and Tribal Peoples) and Colombia's National Constitution. The community governance of forests is severely affected when forestry plantations can be established in ecologically important zones, conservation areas, watersheds and can result in replacement of native vegetation, an impact which is at risk of occurring in areas of southwest Colombia.

Furthermore, Article 19 of the new General Forestry Law stipulates that Afro-Colombians and Indigenous communities should perform a consultation process prior to making use of forest resources in their collective territories. These groups collectively own the nation's natural forests. While on the surface Article 19 might be considered a positive development of the new law, it is also interpreted as a possible source of internal division between local community members. This is because it pits community members against each other, in mutual competition for concessions for wood to sell to companies. This is a way to **weaken community organization processes** that could otherwise focus on other types of initiatives, such as community governance of their forests.

In the few months since the new Forestry Law has passed, one type of process developing at great speed is the signing of **regional competitive-ness agreements** and formation of **productive forestry chains**. Both processes involve big risks for local communities. This is because their participation in these processes implies making contracts with multinational companies that cannot be dissolved until the end of that contract period. The law brings no clarity on what to do if the companies' activities result in impacts. Nor does the law lay out what could happen if the initial agreed-upon conditions change, or if there is inequity in the distribution of income resulting from contacts.

Lastly, we must mention the relationship between the General Forestry Law and the current Rural Development Law Project, which Colombia's National Congress is pushing forward at unexpected speed. This law is clear in terms of its objective of **expelling indigenous, rural and Afro-Colombian communities from their territories**, paving the way for use of these territories for activities such as forest exploitation. At the same time, the legislation could allow collectively-owned territories and rural reserve zones to pass into individual or corporate ownership through concessions, diminishing the sovereignty and rights of local communities over their territories and heritage.



Herbicide application in a pine forest, South Africa.

Many adverse situations are likely to arise from these laws' introduction and implementation in Colombia's various forest regions, consequences we expect to discover as soon as we make contact with these regions and their inhabitants.

Despite this atmosphere of legislative adversity, forest governance proposals initiated by farmers, Afro-Colombians and Indigenous communities from diverse parts of the country continue unabated. They include projects oriented toward sustainable use, non-timber forest products, community conservation, and the recovery of degraded areas by returning to traditional land use practices.

- Are there forestry laws in your country?
- If so, do they contribute to the protection and community governance of forests?
- How are forest resources monitored in your communities? Who monitors the quantity, area, permits, and so on, with respect to forest activities?
- What would you recommend to improve monitoring and protection of your forests?

### environmental services markets and community rights

Simone Lovera / Global Forest Coalition

The concept of "environmental services" is based on the principle that forests and other ecosystems provide human beings with a great number of vital "services". These services include absorption of carbon, water regulation, provision of medicinal plants, and biodiversity-related resources referred to as "genetic resources". Also important to people is the beauty of their natural surroundings, an amenity also considered to have value as an environmental service.

All of us are recipients of some or even many of these environmental services, but we rarely pay for them. From an economic perspective, this constitutes a failing of our markets. Economists argue that this market failure is the principle cause of environmental degradation: ecosystems are disappearing because their value has not been incorporated into the principles of a free market economy. They propose putting a price on these environmental services and creating a market for them to correct this defect.



A sign indicating an area subject to payment for environmental services.

Environmental services markets have already been established for carbon, water conservation, genetic resources and traditional knowledge related to environmental protection, as well as "biodiversity offsets" (areas created in an attempt to compensate for the effects of destructive projects). Ecotourism is also seen as a market for the environmental service provided by the beauty of natural landscapes.

According to the World Bank and other promoters of environmental services markets, these markets can bring great benefits to local communities. They argue that rural communities generally live in beautiful ecosystems (such as forests) and are therefore in a good position to sell the environmental services of these ecosystems. To demonstrate this, these institutions have facilitated financing for community forest governance projects that "dare" to experiment with the environmental services markets.

Most of this financing comes from public funds, which are used to encourage the creation of markets for environmental services. Yet we are led to believe that these markets emerge and regulate themselves, according to the supply and demand of these services. The reality is that without clear public policy direction, it is very difficult for communities to obtain real and sustainable benefits over time.

Following on from this, intergovernmental meetings have been organized to convince governments of the benefits of environmental services markets, while at the same time inviting representatives of funded projects to share their experiences. A result of this strategy is the recent sell out to the World Bank of the Kenyan Green Belt Movement, an NGO which provides income and sustenance to millions of Kenyans through tree planting.

In this case, the World Bank is guaranteeing the organization of carbon credits produced by the Green Belt Movement's tree plantations. The project was promoted by Wangari Maathai, the 2004 Nobel Peace Prize winner and Green Belt Movement founder, at the twelfth Conference of the Parties to the Climate Convention (COP I2), held in Kenya in November 2006. What better proponent for the inclusion of refor-



estation projects in the global carbon trade than this famous African woman, who affirmed at the conference that she was, "delighted to work with the World Bank because it knows where the problems are"? What better way to pressure the European Union, which continues to exclude its reforestation projects from its carbon trade?

The European Union, however, has very good reasons to exclude reforestation projects from its carbon trading scheme. From a climate perspective, these are risky proposals, because trees are vulnerable to forest fires (burning would release their stored carbon), and are seen as providing only short-term carbon storage. In fact, from a sustainability perspective, Green Belt Movement-style projects are the exception, not the rule.

