Forests of the World

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The forests and the Alliance for a Responsible, Plural and United World

The Notebook of Proposals Forests of the World was compiled from various contributions provided by participants of the Electronic Forum that took place from February to October 2001. The starting point was the Allies of the Forest and People of the Earth Letter, issued during a conference held in Bertioga, São Paulo, Brazil, in December 1997, a landmark activity carried out by the Alliance for a Responsible, Plural, and United World.

It would be very difficult to conceive an alliance for a responsible, plural, and united world without the forest theme. The architecture of the forest itself inspires the work of the alliance. One of the most outstanding characteristics of the forest is the explicit and close relationship among all its components - known as an 'alliance'. Tropical forests in their unique way synthesize what can be called the harmony of diversity - an array of genetics, colours, shapes and sizes. To understand - with heart and mind - the dynamics that sustain these immense ecosystems, is one of the keys for constructing proposals and actions in the direction of planetary environmental sustainability.

During the last few years, the Alliance for a Responsible, Plural and United World organised many events, a highlight being the planting of the Woods of the Nations, at the World Social Forum in Porto Alegre, Brazil, and the Encounter of America, Quito, Ecuador, from 19-23 June 2001. One of the proposals issued at the Encounter referred to "recovering a harmonic and respectful relationship with nature, of which we, human beings, are also part. We want to "tread lightly on the Earth" as the foundation for being in Nature as part of Her cycles. The forests, waters, land, skies, animals and human beings - are all part of our planetary sanctuary... We are all under the same sky, although we do not see the same horizon.... "

Forest Network - The Electronic Forum for Forests of the World

The Electronic Forum florestas@grupos.com.br gathered together 129 people from Argentina, Bolivia, Brazil, Cameroon, Canada, Chile, Colombia, Ecuador, France, Malaysia, Paraguay, Russia, Uruguay, Venezuela and the United States of America. The proposal’s main theme was the conservation of sources of biological and cultural diversity as they
exist within forests, with the objective being to establish guidelines for a healthy and sustainable relationship between human beings and the environment.

For 9 months, 295 messages - in Portuguese, English and Spanish - were simultaneously sent to all forum participants. The starting point for debate was the preliminary document “Preservation of the Forests and Biodiversity”. Forum coordinators had contacted other groups and networks; prominently the 'Gondwana Project', a group active in Patagonia - Argentina and Chile; organizations in Ecuador, who initiated the proposal to protect the forests of parallel zero; and participants of the United Nations First Forum for Forests (UNFF1), which gathered together representatives from several Governments and non-profit organizations from all continents. Finally, in October, during a ten day stay in the Brazilian Amazon, the spirit of this effort was impregnated with the incredible energy which permeates the largest tropical forest of the planet, where people, plants and animals, thrive with the air, sun and water in the rich diversity of life.

In the same diverse and harmonious way taught by the forest, we tried to organize this notebook. The result is a collection of several propositions with different and complementary visions, an interpretation of a wide theme that has so many connections.

To expose the richness of the debate that resulted in these proposals, we decided to let the participants' voices speak, by compiling many of the documents and opinions that were circulated during the Electronic Forum.
As expected due to the complexity of the theme, this notebook is full of contrasts. The proposals reflect diverse realities and visions - from the United Nations conference in New York, to a meeting of young people in the Amazon. Permeating this diversity was a common objective: to interrupt the course of forest destruction around the world.

The result is a mosaic of 49 proposals grouped into six broad areas, under the following titles: a) interrupting the felling of primary forests; b) identifying secondary forests suitable for sustainable management; c) promoting a forest culture; d) new economical paradigms; e) the World Bank’s forest policy; and f) the United Nations and the forests.

The Electronic Forum Animation Team inserted into the debate the work of various groups of the Alliance for a Responsible, Plural, and United World, with a view to reinforcing the multi-faceted aspects of the forest theme. The comments received and transcribed were an excellent contribution towards this proposal notebook.

At the conclusion of this work, it is evident that we are only just beginning to save the Earth and its life forms. The implementation of the proposals will depend upon many partnerships and networks and on the continuity, deepening and amplification of the debates and actions already in process.

A tree when falling provokes great noise. However, a great forest grows quietly.
For the last 5,000 years, human beings have been capable of reducing the forests of the planet to less than half of their original area. If in the past, 50% of the planet’s surface was covered by forests today that area corresponds to only 20%.

Many areas that are today considered ‘fields’ - such as the African savannas, the Argentinean pampas and some North American prairies - were once covered by forests, before human beings destroyed them. In many dry, semi-arid areas, of north Africa, Greece, Italy and parts of Australia, the deforested areas have been so consistently used for agriculture that the degraded soil is at the turning point of becoming desert.

The history of the forests is intertwined with the history of civilization, beginning with the ancient and now arid Mesopotamia. There, in the region of the Fertile Delta, the intensive exploration and exploitation of the forests first began.

According to the Epic of Gilgamesh, 4,700 years ago, Gilgamesh, the governor of the capital city of Uruk, wanted to build a great city in order to eternalize his name. The ambitious construction plan demanded a large amount of hardwood, available in the enormous ancient forests of Uruk - so big that nobody took the risk to determine the size, and being the place where "cedars grew with all their exuberance."

To penetrate into the forest was not a simple task. The foliage was so dense that the sunshine hardly entered. Until then, there was no news of anybody that had dared to enter into the forests, which were protected by direct order of Enlil, the main Sumerian divinity who ordered the violent demigod Humbaba to "preserve the forest of cedars".

In spite of people’s warnings about the powers of Humbaba, "whose roar was like a storm, whose mouth was fire and whose breath was death", Gilgamesh and his friends entered the forest with the intention of killing Humbaba, and then cutting the enormous trees.

As they entered the forest, its’ imposing, majestic beauty distracted the group, thereby paralyzing their intentions. However, after a short delay to enjoy the “home of the gods”, the woodcutters began to cut down the cedars. The noise soon woke up Humbaba, who, enraged by the invasion of a forbidden place and the destruction of the forest, ordered the invaders to leave. After a violent fight, Humbaba was killed and decapitated.

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1 Based on the “Forest Stories” of John Perlin
When Enlil, who had the mission of guaranteeing the prosperity of the Earth, was informed of the destruction of the forest, he dashed a terrible curse upon the kingdom of Uruk: "Your food and water shall be consumed and swallowed by fire."

This legend transcends time, foreseeing events that would be repeated throughout history. The war against forests has continued over almost the whole planet, in order to supply civilizations with ever-increasing material needs, namely for construction and fuel.

Today, the south of Mesopotamia is a desert.
Almost ten years ago, the United Nations Conference for Environment and Development (ECO 92), held in Rio de Janeiro, adopted the commitment of working towards the sustainable management, protection and development of all types of forests. ECO 92 catalyzed the debate and actions regarding the forests, redefined the objectives and beneficiaries of forest exploitation, and consolidated the concept of sustainable management, with the firm promise of reaching it by creating new alliances to achieve common objectives in forest activity. This summary states several important facts, in relation to the forests; in many cases, referring to ECO 92 or a previous period; and in other cases, responding to trends and more recent economical, social and political events.

Although the path to reaping the results of a sustainable forest culture is a hard one, and the progress not as fast as we would like, the path is now wider and is undoubtedly being traveled.

The forest resources: surface and condition

The forest surface of the world is estimated to be 3,870 million hectares. Ninety-five percent corresponds to natural forests, while only five percent consists of planted forests. Tropical (rainforest) deforestation and forest degradation in many areas around the world negatively affect the availability of forest products and services. If in some developed countries the forest surface has stabilized and experienced a small increase as a whole, deforestation continues unabated in developing countries. The annual gross variation of world forest surface area during the last decade (1990-2000) was close to -9.4 million hectares, an amount that represents the difference between the estimated annual deforestation rate (14.6 million hectares) and the estimated annual rate of forest surface increase (5.2 million hectares).

The causes of forest degradation vary in nature. Some, such as the excessive exploitation of forest products, could be avoided or reduced by implementing appropriate planning and administration systems, and the effects of other causes like natural disasters could be mitigated by formulating emergency plans.
The Situation of the Forests in 2001 analyzes two recent causes of damage to the forests: the intense fires that occurred in many areas of the world and the hurricanes that ravaged Europe in December 1999. It also considered one of the activities that threaten the existence of forests - the search for wild meat.

Certainly, during 1999 and 2000, the fires were not as widespread, nor as devastating as in the previous biennium, like the serious fires in the western United States, Ethiopia, oriental Mediterranean and Indonesia. The fires of the last four years have raised public consciousness and concern about the problem and increased the adoption of national policy measures, as well as regional and international initiatives for their prevention, alert, detention and control.