In fact, Maathai stated early in the negotiations that it would not have been possible to sell the Green Belt Movement's tree plantation projects as "environmental services" on a purely commercial basis. Only generous (and highly strategic) support from the World Bank and other donors made it possible for her NGO to overcome obstacles. These obstacles included lack of marketing expertise, lack of capacity to comply with the complex requirements of entering the carbon market, and the simple fact that the sequestration of carbon for this type of project is much more costly than for large-scale projects such as eucalyptus plantations.

Costa Rican Government efforts to sell its own forest subsidy scheme in the carbon market highlight this cost discrepancy. Costa Rica planned to compensate its farmers for the environmental services of their land, to ensure it is not deforested (such deforestation is illegal in Costa Rica). Yet it found this entailed a carbon price of about US \$27 per tonne, whilst market prices varied between US \$6 and US \$16 per tonne.

Environmental services markets pose the risk of major impacts for economically marginalized communities. Indigenous villages and many other local communities depend greatly on free access to forests and other ecosystems for their survival. For them, these ecosystems are the basis for their subsistence: this is where they get their food, water, wood for fuel, medicine and construction material. The forests are also the basis for their culture, religion, art and spiritual values.

To consider these values and this relationship with the forests as "services" not only contradicts their belief systems, it also puts these communities into a position of being forced to pay for what they have always conserved; it privatizes the resources they have considered a heritage for all. This situation hearkens back to the old days of Columbus planting a flag on "no man's land" and then putting it up for sale.

When natural resources which were formerly freely-accessed are transformed into market goods, women are generally more affected than men. This is because they tend to deal much less with money, since their work is not paid. This transformation causes them to face grave economic problems and increases their dependency on the profits and incomes of their husbands. However, it is these women, along with men, who have conserved the forests and other ecosystems for generations.

The most perverse aspect of environmental services markets is that they stem from the idea that individuals have the right to destroy the forests and other ecosystems. Paradoxically, it also tells us that if we want to conserve these ecosystems we will have to provide compensation for them, or to put it more accurately, pay for them. This implies, for example, that people of Indigenous villages in the South American Chaco, who suffer from droughts linked to Amazon deforestation, will now have to "compensate" soy farmers for being so kind as not to burn the entire Amazon. It also implies that the women from villages on the lower reaches of mountains, who see their streams dwindling due to logging and plantations that devastate forests on the mountains' higher reaches, should now "compensate" the companies involved if these women want uncontaminated water.

Here we can learn a lot from people in Indigenous and other local communities, many of whom have the strong belief that individuals do not have the right to destroy either forests or ecosystems. These ecosystems are for the benefit of communities; therefore the destruction of community resources for individual profit should not be permitted.



Protest against the commodification of nature.

- Are there environmental services for sale in your community?
- Do you know of any examples of environmental services markets?
- Do you believe that the market for environmental services is necessary in your community? Why?
- Do you think there could be other ways to protect natural resources? Which ones?
- What is your opinion of collective property and its community governance?

### land tenure and the destruction of tropical forests

Ricardo Carrere / World Rainforest Movement

One characteristic of the world today is a double discourse: talking about conserving the environment while it is being destroyed; advocating for the reduction of poverty while it is being increased; championing human rights while they are being violated.

In terms of tropical forests, there is not a single government world wide that has not committed, time and time again, at national and international levels, to protect them. Yet the result is clear: forests continue to disappear.

This problem has many causes, from the excessive consumption of developing countries to the opening of roads financed by multilateral banks. But at the root of all these causes is the issue of land tenure.

Tropical forests are mainly inhabited by communities whose ancestral rights are not recognized by national governments. States are the entities which advocate the right to property ownership of forests, and by exercising that "right" make decisions that end up destroying forests: logging, mining, oil extraction, hydroelectric plants, and land conversion for live-stock raising, agricultural cultivation and forest monoculture plantations.

Perhaps the clearest case is that of the **Brazilian Amazon**, where the subject of land tenure can be seen according to its two dimensions: inside and outside forest areas.

The problem begins with colonial proclamation. Initially Portugal, and after its independence, Brazil, declared everything included within its boundaries to be state property. This failed to recognize the rights of thousands of Indigenous groups and traditional communities that inhabited these lands before the Portuguese (in the case of the Indigenous groups) and before Brazil's independence (for example, the case of Afro-Brazilian communities).

Based on this self-declared "right", the Brazilian state could concede, sell, and even give away large areas of the Amazon to landowners and

companies. This initiated the process of destruction of the forests, natural resources that had previously been wisely used by Indigenous and traditional communities.

Other state policies were formed that worked to concentrate agricultural and livestock farmland ownership into fewer hands, resulting in thousands of landless farmers. Subsequently, a solution had to be found to alleviate the social pressure caused by these policies. This solution consisted of making the farmers into "colonos" (rural people who colonize forested areas) of the Amazon. Under the slogan "land without men for men without land" (as if the Indigenous people were not men; and as if women did not exist) this policy of land colonization was promoted by the military dictatorship during the 1970s.

The final result: the Amazon forest disappears, consumed by the greed of large national and transnational economic groups.

Unfortunately, the Brazilian case is not an isolated one, being just one of many that could be cited. The same process is taking place in Indonesia, where the state grants concessions for timber extraction or forest conversion to palm oil plantations, undermining ancestral rights of traditional communities. History is repeated again in Cameroon, Gabon and many other countries where logging concessions are the rule of the day; in Ecuador, Nigeria and many more regions where oil companies' interests take precedence.



Landless peasants protest in Brazil.

Indeed, all one must do is name a tropical country with a forest to discover a similar situation to that described above.

The solutions are not easy. This is not necessarily because the alternatives themselves are difficult to undertake; but rather because of the powerful national and transnational interests involved, that do not want these alternatives to be implemented.

It is only logical that forest-dependent communities are those with the most interest in forest conservation. Furthermore, it is therefore only sensible to ensure that these communities have governance over and the right to use their forests.

It is also easy to understand that the only way to prevent landless farmers from destroying forested areas - in order to survive - is to implement fair agrarian reforms that adequately resolve the problem. Of course many other measures are required to achieve the conservation of tropical forests, but this is the indispensable point of departure to make it possible.



- Has there been agrarian reform in your country? If so, what do you know about it? What have been the results?
- What do you think should be taken into account with any agrarian reform in your country?
- What do you think would be a just type of agrarian reform?
- How do you think land tenure should be handled? How would your proposals help the forests?





Selling tropical fruits, Sumatra, Indonesia.

# opportunities

"For the inhabitants of the forests and those who depend on them, the forest is their pantry; it is what provides them food (stems, leaves, flowers, fruits, nuts, mushrooms, worms, ants, bird eggs, small animals, honey and fish). They also find construction material and medicine, firewood and raw material (bamboo, rush<sup>1</sup>, leaves, grass, rubber, resin, wax and tinctures to make rope, blankets and baskets) that they can use, trade or sell in nearby towns. Additionally, the forest is a great provider of water; it is the water basin that allows the storage and balanced distribution of water. Lastly, the forest is for them, more than simply a provider of products. It is also where these communities meet for their social and cultural celebrations, where they have decision making meetings, where they bury their dead; there they achieve a profound interconnection"<sup>2</sup>.

### forests and food sovereignty

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

We must recognize that it is the Indigenous communities that have maintained a long relationship of care and use of the forests for food. More and more, however, farming communities and some urban populations are starting to value the forests in terms of their contribution to nutrition. Although in general food from the forest is not part of the daily basic diet, it plays an important supplementary role. Forest food contributes to diet diversification, improving its quality and quantity, and it provides food security when harvest yields are low or during natural disasters<sup>3</sup>.

Take the case of a nine-hectare rural tropical forest in Northern Costa Rica, situated 100 meters above sea level. Here, 17 different species of trees and palms that contributed to families' nutrition throughout the year were found, along with another 20 plant species used as medicinal plants. This forest is a once-degraded area restored through a combination of natural regeneration and planting of edible and timber-producing species. For the rural family, the forest complements their nutrition. At the same time the wood produced constitutes a long-term economic asset<sup>4</sup>.

During the last decade, other rural communities have begun to take notice of neighbouring forests. The forests were state property, but the communities began to organize their care and use as community territories that contribute water, recreation, food, and timber to support community infrastructure<sup>5</sup>.

Forests adjacent to agricultural areas help generate a healthier environment and better harvests. Tree roots extract nutrients from deep ground layers and deposit them on the surface in the forms of dead leaves and humus. Some trees also absorb nitrogen and help maintain

I Grass-like plants that grow in wet areas.

<sup>2</sup> WRM (2006) Revista Grupo semillas #20. Agroforestería y manejo de bosques. www.semillas.org

<sup>3</sup> FAO (1996) Considering nutrition in National Forestry Programmes. FAO corporate document repository- Rome. www.fao.org/docrep/w2167e/w2167e00.htm#TobOfPage

<sup>4</sup> Coecoceiba / ATCR (2004). La restauración ecologista del bosque tropical: una alternativa de reforestación socialmente justa y ambientalmente sana. Coeceiba / Amigos de la Tierra-CR. San José, Costa Rica. www.coecoceiba.org

<sup>5</sup> Coecoceiba / ATCR (2006). Aportes para la sustentabilidad. Coecoceiba / Amigos de la Tierra-CR. www.coecoceiba.org
the fertility of the soil; small restored forests also serve as shade for animals, contribute fodder, and function as wind shelters that decrease erosion.

It is perhaps due to these qualities that the final declaration of the 2001 Forum on Food Sovereignty mentioned the forest as an important resource to guarantee food security<sup>6</sup>.

Another forum on Land, Territory and Dignity (Porto Alegre, March, 2006), recognized that, among other things, food sovereignty is built upon a diversified and rural landscape and culture. The forum included representatives from rural organizations, Indigenous villages, landless communities, small-scale fishers, rural women, migrants, shepherds, and forest communities.

Given these conclusions, it is urgent to consider the just distribution of rural parcels of land that are of adequate size to permit the inclusion of small family forests. Combined with bigger territories, where the forest is conserved and is managed by the community, this would be the basis for sustainable communities that conserve regional biodiversity and guarantee local environmental and food security.