There is more knowledge available now regarding the existing links between fires, politics and land use practices. In many countries, communitarian projects to combat fire have been put into practice. At the same time, there has been a reevaluation of the effects caused by the exclusion of fire in ecosystems that depend upon this element.

The storms that hit Europe in December 1999 caused untold damage to forests and isolated trees, seriously affecting the means of people’s subsistence and disturbing forest industries and markets. Such damage represented up to six months of wood exploitation in Europe; in some countries the wind felled as many trees as could be extracted over several years.

Governments acted quickly and effectively in order to minimize the environmental, economical, and social effects. In addition, many countries proposed to modify their policies regarding the establishment and management of forests, aiming to reduce the future risks caused by storms.

The exhaustion of wildlife in forests, due to the commercial exploitation of wild meat, is a reason for increased concern. The unsustainable trade of wild meat constitutes a serious problem in many places, reaching the dimension of an authentic crisis in some areas of tropical Africa, where numerous species of primates and antelopes, among others, are being threatened. Not-for-profit, non-government organizations (NGOs) and governments, and at the international level, the Convention for the International Trade of Endangered Species of Fauna and Wild Flora (CITTS) have adopted corrective measures to face this serious situation.

The foreknowledge is that in future the demand for wood will be met by plantation forest timber. Planning and administration tasks will need to be accomplished in appropriate ways, in order to ensure that negative environmental and social effects do not occur.
Organization, conservation, and sustainable development of the forest resources

Throughout the world, there is a tendency to increase cultivated forest areas and to depend on them as a large-scale source of industrial wood. The intensification of this type of cultivation is a recent phenomenon; in fact, fifty percent of the plantations are less than 15 years old. Asia is the predominant continent for the development of new plantation forest areas; in 2000, around sixty-two percent of the world's forest plantations were established there. Other important trends show an increase in private investment to establish such cultivated areas in the so-called developing countries, raising foreign dominance, and an expansion of the contract system, where communities or small landowners produce trees to sell to private companies.

For many years, traditional biotechnology has been dedicated to increasing the productivity of plantation forests. There are few opposing opinions regarding such biotechnological applications in the forest industry, although lately the forest sector has begun to debate the use of genetically modified organisms (GMOs). Such modifications aim to provide forest arboreal species with greater resistance to viruses and pest insects, as well as a reduction in lignin and higher tolerance to herbicides. There are no reports of the commercial production of transgenic trees, although there are experiments taking place in several countries. The new biotechnological applications could be of interest; however, it is absolutely necessary to act with utmost caution regarding their long-term use in conservation programs and for the genetic improvement of plantation areas. At all times, follow the 'precautionary principle'.

Many countries recently imposed bars or restrictions on wood extraction, with the intention of protecting forest resources, or as a measure to confront devastating natural catastrophes (for instance, landslides and floods) that are being attributed, correctly or not, to such excessive commercial exploration. The effects of these measures have so far been inconsistent. In some countries, such measures have contributed to the preservation of natural forests; but in others, they have negatively affected the forest sector and local communities, or simply transferred the problem of overexploitation to other countries. A set of guidelines or conditions need to be followed for the results to be satisfactory: incorporating well-defined objectives based on the knowledge of causes of forest degradation, with appropriate policies, significant political will and sufficient resources to face possible short and medium term costs.
Around the world, a greater sensitivity to all aspects of illegal forest activity is spreading, including awareness of the enormous financial, environmental, and social costs of corruption. Corruption, until recently considered a taboo topic, is now being discussed openly at the main international forums. Governments, non-profit organizations (NGOs), the private sector and the international community are actively confronting the problem. Some governments, with support from NGOs and reputable private institutions, have taken up great efforts to fight illegal activities and corruption in the forest sector.

The participation of communities in forest preservation is a significant aspect and characteristic of national forest policies and programs all over the world. Many national forest organizations are immersed in a decentralization, restructuring and reduction process, with varying results. Facing a lack of financial and human resources, governments are more frequently calling for local communities to contribute to the protection and management of state forests. Some of the characteristics of community involvement in this area are markedly different, when comparing the standard approach applied in Southern Asia with what has been introduced more recently in Africa.

Forest products and services

Among the numerous products and services provided by the forests, those that stand out are: the supply of industrial wood; various environmental services, including the moderation of climate change; and primarily the conservation of biological diversity.

The last biennium was marked by a worldwide recovery in demand for industrial wood, after a distinct decrease during 1997-1998, due to the Asian economic crisis. The effects of that crisis, although negative, were less than expected. However, tropical wood production did not reach previous levels and some Asian countries have not overcome the associated difficulties. The reduced level of trade between 1997 and 1998 experienced a major recovery in 1999 and 2000. A new market factor, that deserves mention, is the increasing importance of China as a wood purchaser, marked by a spectacular intensification of wood imports during the last few years, due to recent restrictions imposed on the exploitation of their natural forests. This fact has significantly influenced production and commercial trade networks, as much inside the Asian region as outside.

With respect to international trade, the certification of forest products, though still a vexed question, has gained greater acceptance, being of particular interest to major importing countries (Western Europe and the United States) and to many exporter
countries whose most important markets are in those areas. The surface cover of certified forests continues increasing and is now estimated at 90 million hectares. In this way, it represents only two percent of the world's forest surface area. Also, the majority of certified forests are located in a limited number of temperate-zone countries and not in tropical countries, where unsustainable wood extraction practices are a major concern. Among the latest innovations registered in this field that should be mentioned are; the development of new national certification systems; the mutual recognition of these processes; the preference for wood products with this guarantee, by large retail consortia in Europe and the United States, besides various other groups of customers; and the certification of non-timber forest products (NTFPs).

The conservation of biological diversity inside and outside protected areas

Protected forest areas are essential to the conservation of the world's biological diversity. However, alone they are not enough to meet biodiversity protection objectives and should be complemented with the adoption of effective conservation measures.

Forest industries keep adapting themselves to changes in the extraction and availability of raw materials, and are leaning towards the increasing offers of timber originating from plantation areas, which are more varied in species. The lower short-term availability of raw materials from the forests is giving way to the emergence of innovative plantation systems that increase timber quantities, and to a greater use of residues and surplus.

Recent negotiations on the Kyoto Protocol, of the United Nations Convention for Climate Change, have highlighted the importance of forests in the context of climate change. The forests influence such changes and suffer from their influence. They play an important role in the carbon cycles of the world, whose management or destruction could significantly affect the world heating process during the 21st century. If such climatic changes take place, the consequences on the forests could be long reaching and intense. Forests contribute to a reduction in emissions, by storing carbon. Once ratified, the Kyoto Protocol could deeply influence the forest sector, depending on the type of forest activities allowed, by enforcing the rules with the objective of mitigating climate change.

During the last two decades, conservation and biological diversity have been the primary factors in forest planning and policy formulation all over the world, as high ranking priorities in the international community's environmental program. Additionally,
they are important components for assisting development, as well as the focus of many learning activities, that support not-for-profit and non-government organizations (NGOs). For a long time protected areas have been considered the basic element in the conservation of bio-diversity.

It is estimated that 12 percent of the world's forests are in protected areas. Among recent innovations registered in this area of forest management are initiatives that aim to integrate and balance the necessity for primary forest materials with conservation and development needs; promote community conservation activities; and pay more attention to the management of ecosystems within a bio-regional focus - whereby protected areas are considered in their geographical context, with emphasis on regional land use patterns.
International dialogue and regional and world initiatives

At the United Nations Conference for the Environment (ECO 92), many countries adopted a marked position of confrontation regarding the forest issue. To go beyond the agreements adopted during ECO 92, intergovernmental deliberations continued, at first as the Intergovernmental Panel for Forests (IPF) from 1995 to 1997, and then as the Intergovernmental Forum for Forests (IFF) between 1997 and 2000. In October 2000, the countries signed an international agreement about the forests that included the establishment of the United Nations Forum for Forests (UNFF), whose mandate consists of promoting the sustainable management, preservation and development of all types of forests, reinforcing a long-term political commitment and promoting the application of the proposals for action formulated by the IPF and IFF.

In the last few years, new progress was achieved in the application of the three conventions defined during ECO 92 - the Convention on Biological Diversity (CBD), the United Nations Convention on Climate Change, and the United Nations Convention on the Fight against Desertification. The links between them were strengthened, as well as the IPF/IFF process and other conventions and prior agreements (CITES, Ramsar Convention for humid areas and the international agreement on tropical wood).

The latest trend towards consolidating regional cooperation is in pursuit and is being reinforced by support at the bioregional level. Initiatives relating to countries that have reduced green cover and mountain forests are being highlighted (particularly to mark the International Year of the Mountains - 2002). This tendency is being equally directed at a technical level, as for example, regarding the regional cooperation on fires.