"Food sovereignty is based on the human right to food, free self-determination, on the rights of indigenous communities to their territories, and on the right of the rural communities to produce food for local and national markets. Food sovereignty defends agriculture for farmers, fisheries for small-scale fishing families, the forests for forest communities, and steppes for nomadic shepherds."

# to generate dialogue



- What do you think is the role of organized communities to defend this right?
- How would your family and your community resolve access to food in the case of war, droughts, floods or other emergency situation?
- What would you propose to assure food security in your communities?



Cooking palm fruits, Espiritu Santo, Brazil

<sup>6</sup> Foro Mundial Soberanía Alimentaria (2001) Declaración Final, la Habana, Cuba, 7 de Setiembre del 2001. Tierra # 8 Centro de Estudios Rurales y Agricultura Internacional, Valencia, España. www. cerai.es,

# forests and health

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

The relationship between forests and health is complex, especially so in the tropics. A prime example of this relationship is the case of malaria, a disease which occurs in areas where tropical forests are also found. Seemingly contradictory evidence shows that, while on the one hand, malaria incidence is higher in forested areas, on the other hand a rise in incidence is associated with the impact of timber exploitation of the forest interior. Tropical forests also host the plant species from which quinine is extracted, a substance which has long been useful as a malaria remedy.

More than 15 severe illnesses related to forest destruction and degradation have been identified<sup>1</sup>. For example, in Africa, the incidence of ebola, yellow fever, and river blindness are all related to forest degradation, while in tropical America, it is associated with an increase of Chagas disease and rabies.

Rich traditional knowledge on the use of plants and other forest organisms has enabled millions of people to confront disease in their environment. This knowledge is generally communally shared, or made available at accessible prices. This know how is dependent on the oral transmission of information, in which traditional culture and conservation of resources play an extremely important role. Much ancestral knowledge filters through to the relatively recently-formed rural communities that have come to inhabit formerly forested areas or those areas near forests.

This is readily seen in tropical regions where rural communities, which have settled closely to Indigenous villages, have acquired a major portion of Indigenous traditional knowledge, and further enriched it with their own experiences. In the Upala region of Northern Costa Rica's low plains, more than one hundred and fifty plants and other regional biodiversity elements are used daily to cure illnesses by the local communities and villages. Much of this knowledge was transmitted to the villagers in recent times from the Malekú community, the region's ancestral inhabitants <sup>2</sup>.

This rich history of traditional knowledge is threatened not only by habitat destruction, but also by "bio-piracy". This is the use of traditional knowledge by large corporations, which benefit from patents on that knowledge, but do so without the consent or recognition of the villages and traditions that generated and maintained the knowledge in the first place.

Through these avenues a huge quantity of pharmaceuticals continues to be extracted. It has been estimated that 57 percent of the 150 most-prescribed drugs in the United States have natural components. For example, compounds extracted from tropical forest sources are used as contraceptives, muscle relaxants, aphrodisiacs, antibacterial compounds and drugs to treat heart disease and cancer<sup>3</sup>.



Sharing information on biodiversity uses, Andean plateau.

- I CIFOR (2006) Forest and Human Health. Infobrief. #11-Set 2006. www.cifor.org
- 2 Coecoceiba-ATCR (2003) La diversidad de plantas y el conocimiento tradicional en nuestras comunidades. Campaña por una Riqueza Biológica Protegida y Libre de Transgénicos. Coecoceiba-Amigos de la Tierra-CR, San José, CR. www.coecoceiba.org

# forests and disasters

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

Natural disasters are a combination of natural phenomenon and their interaction with human vulnerability. The extent of this vulnerability depends on communities' resistance and resilience in the face of the event's ecological and social consequences'. Resistance refers to the capacity of the systems in place to resist the drastic changes generated by the event, while resilience is the capacity of these systems to return to their original state.

In Central America, the 1999 Hurricane Mitch was a devastating event. With winds up to 285 km/h, it generated rainfall of up to 50 percent of the entire annual average, and caused around 10,000 deaths. Three million people were affected by the hurricane, and damage totaled six billion dollars.

However, the devastation of Mitch was not homogenous. Many observers affirm that its destruction was also a consequence of deforestation and unsustainable agricultural practices<sup>2</sup>. One participatory study, carried out mainly by members of the rural movement, found that land parcels in which forest conservation, agro-forestry, natural cover and other practices had been implemented were better able to resist the hurricane's impact and to recover to the previous productive state.

Similarly, a strong relationship has been identified between the level of destruction caused by the December 2004 tsunami on large parts of Southeast Asian coasts and the state of the forest cover in those areas. This tsunami left an estimated 174,000 people dead and destroyed tens of thousands of buildings in Thailand, Indonesia, India, the Maldives islands and Sri Lanka. However, the Ranong area in Thailand barely suffered damage thanks to the existence of a lush mangrove forests<sup>3</sup>.

With a coast line that extends 18,000 km from Guangxi to Liaoning, China regularly suffers costly damage as a result of frequent typhoons. Each year the total losses exceed ten billion Yuan (\$US 1.2 billion), according to the State Forest Administration (SFA). This is why the SFA has planned to restore a defensive forest belt to improve protection against typhoons, large waves, tsunamis and other related catastrophes. According to Zhou Shengxiang, director of the SFA, this will be, "A green system designed to include the restoration of protective primary forests, mangroves, protective belts for farms, urban reforestation, reforestation of arid mountains and coral reef protection."<sup>4</sup>

Some studies show that a network of coastal defenses, especially a mangrove belt, is capable of absorbing between 30 and 40 percent of the total force of the waves produced by tsunamis or typhoons before they reach inhabited coastal zones. From India to Indonesia, stories have been told about fishermen who survived by seeking refuge in wetlands. In India, nearly 11,000 people died during the 2004 Tsunami, the majority in the state of Tamil Nadu, where thousands of fishermen must now live in refugee camps. In contrast, in Pichavaram, which is covered by 900 hectares of mangroves, local residents continue fishing as they did before the tsunami. Approximately 3,000 fishing families from this region depend on the mangroves, each year collecting 230 tons of shrimp, fish and crabs.



Hurricane Mitch passes over Central America.

I & 2 Holtz-Gimanez, E. et al. (2000). Midiendo la resistencia agro ecológica campesina frente al huracán Match en Centroamérica. Vecinos Mundiales, enero 2000. www.agroecology.org/people/ eric/resist/resist.pdf

<sup>3 &</sup>amp; 4 China View (2005). Defensas forestales para ayudar a proteger las costas frente a desastres naturales. www.kaosenlared.info/noticia\_pdf.php.id?noticia=12096

# decentralization and community-based forest governance

Javier Baltodano / COECOCEIBA / Friends of the Earth Costa Rica

"Who owns the forests? Who claims rights over them? Who has access to their resources? Furthermore, who is the true possessor of the forests? These are questions that provoke lively disputes in many parts of the world"

Many conflicts over forest destruction or degradation emerge from decisions taken by central governments. There are many examples of decisions taken by governments that negatively affect forests and forest communities: logging concessions granted without previous consultation or community consent; providing credits or incentives for activities that result in deforestation, or granting concessions for agricultural production; and construction of mines, hydroelectric plants and other types of infrastructure or development projects .

Governments have great difficulty when it comes to ceding power to communities. They say that decentralized control "foments deforestation, illegal logging and conflict"<sup>2</sup>. However, the reality is often the reverse: communities often better control and sustainably use their resources.

The political and legal arrangements that enable community-based forest governance vary<sup>3</sup>, and but may include some of the following:

- I. Local (municipal) government ownership or control of forest areas through agreements.
- 2. Specific community agreements with governments over the use of national areas.
- **3.** Use of national parks or government-owned reserve areas by neighbouring communities through agreements that regulate this use.
- **4.** Indigenous territories which are possessed under community rights and community property titles.
- 5. Communities as owners of concessions for the use of timber
- 6. Private land which is managed in a communal fashion through organizations that are local in character.

Historically, communities have in large part been excluded from forestry policies and laws. Today, however, many diverse movements have been launched to demand and defend community rights. The success of these movements

#### **Community-based forest governance consists of:**

- Local control of resources
- Planning
- Participatory planning of its use
- Enjoying the economic and non-economic benefits of the forests

will depend not only on communities' ability to clarify forest land tenure but also on their capacity to organize and properly govern their resources.

The sustainability of community governance will depend on communities' ability to refrain from falling captive to illusions fostered by large international markets that drive the exploitation of forests beyond their sustainable capacity. Instead, it is necessary to consolidate product commercialization strategies for products generated through sustainable use of community forests based on local and just markets.

## to generate dialogue

- What type of decisions has your country's central government taken which affect the conservation of the forests? (Laws, incentives, policies, programs, etc.)
- If you were in the central government, what kind of decision would you make to protect the forests and their neighboring communities?
- Is there currently an agreement, political arrangement or law, like the six mentioned in this article, that permits community governance of the forests in your community?
- Of the six examples mentioned above, which one(s) do you think should be implemented in your country
- I White A. & Martín A. (2002) Who owns the forest? Forest Trends, Washington DC.

<sup>2</sup> Engel S. & Palmer C. (2006) For Better or Worse? Local Impacts from the Decentralization of Indonesia's Forest Sector, processed. charles.palmer@env.ethz.ch, stefanie.engel@env.ethz.ch .Cl-FOR-POLEX www.cifor.cgiar.org

<sup>3</sup> Gunter J., Ed (2004) The Community Forestry Guidebook: Tools and Techniques for Communities in British Columbia. British Columbia Community Forest Association. info@bccfa.ca

# local production and fair timber markets to create sustainable societies in developing countries a french perspective

Sylvain Angerand / Friends of the Earth France

Increasing our use of timber is often considered as a solution to the challenge of climate change. In effect, this solution centers on wood's renewable and durable nature (many churches built with wood have stood for centuries!) along with its lower energy cost relative to other construction materials. From raw material to building material, wood requires little transformation before it is used, and it also stores greenhouse gases. However, it is necessary to consider some key issues to ensure timber is sustainably consumed.

In France, forests are expanding. During the Middle Ages, France underwent large-scale deforestation. Beginning in the 19th century, however, forest cover expanded considerably, by an estimated two thirds. After the Second World War significant areas were planted with resinous pines. Today, however, the principal cause of the expansion is agricultural depression: trees are naturally colonizing fields abandoned by the farmers.