A series of regional and worldwide initiatives supports the efforts accomplished by many countries in the direction of sustainable forest management. The development of criteria and indicators in this manner has contributed to a better definition of this concept and calculation of the progresses achieved. Model forest programmes for the demonstration of such initiatives are being applied in many regions of the world, and have contributed much to illustrate the practice of sustainable forest management.
Conclusion

The decade of the 1990's was of great importance, with respect to the adoption of a common vision, on a worldwide scale, regarding the future of our forests and their relationship to peoples' daily life. Agreements were reached about the way to move forward and turn the vision into reality. New technologies and instruments were developed to make the task easier, along with a clarification of related issues of costs and benefits. The foundations were set. However, to turn the fundamental vision into actual reality, based on sustainable management and global forest conservation and development, still depends on a series of factors, such as: the capacity to finance and distribute equally the costs and benefits of such re-systematization; the strengthening and maintenance of political commitment, and the transformation of this commitment into effective action.
Recently FAO presented the results of its Evaluation of Global Forest Resources 2000, characterized as "the most wide-ranging base report, reliable and trustworthy in relation to current forest resources". But the most important question is - does it have any use? The central message of the FAO evaluation is that the situation has improved in comparison to previous related studies of this type at the world level. It indicates that at present deforestation has come "to a gross rate significantly lower than was registered in the previous FAO report, corresponding to the 1990-1995 period"; and adds "possibly, since the 1980's decade, gross deforestation has decreased at the global level". For this reason, it would seem that, after all, the situation would appear to be improving! However, when analyzing the study carefully, it becomes obvious that the situation did not improve and the conclusions reached by the report are a result of the manipulation of information in distinct ways:

1) Changes to the definition of forests
2) Lack of inclusion of commercial cutting as deforestation
3) Inclusion of plantation areas as "forests", according to FAO's classic definition
4) Inclusion of many types of cultivated plantations as forests - for example, rubber

Intentionally or not, the FAO is spreading incorrect messages. The organization suggests that deforestation is decreasing, when its own data indicates the opposite. It is saying to governments that they can cut all their forests, which should just be considered "temporary areas without trees".

The world needs to know the truth concerning the real state of the forests. More than just an academic exercise, the report should be considered a tool for the adoption and implementation of policies that could assure the protection of endangered forests. Unfortunately, FAO has lost the opportunity of presenting that tool to the world.
In fact, the FAO’s report - Forest Resource Assessment (FRA 2000) - seems to willfully want to confuse rather than clarify the real situation of the world’s forests. Moreover, everything indicates that for a long time to come we will not have reliable data, considering the high cost of producing a complete and well-documented study. Discussing the shortage of resources, FAO uses sampling methods and official data collection from countries that vary a lot in scale, date, and the quality of the information.

I analyzed the data issued by FAO, as soon as they were published on the Internet, in January 2001. The conclusion is that no one can be sure of the deforestation rates, not only because FAO considers large arboreal monocultures (eucalyptus, pine, teak, acacia, havea...) as forests; also principally because it has altered the previous criterion from 20% of arboreal covering (dossal) to 10% in non-tropical industrialized countries, concluding then that the "rich" ones are preserving and increasing their forests and the "poor" are destroying theirs.

FAO used the new criteria to re-evaluate the 1990 data, defining the variation of forest cover for the 1990-2000 period according to the same criteria and sources. The presented result indicates a decrease in world deforestation rates from 13 to 9 billion hectares/ year, between the 1980's and 1990's. As the methods were different in 1980, the comparison becomes impossible!!

To identify the deforestation rates of tropical forests, I decreased the total forest area of each country, corresponding to the arboreal cultivated areas presented by FAO, in separate tables. The data from 1990's cultivated areas were extracted from the FRA 1990 report. Regarding the total amount of existing forests in the world, as presented by FAO for 2000 (3.86 billion hectares), the cultivated areas correspond to less than 5%. Only in Asia do the cultivated areas have a larger mass, occupying 21% of the total amount.

Considering only the tropical countries (between the Tropics of Cancer and Capricorn) the deforestation rate, including cultivated areas, during 1990-2000 period would be 12 million ha /year. Excluding the cultivated areas, the rate increases to 16 million ha /year.

When the data are analyzed by country, the divergences become even stronger. The case of India is the most amazing; if considering the cultivated areas (and India has the world's largest eucalyptus-planted area), the deforestation rate would be none;
excluding the cultivated areas, India would appear to be the second most deforested country, at a rate of 1.9 million ha/year. The leading country in deforestation in the 1990-2000 period was Brazil - with or without cultivated areas (there was no great increase in planted areas during this period, according to FAO) - with a deforestation average of 2.23 million ha/year. Indonesia is third, after India, with 1.7 million ha/year.

In spite of Brazil being the "champion" of deforestation, the situation in Asia is more critical. Maintaining the current rates of deforestation, India and Thailand will lose their natural forests completely in less than 20 years, Malaysia in 43 years and Indonesia (the country with the third largest area of tropical forest, after Brazil and the Democratic Republic of Congo) in 56 years. To completely exterminate the largest areas of tropical forest in the world would only take a little more than two centuries.

If we consider that the tendency is to increase the speed of deforestation, as long as highways and occupation advance, and that FAO is probably underestimating the real rates of deforestation around the world, the situation does seem to be out of control. The latest data from the National Institute of Spatial Research shows that in the Amazonian area, where most deforestation occurs, the situation is becoming even worse.

**Hidden causes of deforestation and forest degradation**

*World Rainforest Movement*

Forests constitute one of the most valuable ecosystems in the world. They contain more than sixty percent of the planet's biodiversity that, besides its intrinsic value, possesses other multiple social and economic values - from the important ecological functions of the forests in terms of protection of the soil and hydro-geographical basins, to the monetary and non-monetary value of the numerous products that can be extracted. For the indigenous and local people that depend on them, the forest provides their sustenance, supplying them with edible and curative plants, wild animal meat, fruit, honey, refuge, fire and several other services and functions, around which they base their cultural and spiritual values. On a world scale, forests play a crucial role in climate regularization and represent one of the main carbon sinks of the planet. Their survival, therefore, is vital to impede the temperature increases due to the greenhouse effect.

Forests have disappeared in many parts of the world, and the indices of world deforestation reached up to fifteen million hectares a year, regarding only tropical forests, during the 1980's decade. Worldwide, deforestation accelerated during the 1990's decade. For this reason, it is important to remark that the deforestation indices tend to be obscured due to the existing ambiguity around the true definition of forests.
The last definition of the Food and Agriculture Organization (FAO) - the United Nations organization formally responsible for the forests - is so broad that, in fact, most of the green urban surfaces can be considered large forest ecosystems. Rarely is the substitution of valuable ecosystems of primitive forests for cultivated plantations of monocultures taken into account - in many cases of exotic arboreal species such as the eucalyptus or pine - as an inadequate exchange for biologically poor forests. A great part of Europe, for instance, lost most of its primitive forests during the 19th century. Despite this, the latest FAO reports establish with enthusiasm that there is an increase in temperate forests in that area. However, a substantial part of that "forest" consists of biologically poor systems and lacks the 'soto-forest', the original forest structure, and most of the original species of birds, mammals, and reptiles. In reality, they resemble cultivated monoculture plantations more than true forests.

Direct causes of deforestation

Among the more important direct causes of deforestation are; 'clear-felling' - the cutting and transformation of forests into agricultural land and cattle breeding areas; urbanization and infrastructure construction; mining and petroleum exploration; acid rain and fires. Nevertheless, there is a tendency to accuse small migrating farmers, or the "poor people" of being the main cause for the loss of forests. The general tendency of small farmers is towards establishing settlements along roads that cross the forest, by cleaning up a portion of land and using it for subsistence production or small trading. In tropical forests, these practices end up provoking rapid degradation of the soil, which is generally unable to resist such excessive agricultural practices. Consequently, in a few years the farmer is forced to move on and devastate another portion of the forest. The degraded agricultural soil is commonly used for a few more years for cattle breeding, which is equivalent to its death sentence, once the cattle eliminate the last remaining traces of fertility. The result is a patch of totally degraded land that may not be able to recover its original biomass for several years. It is a terrible mistake to believe that such unsustainable agricultural practices only happen in tropical countries. Many parts of North America and Western Europe were deforested using similar agricultural practices, provoking severe soil degradation and leading, in many cases, to the abandonment of farms by the farmers.

In other countries, the forestry practice of shallow cutting has been the major cause of forest loss. At the beginning of the nineties, Canada and Malaysia were famous
examples of countries in which timber companies mercilessly cut thousands of precious primitive forests. Here the historical perspective cannot be ignored.

Countries like Ireland and Scotland were practically covered in forests that were felled during the British Empire, almost totally to supply wood to the English sawmills. Nowadays, forest exploitation still continues, the most important and current threats happening in the forests of the Shield of Guyana, Central Africa, Eastern Siberia, and British Columbia.