Forest products stand in second place, after petroleum, on France's commercial trade deficit list. There is a shortfall of approximately 10 million cubic meters between the quantity of wood imported (44 million cubic meters) and exported (34 million cubic meters). France is the largest importer of African timber in Europe. Tropical forest timber is widely used in construction due to its natural durability and low cost: a window or door frame made from "Moabi coute" (an African tree) is 30 to 40 percent cheaper than one made from "chene" (a French species).

# Local production: environmentally healthier, more socially just

While France's annual timber consumption is about 90 million cubic meters, its domestic timber production is only 50 to 55 million cubic meters. It is believed that an additional 35 to 40 million cubic meters could be produced without negative impacts on France's forests. However, the country must also be prepared for future increases in levels of wood consumption. This is the case for firewood; if France is to respect its European commitment to develop renewable energy based on biomass, an estimated 13 to 18 million cubic meters of firewood will be needed.

To increase local timber production, we require forestry policies that prevent overexploitation of the forests. On the one hand, 75 percent of the forests are located on private land, distributed over small farms with an average area of 2.6 hectares. Harvesting timber from these "mini forests" is difficult and not very profitable. On the other hand, largest forests (mostly on public land but also some private forests), with easy access for log transportation, are sometimes overexploited:



Fine timber from the "nazareno" tree (Peltogyne purpurea) produced through community-based forest management, Osa Peninsula, Costa Rica.

Given these issues a new forestry policy should, among other aspects, do the following:

- Motivate the use of less-exploited forests and facilitate the recovery of overexploited forests by limiting the intensive methods of forest use.
- Promote diverse forests, rich with local species, which replicate the cycles and dynamics of natural forests.
- Discourage the transformation of forests into monoculture plantations.

In the social arena, local timber production generates employment linked to the forest in rural areas. The timber processing companies are generally small. This diffuse industrial fabric allows space for economic activity in territories that need an economic boost. In addition, in France, employment is governed by strict laws and social norms. Company salaries are augmented by social coverage and controlled working conditions, especially in the area of security. These legislative requirements effectively impose a surcharge on wood produced in France, however, this higher cost of production directly translates into greater social benefits for employees.

On the other hand, the use of local timber lowers the cost of transport, reducing energy consumption and greenhouse gas emissions. Compare this to timber that is cut in the center of the Congo basin; it is transported 800 km in a truck to port, shipped 4,000 km by boat to reach France, and trucked 500 km to the site where it is used, implying a major ecological impact.

#### fair and harmonious markets for tropical timber

Promoting the use of local forests does not mean boycotting tropical timber. On the contrary, we think the trade of tropical timber can play an important role but must be revalued as a sustainable activity.

It is not rational that the primary forests of Indonesia and Africa be cut and used in Europe for construction frames that are simply discarded a few days after their use. The trade of timber and forest products produced by community-based forest governance experiences can be beneficial: both in terms of international solidarity in the struggle against poverty, and to consolidate control of forests for local populations and/or Indigenous communities.

### to generate dialogue

- How can fair trade of the resources in your community be generated?
- What would you need for this? (Modifications to forest legislation; development of techniques for the sustainable use of the forest; fairer and more equitable trade models?)
- What do you think about the fact that 80 percent of forest resources are consumed by 20 percent of the world's population?
- What do you propose to change this situation?



# forests and poverty

Meena Raman / Chair, Friends of the Earth International

Poverty is the greatest indignity and scandal of our time. As we commence the 21st century, more than a billion people live in extreme poverty. Millions die of hunger each year and a billion people lack access to potable water. Nearly half of Africans live on less than a dollar a day. The figures are daunting, however, an increasing number of people think it is possible to eradicate poverty in the coming decades.

As an ecological organization, Friends of the Earth develops campaigns to protect forests, agricultural lands, fisheries, wetlands, rivers, the climate and everything that constitutes the basis for the survival of people and communities. In fact, 70 percent of the world's poor live in rural areas and depend on their local environment to survive. The relationship between rural poverty and environmental degradation is very clear to us. From the field, our groups can testify that neo-liberal economic globalization has increased both environmental degradation and the poverty of people dependent on those natural resources.

This tragic cycle is perpetuated by:

- Overexploitation of the environment
- Loss of cultural, political and economic self-determination
- Hunger and poverty

However, we also see reasons for hope. We offer living proof of communities around the world in which people lead rich and satisfying lives when they control their natural resources. The rural population, and particularly those who are "poor" in the economic sense of the word, often have a symbiotic relationship with their local environment. For these populations, their degree of poverty is much more than the simple lack of money and material possessions. It is in reality a measure of their access to natural resources and their involvement in decision-making processes regarding these resources. Our alleviation strategy includes promoting strong support for local inhabitants that are building sustainable communities as an alternative model to that of "developers". At the same time, we will continue to pressure International Financial Institutions, trade organizations, corporations, and governments to eliminate socially and environmentally destructive policies that degrade natural resources and create human poverty.

# to generate dialogue

Using these concepts as a guide, reflect on the following: Is the cycle of poverty present in your community? How does it manifest itself? Who are the actors involved? What solutions does your community propose? Do you have a clear strategy to confront the cycle of poverty? How are forests included in this strategy?