Hidden causes of deforestation and forest degradation

During the last few decades, the forest crisis motivated the development of several international, regional and national initiatives, aimed at forest preservation, although many of them have not succeeded. Generally, the failures were due to certain limiting strategies that ignored the essential causes of deforestation and degradation, and the fact that they are multiple and interconnected. In some cases, they refer to major international economic phenomena, such as macroeconomic strategies that offer great incentives and short-term profits, instead of thinking about how to reach long-term sustainability.

Deeply embedded social structures are also important, since they provoke disparity in land ownership, as well as the discrimination of indigenous people, subsistence farmers, and poor people in general. There are various political factors involved, like the lack of participative democracy, military influence and rural exploitation by the urban elites. The excessive consumerism of high-income countries constitutes another of the main hidden causes of deforestation, while in other areas unrestrained industrialization tends to be a key factor in forest degradation, due to pollution and contamination from acid rain.

It is impossible to mention, in this context, all the important underlying causes of deforestation, due to their complexity. However, several examples can be presented to demonstrate how these causes can initially appear varied and misleading, though they are actually closely interrelated.

Forces that act from within unsustainable agriculture

According to FAO, ninety percent of global deforestation is provoked by unsustainable agricultural practices, while the cutting and planting of trees in forest exploitation play the most important role in the degradation process. No matter how controversial these figures are, unsustainable agriculture is doubtlessly one of the direct, primary causes of deforestation and degradation of the forests in many countries.
A simplistic approach to the problem could blame the "ignorance" of the farmers involved in this process, but it is undoubtedly more complex than this. Few decide voluntarily to abandon their birthplace, to go into the forest and to devastate it through conversion to agricultural land. National and international forces that act for different interests move them to behave in this way. In some countries, forests serve as escape valves, enabling people to avoid social revolutions. The concentration and distribution of power and land in too few hands creates a large mass of dispossessed people, a situation that can end in confrontation and social outburst. In order to avoid this, poor people are sometimes offered the possibility of free access to a parcel of forested land. This practice becomes possible through projects promoted by the government, for the cutting and supposed "development" of forests, or as a result of the activities of companies dedicated to forest exploration, mining, energy and other commercial pursuits. This example clearly exposes how deforestation results from the implementation of state policies - social and economical - that indirectly promote it. Poor farmers are simply the ones who are made to use the saws and set fire to the forests, whilst governments and large companies are realistically behind such actions.

**Consequences of long-term globalization**

Forests are frequently cut to open the way for roads needed by modern agriculture and large-scale cattle breeding, usually bound for the export market. For instance, many forests were transformed for cattle breeding in Central America, soy production in Brazil and wood to pulp production in Indonesia. In the first case, the process originated in the explosive growth of the fast food market, namely hamburgers, in the United States, a large market that demands a great amount of cheap, low-quality meat that is produced by countries close to the tropics. The result was Central America's widespread devastation. The subsidized, high technology system of meat production in Europe demands an ever-increasing provision of cereals to feed the cattle. Soy is one of the main inputs to this process and in Brazil - as well as other Southern countries - enormous forested areas were chopped down to ensure the economical maintenance of the European meat industry, through the provision of cheap cereals. A similar situation occurs in the paper industry, due to a constant increase in consumption, particularly in high-income countries, which rely on the availability of wood or cheaper wood pulp to feed the paper industry. For this reason, many forests in Indonesia have been devastated - and other parts of the world -
giving way to eucalyptus plantations that are destined to supply the market with increasing amounts of cheap raw materials. In the previous cases, it is obvious that these unsustainable systems of hamburger production in the United States, meat in Europe and paper in high-income countries, are essential causes of deforestation in Central America, Brazil and Indonesia.

Policies of agrarian reform and the disparities

The following example of Ecuador can be extended not only to most Amazonian countries, as well as others in the South, but also to more distant regions. At the beginning of the 1970's, there was a great migratory flow of farmers who penetrated into the Ecuadorian Amazon, one of the most well known forests in the world. The majority came from the Andes and from coastal areas, to escape the lack of availability of land, unemployment and land degradation in general. An Ecuadorian government program that included giving land titles to the immigrants, on portions from 45 to 50 hectares, actively encouraged the migration. Since farmers ran the risk of losing their rights to the land if they did not transform it into cultivated areas, or other "useful" land, deforestation was more-or-less obligatory. In the majority of cases, it was the combination of a desperate situation in their homeland, with strong legal and economical incentives, that led to people migrating to the forests. In Ecuador, the government pushed such incentives, even though they lacked any agrarian reform, or supported the systems of sustainable agriculture of the Andes and coastal areas. This was a deliberate policy to convince people to move into the forest, by using a public information campaign strategy that encouraged false expectations through the promise of land-title ownership, an act that generally aggrieved the rights of indigenous people.

In Ecuador, clearly, it was a series of causes that started the migratory process to the forest, provoking the widespread deforestation of the Amazonian area. Of the various causes, their official migration policy was probably the primary cause that led to the deforestation process carried out by immigrant farmers, though in reality the responsibility fell on the government.
Patterns of production and consumption

Among the numerous underlying causes of deforestation, one of the least understood relates to the relationship between deforestation and the production and consumption patterns of agricultural products. It is necessary to highlight that it is rarely the production of food by small farmers that causes mass deforestation, but the conversion of huge areas of forest to large-scale commercial cultivation and cattle raising. These commercial products, from coffee and meat to coca and soy, in many cases are produced exclusively for the export markets of the Organization for Economic Cooperation and Development (OECD). It is absurd to defend the production of these goods, destined only to satisfy the excessive consumption patterns of countries in the North, with the ‘food security’ argument, as some governments and international institutions are doing (including FAO itself).

Production and consumption patterns play an important role in deforestation, since they are the reason why so many, even the majority, of countries tend to centralize their production systems to supply export markets. In most cases, production for exportation is stimulated in order to compensate seriously shaky balances of trade, and/or to repay debts partly caused by the same trade imbalances. According to current free trade ideology, the standard remedy provided by financial institutions like the International Monetary Fund (IMF) is to increase exportation, instead of reducing importation. Meanwhile, the importation of luxury goods for the richest part of society, and weapons, tends to regulate the structural causes of trade imbalances, and the balance of payments, as much in the industrialized countries as in those of low income. One of the principal, deeper causes of deforestation is the non-recognition of this relationship between consumption patterns and macroeconomic problems, on behalf of macroeconomic forces like the Bretton Woods’ institutions.

A global problem with many actors

Deforestation and degradation happens as much in countries of the North as in the South, with the underlying causes originating from both, although to differing degrees of responsibility. Industrialized countries have not only reduced or degraded their own forests in the past, but they are still doing it, using large-scale clearfelling - as in many areas of Canada, United States, and Australia - or through simplification and therefore degradation - by reducing forests to a few species of commercial value, at the cost of
biodiversity - as is happening in Sweden, France and Finland. At the same time, the resulting problems of industrialization, such as acid rain, have a strong impact on forest degradation. Similar situations occur in the South, where some forests are being cut down primarily for unsustainable agriculture for export, or for monoculture plantations of trees and oleaginous palms, or still for cattle breeding - or they are being degraded as a result of selective timber harvesting activities, or more commercial species like mahogany.

The military role

Weapons importation lends an important weight to the socioeconomic situation, and therefore ecological reality, of many countries. Each dollar spent on weapons is a dollar less destined for education, health care, the development of appropriate technologies and sustainable development in general - and a dollar extra added to the negative side of the balance of payments. On the other hand, the exportation of arms is big business for many countries, especially those of the North. Naturally, war and violence represent an important direct and indirect threat to the forests. In some cases, military forces have direct interests in concessions for forest exploitation, and the production of commercial cash crops, such as coca. The military influence on government policies of many countries goes even deeper, though it is more covert. Often there are strategic considerations behind the colonization of forest areas. For the military, the inaccessibility aspect of the forests is a strategic issue. Forest trails become an important advantage. The presence of indigenous people and other isolated groups of society pose a strategic threat. The devastation of forests and incentives for people to migrate from the centre of the country to isolated forest areas serves their strategic purpose. Oil exploration and mining inside the country are strategically important, even if they attract investment by foreign companies, under conditions that allow the profits to practically leave the country. Indirectly, the dominance of strategic ideologies from the cold war is partly the reason why some global macro-institutions are so mercilessly oriented towards so-called 'free' trade. In spite of these obvious connections, it seems there is a strong taboo about the military influence in deforestation and other social and ecological problems. There are no clear figures and little research on the subject.
Looking to the future

The international community - at least inside the Intergovernmental Forum for the Forests (IFF), and the Commission for Sustainable Development - recognizes the need to identify the underlying causes of deforestation, with the objective of finding solutions and saving the remaining forests of the planet. The not-for-profit, non-government organizations that participated in this Forum offered their services to work in cooperation with governments and international organisms, in order to assist the identification process of major underlying causes of global deforestation, and to develop solutions. Such an offer was accepted and the process has already begun. Nonetheless, it is important to remain conscious that deforestation and environmental degradation are not "technical" themes. The forests are not disappearing just because people and their governments are ignorant, or because appropriate administration plans do not exist. The forests are disappearing because a series of interconnected national and international policies prepared the land for this to happen. Therefore, the solutions should be sought at this level.