Tayni-Cabecar children. Their houses were improved using timber produced under a community-based forest management program in Costa Rica.

# related readings

- Achard, F., Hugh D.E., Hans-Jürgen S., Mayaux P., Gallego J., Richards, T. and Malingreau J.P., 2002. Determination of Deforestation Rates of the World's Humid Tropical Forests, Science, August 2002: Vol. 297. no. 5583, pp. 999 - 1002.
- Asner, P., 2005. Selective Logging in the Brazilian Amazon. Science, October 2005: Vol. 310 (5747). www.sciencemag.org
- CEADES, Colectivo de estudios aplicados al desarrollo social. Manejo Forestal Comunitario en el TCO Guarayos. Ed. CEADES. Bolivia.
- Clay J. 1988. Indigenous Peoples and Forests. Models of land use and management from Latin America. Cultural Survival Report #27, Cambridge, Massachusetts.
- COECOCEIBA-ATCR, 2003. La madera, el bosque y la gente: alternativas para la producción de madera ambientalmente sana y socialmente justa. San José, Costa Rica. www.coecoceiba.org
- COECOCEIBA-ATCR, 2003. La restauración ecologista del bosque tropical. San José, Costa Rica. www.coecoceiba.org
- Counsell, S., 2006. Forest Governance in the Democratic Republic of Congo: an NGO perspective. FERN, Brussels, Belgium. www.fern.org
- Forest Watch-Ghana, 2006. Forest Governance in Ghana. FERN, Brussels, Belgium. www.fern.org
- Gain Philip, 2002. **The Last Forests of Bangladesh**. Second Edition. Society for Environment and Human Development (SEHD), Lalmatia, Dhaka.

- Gunter J. (ed), 2004. The Community Forest Guidebook: Tools and Techniques for Communities in British Columbia. British Columbia Community Forest Association, Kaslo, BC, Canada.
- Haworth J. and Counsell S., 1999. Life after Logging: the impacts of commercial logging timber extraction in tropical rainforest. Rainforest Foundation, Friends of the Earth England, Wales and Northern Ireland, Greenpeace, London UK. www.rainforestfoundationuk.org
- Hombergh, H. van den, 1999. Guerreros del Golfo Dulce: industria forestal y conflicto en la Península de Osa, Costa Rica. Colección Universitaria, San José, Costa Rica.
- Hong, E., 1987. Natives of Sarawak: Survival in Borneo's Vanishing Forests. Institud Masyarakat. Malaysia.
- Laurance C. et al., 2006. Rapid Decay of Tree-Community Composition in Amazonian Forest Fragments. PNAS, December 12, 2006, vol. 103, no. 50, 19010-19014.
- Mohan Bthttarai, A. and Raj Khanal, D., 2005. Communities, Forest and Law of Nepal. FECOFUN, Pro Public/FoE Nepal, CIEL. Katmandú, Nepal.
- Movimiento Mundial por los Bosques Tropicales, 2005. Pueblos Indígenas: sus bosques, sus luchas, sus derechos. WRM, Montevideo, Uruguay.
- Contreras, R., Gramajo, S.E., Cigarroa, C. and Moreno, P., 1999. Comunidades Rurales y Áreas Protegidas: Análisis de la gestión colectiva en dos sitios de El Petén. FLACSO, Guatemala.
- Sahabat Alam-Malysia, 1990. Solving Sarawak's Forest and Native Problems. Friends of the Earth Malaysia, Penang, Malaysia.
- Scherr, S., White, A. and Kaimowitz D., 2002. Making Markets Work for Forest Communities. CIFOR, Bogor, Indonesia.
- Stockdale, M., 2005. Step to Sustainable and Community Based NTFP Management. A manual written with special reference to South and Southeast Asia. Non Timber Forest Products Exchange Programe (NTFP-EP), Quezon, Phillipines.

- Sustainable Development Institute, 2005. Liberia: Under Mining the Forest: Presenting ongoing illegal activities in the forest sector.
  SDI, Monrovia, Liberia. www.sdiliberia.org
- United Nations, 2005. Millenium Ecosystem Assessment Synthesis Report. www.milleniumecosystemassessment.org.
- United Nations, 2005. World Heritage Forests. Levering Conservation at Landscape Level. Proceedings of the 2nd World Heritage Forest Meeting, March 9-11, 2005, Nancy, France.
- Vargas, E. Agurcia and M. Benítez, N., 2006. Erguidos como Pinos. Memoria sobre la construcción de la conciencia ambientalista. Comité de Familiares de detenidos-desaparecidos en Honduras (CO-FADEH), Honduras.
- Wallace S., 2007. Amazonía, nos estamos quedando sin selvas. Nacional Geographic/Español, Enero 2007: vol 20 #1.

- Wellman, D., 2001. Sustainable Communities. World Council of Churches, NY, USA.
- White, G.M. and Boshier, D.H., 2000. Fragmentation in Central American Dry Forests genetic impacts on Swietenia humilis. In: Genetics, Demography and the Viability of Fragmented Populations. Young, A. G. and Clarke, G. (eds.) Cambridge University Press, Cambridge, UK.
- White, A. and Martin, A. (2002). Who Owns the World's Forests?: Forest tenure and public forests in transition. Center for International Environmental Law, Washington DC, USA . www.forest-trends.org
- Wolvecamp P. (ed).1999. Local strategies for forest protection, economic welfare and social justice. Econet, Pune India; Both Ends, Amsterdam.
- World Rainforest Movement, 2002. Africa: Forest under Threat. WRM. Montevideo, Uruguay.