Additionally, although it is necessary to identify the underlying causes and make changes to policies in order to contain the deforestation, it is crucial to involve organized society to ensure that such changes are actually applied - so that humanity as a whole, in conjunction with the inhabitants of forest areas, reap equal benefit. Obviously, this presents a substantial and difficult challenge, requiring a necessary degree of effort - but it is worth it, since it brings certain hope for the future.
PROPOSALS

INTERRUPTING THE CUTTING OF PRIMITIVE FORESTS

1. To declare primitive forest as sacred and not authorize any type of exploitation.
2. To create an intercontinental shrine of native forests to the south of parallel 40.
3. To create a worldwide belt of cultural and biological diversity at the parallel zero - Equatorial Shrine, including territories of Latin American, African, and Oceanic countries.
4. To profess a forest moratorium, only allowing trade of forest products originating from managed areas of secondary vegetation.

VOICES

"Trees are the primary and essential pillars of the planet's vitality: they are like antennas that catch the energy of the cosmos to give it to the Earth. Our preoccupation with a healthy life should begin by stimulating the cultivation, care, knowledge, respect, and love of trees. Deforestation, in other words the loss of trees, represents one of the most egoistic mistakes that men have committed throughout history."

"Our temples are the old forests, the Forest Cathedrals, that have developed for thousands of years and achieved a harmonic coexistence between the giant trees, smaller trees, bushes, lianas, epiphytes, ferns, mosses and herbs that cover the forest floor. The small animals, birds, frogs and lizards, the insects that pollinate the flowers, and the microscopic organisms that live in the soil, are all indispensable, enabling the life-cycles of the Chilean forest and the planet to develop harmoniously. Nothing more and nothing less. The pristine forests are perfection and the best expression of God on the Earth."

Malu Sierra, CHILE

"With respect for this open debate, we suspect that our proposal was already put forward. Nevertheless, we want it to be registered here: To demand that not a single native tree should be cut. What this means is that the sustainability of the forest is neither measured by the quantity of cut trees, nor based on the pretense that a degraded forest can recover after losing 60% of its basic area - through the
transformation of virgin forests into managed plantations."

"For us, with the disappearance of 70% of Argentina's forest mass, the only alternative is the creation of 'an international shrine of native forests to the south of parallel 40, 'Gondwana'."

Javier Rodriguez Brown, ARGENTINA

"In my opinion, until the opposite can be proved, sustainable management does not exist; and if it continues like this, forest exploitation should simply be interrupted. This seems to be the reasonable conclusion of this debate. Moreover, it should only be altered the day something appears to demonstrate this is wrong. Today the opposite is done. People explore in order to see how it could be afterwards. Which of the two attitudes is the correct one? The former would guarantee the preservation of the few native forests that remain untouched. The latter, though it has the intention of sustainable management cannot guarantee their survival. The political problem of how to obtain the interruption is another issue. It seems impossible in practice, but proposing anything else would hurt my conscience."

João Madeira, BRAZIL

"Forest management is still an irresponsible activity. If the answer to every intervention is not known, then sustainable management does not exist. It is in fact unsustainable management."

"We still don't have forest management; what is being practiced is an irresponsible exploitation of forest life-forms. This is enough to verify that control does not exist. The exploration licenses are issued after tremendously superficial analyses, without having an ecosystem-oriented view of the forest. Authorization is based only on wood volume, which is believed to be reasonable enough to allow for automatic replacement, without any follow-up of what actually happens later. What kind of certification is this, if we do not have enough knowledge?"

"I want to congratulate the questioning of certification. I believe in forest management, but not if it is similar to what is actually being practiced now."

Paulo Cézar Mendes Ramos, BRAZIL
"The interruption of the trade of forest products extracted from old-growth forests assists the need to stop the destruction of primary forests and, at the same time, settles the peace with the people that depend on the forest to survive. Primitive forests should be recognized as "sacred" as they shelter mysteries of the sustainability of life on the planet, that we will never understand, since we are a part of this mystery."

"I do not believe that the implementation of sustainable systems of management is a good strategy to interrupt global forest destruction, since the true idea of forest management is to confer sustainability on forest exploitation, but in fact the concept has been used to continue the felling of primitive forests."

André Vieira, BRAZIL

"It seems to me a little premature to define certain positions without discussing the implications thoroughly. For instance, André Vieira’s proposal of "professing a forest moratorium" and being against sustainable management systems"... I think it is more complicated. The misuse of certain instruments does not disqualify them. Besides, it is worth remembering that human presence in forests and the use of forest "assets" are historical. It is difficult to say what a "primitive forest" is, especially if we want to understand this concept as something exempt from human activity, because the problem is in the mode of appropriation and utilisation of those "goods".

Claudia Teixeira, BRAZIL

"One of our proposals is the creation of an "Intercontinental Shrine of Native Forests to the South of Parallel 40 - Gondwana." This proposal, supported by a growing number of non-government organizations around the world, demands the creation of definitive protection status for the more southern native forests of the planet. In addition, it keeps a direct connection with the "International Shrine of the Whales", created a few years ago in all seas to the South of Parallel 40. The objective of this International Natural Protected Area is to preserve the enormous biological wealth that still exists in these fragile ecosystems of the Southern Hemisphere, thereby allowing its perpetuation for future generations, despite the irrational overexploitation they were submitted to during the last century."

Alejandro Nebbia, ARGENTINA
"The 'world belt of cultural and biological diversity at Parallel 0 - the Equatorial Shrine' has as its' central objective the protection of cultural and biological wealth of the tropical regions of the earth. For this reason, non-profit organizations in Ecuador determined the range between Parallels 1 North and South as the focus of the campaign. The action strategy has already defined some of the first steps: 1) an extended summons to other non-profit organizations in the country (Ecuador), to present the draft document of the proposal; 2) soon afterwards, to publish and spread the information to organizations and governments of Parallel Zero countries - in America, Africa and Asia, and: 3) the organization of a world meeting, in Quito, during the solstice of 2002, when the movement should win international visibility."

"Other activities are being planned, such as: a contest for the creation of a logo, the participation of the students' union of Ecuador, and incentives to do research on the environmental and cultural importance that tropical countries represent regarding global stability."

Luis Felipe Cesar, BRAZIL

"We are highly motivated by the idea of declaring an Intercontinental Shrine of Forests at Parallel Zero. A work group is being formed at the moment. We believe that the idea of issuing the declaration of the forest shrine in Ecuador can count on the institutional support we need from several environmental organizations, and on the good will of the international community."

Carolina Mancheno, EQUADOR
WHAT IS SECONDARY CAN BE SUSCEPTIBLE TO SUSTAINABLE MANAGEMENT, or identifying secondary forests suitable for sustainable management???

1. To implement a policy on the trade of forest products, based on territorial planning, that increases the interconnection of natural areas.
2. To respect all native species inside forest systems without altering their composition, and eliminate forest production of fast-growing, exotic species - which seriously threatens biodiversity and promotes the use of insecticides and pesticides.
3. To implement a policy of progressive reforestation, as cultivated plantations, in areas that are in an impoverishment process.
4. To prohibit the use of pesticides in forests.
5. To deepen scientific knowledge and to recover the indigenous knowledge systems from native forest people, regarding the sustainable use of forests.
6. To promote the use of ecologically certified timber for public buildings, by establishing an agreement with public authorities on the use of certified wood in at least 50% of the constructions they directly or indirectly finance.
7. To surround the forest conservation units with outward concentric areas, in order to guarantee the development of sustainable human activities around protected areas.
8. To establish forests under participative management that will attend to local needs, in each group of cities with more than 250 thousand inhabitants.
9. To establish clear, protective measures for forest habitats and ecosystems.
Starting from the release of the document ‘PRINCIPLES AND CRITERIA FOR FOREST MANAGEMENT IN THE ATLANTIC FOREST’ by the Forest Stewardship Council (FSC) - several participants of the Internet Forum discussed the issue of forest sustainability. Following is the transcribed introduction of the FSC document and the participant’s comments. The varied colors help to differentiate the authors.

It is substantially accepted that forest resources and their related lands should be managed to supply the social, economical, ecological, cultural, and spiritual needs of present and future generations. The public’s growing understanding of forest destruction and degradation has led to consumers demanding that their timber purchases, and other forest products, should not contribute to that destruction, but instead can help to ensure the supply of forest resources for the future. In response to these demands, certification programs now proliferate in the timber trade market, either through third parties or self-certification.

The Forest FSC (Forest Stewardship Council), a council for forest management, is an international entity that approves the certifier organizations, in order to guarantee the authenticity of their declarations. The certification process begins as a voluntary initiative of forest operation owners, with the respective forest management body responsible for that area. They request the services of a certifier organization. The FSCs objective is to guarantee that the management of the world’s forests will be environmentally appropriate, socially favorable, and economically feasible. This is done through the establishment of a world pattern of Principles of Forest Management, a considerably recognized and respected methodology.

(Principles and Criteria for the Forest Management in the Atlantic forest - FSC)

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2 Forest Management – consists of the administration of forests, in order to obtain economical and social benefits, while respecting mechanisms for the environmental maintenance of ecosystems.
In “appropriate management of forest resources”, the words "management" and "resources" are linked to human activity. Unless we consider that humanity is only a small part of Nature and that the preservation of values is superior to the future of humanity; ‘sustainable development’ should mean 'searching for humanity's happiness, with respect for Nature and concern for future generations'. Any definition that forgets about humanity excludes any human activity, including any management or any consideration about resources."

Bruno Cinotti, FRANCE

"Sustainability is what can lead our forests in the direction of the primitive forests that we observe around us, by increasing carbon stocks and the size of areas for biological processes and biodiversity enhancement."

André Vieira, BRAZIL

"The use of pesticides destroys a great part of the fauna and flora associated with the forest. These products, mostly used in agriculture, cause persistent noxious effects, feeding production systems that are increasingly intensive and fragile.

"Timber was used throughout history but has been partly substituted by "modern" materials. Reestablishing its use in constructing public buildings would stimulate the wood industry and promote the use of an ecological resource."

"Natural parks express an idea of enclosed territories. Sustainable development requires the enlargement of conceptions to positively impact on adjacent territories."

Olivier Rank, FRANCE

"The forests, as with any other natural asset considered a resource, should be used according to the political consensus of the local community and not be dependent on national policies or legislators who don't even know where the trees are. In other words, decision-making processes and local development measures should include the social participation of the community."

Alejandro Nebbia, ARGENTINA
"When considering technical and environmental aspects, I believe, based on my professional experience and on studies of several types of forest ecosystems all over the world, that it is possible to produce wood in a way compatible with the maintenance of the essential processes of forest ecosystems, including the maintenance of their basic structure over long periods of time."

“We have enough theoretical and empirical knowledge to allow forest exploration in areas of high timber potential - and of low priority in terms of preservation - using selective harvest and rotations of average to long duration, taking extra care in the cutting and extraction activities, and trying to reduce the impact on the remaining vegetation, that includes younger individuals of the exploited species. We could still develop methods that combine some level of exploration with the recovery of degraded areas, or in secondary forests (already exploited, or rejected agricultural land), with the long-term objective of recovering, at least partially, the structural characteristics and dynamics of the forest."

Cláudio B. de A. Bohrer, BRAZIL

"We should be conscientious with regard to the use of the forests. Several aspects should be appraised or an evaluation commission should be created. In some areas the use of the forest is valid for the reproduction of pharmaceutical essences and foods for the use of a certain local community. However, the relationship forest x man is delicate, making it necessary to control resource use, a complex fact in many aspects. The Conservation Units systems have been directing and, in some ways, supporting sustainable use, or their use only for research, etc. The use of the forest should be supervised by people who know and study the system as a whole."

Ciro Croce, BRAZIL
ENCOURAGING A FOREST CULTURE

1. Recognize and assure the legal and customary rights of indigenous people and other local communities.

2. Create places for formal and non-formal training for the whole community, where politicians, engineers, technicians, professionals, academics, students, and rural producers can become qualified, in order to revalue the relationship that exists between society and nature, with the objective of learning how to live together in the forest.

3. Promote and articulate an international network of protected urban forests.

4. Broaden, through public opinion campaigns, the recognition of the forests’ importance.

5. Develop activities to reorient urban citizens to the forests.

6. Create conditions for the participatory administration of every forest type (urban, primitive, secondary...)

7. Increase the presence of conservation agents in protected areas, who can educate the population to have respect for the surrounding nature.

8. Stop financing projects or programs that disrespect international agreements and treaties for human and environmental rights.

9. Improve strategies and coalitions of "existing sustainability forces" inside and outside the Amazon and other primitive forests - forces that are present in all sectors - and to develop lobbying practices for forest conservation.

10. Produce thematic videos and shows, as channels to transmit the feeling of belonging to the forest.

11. Insert 'History of the Forests' into the school education program.

12. Promote art in the forest, using forest spaces for theatre, painting, dance, music, and many other artistic activities.

13. Create an Internet homepage dedicated to the forest theme, integrated into the website of the Alliance.

14. Give continuity to the discussion process of the forest theme, through the continuous updating and ripening of the Proposals Notebook, and establishing a permanent electronic forum.

15. Promote the renewal of a political class through a campaign for the "responsible vote" (Amazonia).
"The forest's role is changing quickly due to the pressure of a world which is becoming increasingly urbanized. Once considered the font of life, they are now places just to refresh the mind and body. How can that role be given back its correct dimension?"

"The objectives for the forests cannot be defined without the participation of the local community. After all, these citizens are the most capable people to express their needs for and with the forest."

Olivier Rank, FRANCE

"The forests, as with any other natural asset considered a resource, should be used according to the political consensus of the local community and not be dependent on national policies or legislators who don't even know where the trees are. In other words, decision-making processes and local development measures should include the social participation of the community.

Alejandro Nebbia, ARGENTINA

"The main actors in solving this crisis are the forest people themselves and the communities that depend on the forest for their survival, people who have crucial knowledge of how to conserve and use the forest in a sustainable way. Governments, with international and non-profit organizations need to work with these people, by supporting their efforts and creating an appropriate socioeconomic and political environment, so that they can continue to develop their lifestyles, determined by themselves, and therefore ensuring the protection of the forests."

Document issued by NGOs and OPIS present at UNFF 1

"I was born in a green territory - emeralds, and it is my will to return what is being usurped... I want to see my people growing and knowing that they are rich for what they have - their natural wealth - and for who they are - cheerful people."

Carolina Mancheno, EQUADOR
"Inside the Amazonian reality, the human factor should be at the centre of the self-sustainability ideal. There is an urgent need to support these abandoned communities which survive in the forest, after the destruction of the rubber cycle."

"The key to all this is to find a new way to inject life into new self-sufficiency cells and regenerate Gaia's weakened organism, after so many centuries of devastation. Otherwise, there will be almost nothing left to be discussed. So, let's put our hands to work"

Alex Polari, BRAZIL

"We believe that a safe route to penetrate to the superior values of human beings is through the beauty - by presenting Nature to people in all Her beauty."

"How can we do this? Starting with ourselves, by contemplating Her beauty and being transported by Her dynamics. She moves us and I do not mean just the aesthetic beauty, but of that which shows creation just as it truly is."

"I share this belief with you because the technique is something that is at hand: but in the end, few are the ones that ascend. I think that in this millennium, the successful projects will have a quota of inspiration and will be simple. Often the technique or technicians complicate things to display power or territory, but the projects should be simple enough to be truly participatory. People brighten when they fully understand and if this completes in each person an inner understanding: then there will be a sensation that can be translated as - "now I understand!"

Carlos Fuenzalida, CHILE

"The question is not to reach only sustained development but a sustained society. We need to build a new paradigm to guarantee the future of the Earth. It is imperative to re-educate humanity. Without this, none of the presented proposals can be achieved."

"And if we had to choose...
And if, in order that the planet survive,
Should we let ourselves die?
And then what? "

Isabel de Andrade Pinto, BRAZIL
NEW ECONOMICAL PARADIGMS

1. Move forward towards an equitable division of economic benefits, valuing all forestry workers, and guaranteeing a greater balance in wealth distribution, in order to create a sustainable forestry sector.
2. Not trade the forests as carbon sinks (‘carbon credits’) to justify continuous excessive contamination, as developed countries are provoking.
3. Discuss on equal terms, the solutions for problems between developed countries of the north and the countries of the south, accepting the environmental and moral debts of the former to the latter.
4. Not allow the forests to be used as a currency for exchange, by formulating policy mechanisms for clean development.
5. Reorganize the entire economy according to humanistic and ecological principles.
6. Reevaluate and reduce the foreign debts of developing countries, due to their unfair and illegal character.
7. Not accept any proposal for exchanging monetary debts for certificates to pollution rights, regarding creditor countries.
8. Internalize the environmental 'hidden' costs of (inter) national accounts.
9. Consider the value of ecological activities that are today considered a financial liability.
10. Create an ecological-value reserve system to serve as a 'new world' monetary economic standard. (i.e. Liquid Crystal).
11. Collect a tax ('Tobin Tax') on emissions of carbon outside national borders.
12. Create a "Seal of Forest Products Participation" to be used on consumer products, identifying the forest origins of plastic products, gasoline, timber, furniture and coal, etc.
13. Reject the use of our country and our soil, as a carbon drain (Argentina).
14. Chile and Argentina must be involved ('at the table') in decision-making processes of 'clean development' mechanisms.
15. Prohibit the entrance of large multinational companies with production projects that destroy our natural assets (Argentina).
16. Improve the Law of Access to Genetic Resources (Brazil).
17. Provide incentives to the extractive agro-forestry sector (Brazil).
"To consider ecological activities that are today considered a financial liability. This is the subject that can touch the heart and pockets of the developed countries and take them towards a dialogue with the countries that are still rich in this aspect."