# friends of the earth international member organizations

**www.foei.org:** At this website for the world's largest grassroots environmental network you will find in-depth information on environmental issues. There are also links to the network's more than seventy member organizations and affiliated groups (www.foei.org/es/who-we-are/groups), some of which work on community-based forest management.

# other organizations

**www.fase.org.br** - FASE is a Brazilian social organization whose website has information on forests, plantations and the Network Against Green Deserts.

www.fern.org - FERN is a European organization focused on the conservation and sustainable use of forests. Here you will find information on forests, certification, illegal logging, and monitoring on the enforcement of some international conventions, such as the Convention on Biological Diversity, and the UN Framework Convention on Climate Change, for example. It also has information about forest peoples and climate change.

www.fern.org/pages/about/fme.html - Here you will find information about Forest Movement Europe, a group comprising several European organizations working on forests. The website's information on forests and the European Union is especially helpful on conservation and forest peoples. **www.forestsmonitor.org** - This site has an interesting database on private companies in the wood and logging sector.

**www.forestpeoples.org** - FPP is an international organization working on forest peoples. Here you will find information on communities who live in the forests, on their rights, and on the forests themselves. The site provides interesting analyses on key subjects.

www.grain.org y www.etcgroup.org - Here you can find valuable information on topics related to biodiversity, including: collective rights, community management, genetically modified organisms, and nanotechnology.

www.illegal - logging.info - This site provides information on key issues of the illegal logging debate, including news, events, documents and links to other websites.

www.international-alliance.org - The International Alliance of Indigenous and Tribal Peoples of the Tropical Forests is made up of many Indigenous Peoples' organizations from around the world. Here you will find information about traditional knowledge, the rights of Indigenous Peoples, and analysis of international conventions on Indigenous Peoples.

**www.mst.org.br** - This site contains information about the struggles of the Rural Landless Workers' Movement from Brazil.

www.radiomundoreal.fm - Web-based radio from Friends of the Earth International, based in Montevideo, Uruguay. It provides world news in Spanish, English and Portuguese, and has environmental information on a wide range of topics.

**www.rainforestfoundationuk.org** - At the Rainforest Foundation's website you will find information on campaigns for Indigenous Peoples and the forests where they live, their collective rights, the Forest Stewardship Council, forests in Africa, and community-based forest management. The organization's US website is at: www.savetherest.org.

**www.ran.org** - Rainforest Action Network is an organization that provides information on forests and forest peoples, viewed within the framework of campaigns against the oil industry and international financial institutions, and for the preservation of the world's forests.

www.siemenpuu.org - The Siemenpuu Foundation donates project funds directly to civil society organisations and network organisations, NGOs, community groups and research institutions operating and based in developing countries.

**www.sinkswatch.org** - This site has information on tree plantations designated as carbon sinks in areas where there are disputes over land tenure and land use rights.

**www.thecornerhouse.org.uk** - The Corner House is an organization that provides analysis on climate change, plantations and other issues related to forests and communities.

www.viacampesina.org - This website is about Via Campesina, a body which encompasses most of the world's peasant organizations. Here you will find information on peasants' rights and recent related news.

www.wrm.org.uy - Here at the World Rainforest Movement website you will find information about forests, campaigns against plantations, a newsletter on current world affairs, country-specific information, and documents on logging, community-based forest management, collective rights, and much more. There are also links to some publications on forests issued by FoEl and other organizations.



Friends of the Earth International - The world's largest grassroots environmental network, uniting 69 national member groups and some 5,000 local activist groups on every continent. With over 2 million members and supporters around the world, we campaign on today's most urgent environmental and social issues. We challenge the current model of economic and corporate globalization, and promote solutions that will help to create environmentally sustainable and socially just societies.

friends of the earth has groups in: Argentina, Australia, Austria, Bangladesh, Belgium, Belgium (Flanders), Bolivia, Brazil, Bulgaria, Cameroon, Canada, Chile, Colombia, Costa Rica, Croatia, Curacao (Antilles), Cyprus, Czech Republic, Denmark, El Salvador, England/Wales/Northern Ireland, Estonia, Finland, France, Georgia, Germany, Ghana, Grenada (West Indies), Guatemala, Haiti, Honduras, Hungary, Indonesia, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic of), Malaysia, Mali, Malta, Mauritius, Nepal, Netherlands, New Zealand, Nigeria, Norway, Palestine, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Scotland, Sierra Leone, Slovakia, South Africa, Spain, Swaziland, Sweden, Switzerland, Togo, Tunisia, Ukraine, United States, and Uruguay.

(Please contact the FoEl Secretariat or check www.foei.org for FoE groups' contact info).





friends of the earth international secretariat P.O. Box 19199 1000 GD Amsterdam The Netherlands Tel: 31 20 622 1369 Fax: 31 20 639 2181 info@foei.org www.foei.org