Alex Polari, AMAZONIA.

"...To speak of sustainability does not mean to only have the good intention of maintaining the primitive forests without changing our thoughts, behavior and values."

"I am also concerned when we talk of maintaining the carbon stocks of the planet, but we continue using the car, without the urgent search for other forms of energy. Like a Mexican adage says: "Between the statement and the fact there is a wide gap."

Rosângela Azevedo Corrêa, BRAZIL.

"Timber is only a minimal aspect of the forest. The values of the forest cannot be appropriately expressed in monetary terms. For this reason, the methods of assessment should take into consideration the cultural, spiritual and social benefits of the forests and the result of that holistic assessment should form the basis of all political decisions."

"However, any effort motivated towards forest conservation and their sustainable use can be annulled by current globalization trends, in which trade has been converted to one of the primary threats to this effort. The potential impacts of trade on the integrity of forests and the rights of forest people should be urgently identified and properly approached."

"To put into practice several of the solutions to the current forest crisis, it is crucial to supply sufficient financial resources. It is essential that there is collaboration between the North and the South in order to make these resources available."

Document issued by NGOs and OPIs present at UNFF 1
1. To recognize, help and assure the legal and customary rights of indigenous people and other local communities; to maintain the proscription of the World Bank about financing the cutting of humid tropical primitive forests and extend it to every type of primitive forest; and not give support to projects and programs that could provoke damage to the forests;

2. To not finance projects or programs that oppose international agreements and treaties for human and environmental rights; to establish clear protection guide-lines for forest habitats and ecosystems; and guarantee the taking of informed decisions, marked by their inclusive, effective, transparent and participatory nature;

3. To establish effective mechanisms for the participation of local communities and other Principal Groups in National Programs for Forests, Biodiversity Action Plans and other related projects supported by the Bank, like PROFOR; and to include clear and obligatory operational rules to be followed by Bank personnel, with the objective of assuring that loans to non-forest sectors are not harmful to the forests and their inhabitants;

4. To state clearly the minimum requirements that subcontractors and executives should accomplish, before the approval of such loans that may affect the forests and local communities that depend on them;

5. To recognize the controversy related to the concept and practice of establishing tree plantations purely as carbon sinks;

6. To adopt a precautionary focus with respect to the planting of carbon-sink trees and not finance such projects in the face of an non-existence of guarantees or social and environmental agreements;

7. To explain essential concepts and procedures [e.g; zoning of critical habitats and other forest areas of social and conservation value]
Ten Priority Action Proposals

After many years work, the Intergovernmental Panel for Forests (IPF) adopted, in 1997, a series of Action Proposals to solve the forest crisis. These proposals are still current, but it is obvious that the action is missing. A new United Nations organ - the Intergovernmental Forum for Forests (IFF) - was subsequently created with the mandate of putting these proposals into practice. However, its work began and finished with few results.

This work is still continuing, in the UN Forum for Forests, though it appears that few things have changed. In this context, representatives of NGOs and indigenous peoples’ organizations (IPOs) who attended the first meeting of the new group, in June 2001, insisted on the need to put the existing commitments into practice. They prepared a list of ten IPF action proposals that would be the most appropriate to start solving the forest crisis, and how they could be put into practice. Here are the most relevant IPF Action Proposals:

1. To encourage the countries who, in exercising their national autonomy and in agreement with their specific situation and their national legislation, could proceed to develop and execute, the surveillance and evaluation of national forest programs - that would be comprised of a wide variety of criteria for the planning of sustainable forestry systems - considering the following elements:
   - compatibility with local policies and strategies, plus national and regional ones, and when reasonable with international agreements;
   - participation mechanisms in which the various interested parties could intervene;
   - total recognition and respect of the customary and traditional rights of certain groups, amongst them all indigenous people and local communities;
   - a regime for securing earth stewardship;
   - integrated criteria, being inter-sectorial and interactive;
   - methods of ecosystem protection that integrate biological diversity conservation and the sustainable use of biological resources, and an adequate provisioning and appraisal of forest products and services (IPF, Proposal 17-a);
2. To encourage these countries to establish effective mechanisms and strategies of national coordination between all interested parties, on the basis of creating principles of consensus, in order to promote national forest programs (IPF, Proposal 17-h);

3. To formulate and apply, using an open and participatory process, national strategies to confront the basic causes of deforestation, and following this, to define normative objectives relating to national forest cover, as contributions to national forest programs (IPF, Proposal 29-a);

4. To formulate policies that guarantee appropriate land reform and tenure for local communities and indigenous people, and fair policies that distribute in a just and equal manner the benefits derived from the forests (IPF, Proposal 29-c);

5. To provide appropriate, reliable and precise information about the underlying causes of deforestation and degradation, when necessary, as well as essential information about the multiple functions of the forests; enabling greater public understanding of the problems, for the adoption of pertinent decisions (IPF, Proposal 30-a);

6. To urge these countries, when executing their forest programs, to adopt measures for the recovery and protection of traditional knowledge relating to the forest - taking into consideration the integrity of cultural survival of the people whose lives depend on the forests - as a fundamental pre-condition for the protection and effective rehabilitation of traditional knowledge systems (IPF, Proposal 40-d);

7. To solicit the help of competent UN organizations, international finance institutions, other international organizations and the donor community, to collaborate with developing countries, when considering national forest programs - in order to determine the real needs of those countries regarding sustainable forestry; by calculating the necessary resources to finance such activities destined to meet those needs, and locating the resources that these countries could utilize to achieve such objectives, including the AOD (IPF, Proposal 67-CMI);

8. To encourage countries to start consulting with all interested parties in formulating national, regional and local plans, in order to determine the wide range of benefits that forests give to society, fully considering an ecosystem focus (IPF, Proposal 89-h);
9. To encourage countries, in collaboration with international organizations, to use available methods to improve the estimated value of all forest products and services, in order to adopt well-informed decisions about the consequences of other proposals - of forest programs and land-usage plans; and to consider that the wide range of benefits offered by forests is not properly covered by current evaluation methodology; and that economical assessment cannot be a substitute for the political decision-making process, that involves the consideration of many environmental, socio-economic, ethical, cultural and religious factors (IPF, Proposal 104-a);

10. To urge that countries and competent international organizations study the social, environmental and economical effects of trade measures related to forest products and services (IPF, Proposed 128-a).
Regional ecosystems do not have an exact, but a diffuse physical limit, and each one of them is permanently affecting and influencing, and is influenced by, others. As part of the biosphere, forest ecosystems accomplish a unique and irreplaceable function. The alterations they suffer include: - a reduction in their natural extension; genetic erosion resulting from shallow cut techniques and the introduction of commercial varieties and transgenic cultures, amongst others. All these factors seriously affect their load capacity and role in the ecosphere. There will be less retention of carbon, and a diminished biodiversity, less able to generate the necessary information for recovering degraded areas, or for the ecological resettlement of lands affected by fires and other natural phenomena. The forest, as a biodiversity reserve, is nature's "shock absorber", an area that protects ecosystems from human interventions, or in face of natural planetary climatic variations, functions as an area of influence on global climates - it can never be substituted by a green mass of organized cultivated areas, either for agriculture or monoculture plantations of exotic trees. Its' ecosystem function is deeply linked to the "environmental services" that it provides and to its' capacity to contribute natural resources to the productive systems that it shelters - being a form of savings, for the rubber collectors or nut harvesters in Brazil, or the subsistence savings of native peoples and recent colonists. Especially, as a 'place of life', the forest is a space that gives to humanity an abundance of information, products, environmental services and inspiration.

These are exactly the savings, on a small scale, available to new users and colonists learning the process of adaptation to these ecosystems, without radically transforming them, which articulate us to 'fair' trade. They represent the wealth of forest tribes, many of whom are still self-governing and isolated - especially the ones that are articulated with the production of surplus cocoa, coffee, cassava, various fruits, curative herbs, trees and plant resins, vegetable fibres, etc - and make forests relevant in systems of fair trade.

Such an example, to demonstrate how fair trade relates to the forest, as small-scale savings, without destroying the terrain - in contrast to the option of market mega-interventions - is the "blood of Drago". A curative product common in forest areas of Peru and the Amazon, this product has been used in traditional medicine for centuries to
heal ulcers, inflammation of the tonsils, and even for superficial wounds and acne. It has always been readily accessible at reasonable prices, due to multiple transport mechanisms that characterize the popular local economy. Large pharmaceutical laboratories have not yet monopolized its commercialization. On the other hand, the famous "Cat’s Claw", scientifically named ‘Uncaria tormentosa’, has gained fame around the world.

Multi-national laboratories have used a net effect, creating virtual devastation in many areas of accessible forest, simply to meet the needs of commercial trade markets. This implies that large-scale commercialization does not impose a heavy demand on fragile systems whose regeneration capacity is slow, and fails to recognize how restrictive this is to the ‘market’, and its pernicious effect or destructive nature. On the contrary, the excessive demand and the true reaction of the forest to such systems, articulated to production without ecological restrictions, is the deterioration and eventual extinction of biodiversity, the source of our well-being and health.

For this reason, fair trade, when referring to forest areas, should be particularly careful to investigate current and potential long-lasting effects when creating trade networks for forest products, and not emphasize forest degradation. It should especially aim to strengthen local forest-based economies, by making use only of the product surpluses that forest ecosystems and local communities can generate based on their technological abilities, in accordance with the load capacity of these ecosystems.
It is necessary to reorganize the entire economy according to ecological humanistic principles. In this way, equity between countries could be achieved through cooperation on projects in which the external debts, especially of the developing countries, would be recounted (due to the unfair and illegal character, according to national and international rights; Pinaud, 1992). No proposal for trading monetary debts for certificates in pollution rights should be accepted, when referring to creditor countries. The monetary economy should serve ecology and not the opposite, otherwise ecology will lose and consequently, so will the people.

All types of environmental costs should be internalized in (inter) national accounts, and clauses about the evaluation of environmental impacts and ecological security should rule the financing contracts in social development. What is now considered a financial liability could be regarded as an ecological asset if the country in question could preserve life’s biodiversity in valuable natural reserves (of forests, in this case, but also people), by implementing cooperative governmental policies for social development (especially in health and education), in order to stimulate new jobs and the protection of natural resources (the atmosphere, oceans, forests and sentient beings in general).

The immediate, direct link between forests and energy is in the use of wood for combustion. Wood is still a very substantial resource used for cooking and heating in many areas of the world. The agricultural crisis in several countries of Africa has led the small farmers to abandon their lands, which has contributed to the fast growth of cities. Fuel is frequently brought to the city in the form of coal, a very inefficient use of wood, after being transported over long distances (which consumes a lot of energy too...)

Even in a country like France, wood is a substantial source of energy, because many houses (probably about 20%) still have firewood stoves and use wood as a secondary
source of heating. Generally, wood has been used in various ways, as well as (through conversion to) other forms of biomass. Urban heating and thermo-electric generation plants, for instance, function at the cost of forests or wood surpluses. Austria has a significant number of biomass generating plants.

Finally, wood is an important source of energy in the context of the Climate Change debate, as the cycle of carbon (CO$_2$) liberated in the atmosphere through combustion, is absorbed and stored by the forests.

**Forests, women and the economy**

Manon Boulianne

In response to this subject, what immediately comes to mind is the time women have to spend in travel every day, journeying across countryside, in several countries of the south, in order to obtain the necessary wood for the preparation of meals for which they are responsible. The more the forests disappear and the more the forests are destroyed, the larger and heavier becomes the task. Women also accomplish the work of gathering different products of the forest, such as food, fruits, or curative plants, since time immemorial.

**A good question!**

Cécile Sabourin, Canada

I can say that during the workshop on 'Women and Economy' this theme was not discussed. Women are busy and concerned with other things. This does not mean that the forest is not part of their lives, but that the theme was just out of the debate. On the other hand, we discussed forest production, and its "valuation" through GDP (gross domestic product). What better example of abnormalities in the methodologies of national accountability than the image of dead trees translated into dollars, considering what a beautiful forest is truly worth. The natural wealth is not considered, unless it is destroyed first and successfully used. In this sense, it would be worthwhile to develop the habit of "giving value" (mise en valeur) with concern for the "initial capital", in which case a beautiful forest would bring health and collective well being.
The Quebec forest (Canada) is an exploited natural resource, now extracted to exhaustion - according to the most conscious people. The history of that destruction is known, but nobody is adequately "smartening up" so that some lessons could be learned.

When we think about the exploration process, regarding women, what soon comes to mind is that in the beginning of the century, and probably during the last century, the women became "widows" due to the forest industry. When the men left to cut down the most distant forests, the women stayed with the children, frequently being busy with farm tasks, and responsible for the daily routine during the long months of winter. That generation of strong women maintained life in the areas where forests were harvested. Their strength, courage - and solitude - has been retold and sung by our artists. This work, however, did not have any "economical value".

The forest that everybody fights to conserve is, at present, an object of political debate in which interests and points-of-view from different groups are expressed in quite uneven ways.

For me, daily for almost twenty years, the forest has been present at bedtime in such an evident and immediate way, that sometimes I am not even conscious of it. It is totally integrated into my life. However, there are moments during the day in which the forest regains all its importance: when going and coming from work. The 15 kilometres that I drive in the middle of a rural environment, where the fields take turns with the forest, are moments in which I feel very consciously just how they are essential to my well-being. They form a screen between the external world and the one of intimacy. Does a subway ride or driving in the city produce the same effect? Who knows? Parks would probably be, from that point of view, essential to urban life.
TRANSVERSALITY

PROPOSALS OF THE AMAZONIAN YOUTH - 'Guardians of the Forest'

"The most recent deforestation rates in the Amazon show an increase from 17.259 km², from August 1998 to August 1999, to 19.832 km² (14.9% greater) in the period until August 2000.

Brazil has nothing less than 18% of the forest biomass of the planet (one third is in South America), with the additional advantage of including 172 m³ wood per hectare, while the world average is 126 m³ / hectare, and 128 tons of biomass per hectare, while the world average is of 92 tons. Also we have 3.2 hectares of forest per inhabitant, while the world average is 0.6 hectare/person.

A research made by the Institute of Religious Studies (ISER) and the World Wildlife Fund (WWF), revealed that forest preservation is the priority for Amazonians." (based on an article "Wasted Privilege" - Washington Novaes)

As part of the activities of the Forest Network in Amazonia, on October 8, 2001 we celebrated a gathering of 23 students of the Escola Cruzeiro do Céu, in Céu of Mapiá, Amazon state, Brazil. The students listed priority actions for forest conservation:

1. To reforest the already devastated areas, with emphasis on agro-forestry plantations, fruit-tree species, and the recovery of 'Mata ciliar' of igarapés.
2. To preserve existing primitive forests and everything around and relating to them.
3. To understand the forest, by organizing hikes with the woodsmen of the area, who have the traditional and practical knowledge of the forest and their inhabitants.
4. To know how to use forests without destroying them.
5. To create the 'Guardians of the Forest'; forming a 'youths of all ages' group to implement the above proposals, starting with environmental education. Public institutions, like Ibama and the municipality of Pauini, will be contacted, besides the woodsmen, to begin training this group. The Guardians also want to know other groups, especially those that are active in the forest borders of the North (Canada and Russia) and Patagonia."
Protection of 4,000 hectares of forests, high altitude fields, and wellsprings - in Matutu, Serra da Mantiqueira, Brazil

The Matutu Reservation Community is a group of 150 people, almost all of urban origin, who live in a communitarian way. Their main source of income is from the sale of handicrafts. This group created the Matutu Foundation, which is proprietor of 4,000 hectares of land in a mountain ecosystem of the Brazilian Atlantic forest biome. The Foundation develops activities for the protection of this ecosystem, which is composed of altitude fields and high altitude tropical forests (1,500-2,000m sea level), and has the outstanding presence of lamp and Araucaria (Araucaria angustifolia). The protection is carried out by a prevention and fire-combat brigade, reforestation with Araucarias, daily surveillance of motorcycle traffic, and participation in educational campaigns held in neighbouring towns.

Matutu Reservation’s Community has established a new model of land occupation in mountain areas that makes human presence have a positive impact on the ecosystem. At the same time, reforestation activities are carried out with autochthonous species, like the Araucaria. Matutu Foundation’s experience is a direct example of a well-organized, environmentally sustainable community, which shows a tangible option for the occupation of mountain ecosystems - by making possible a high-quality existence, coupled with reduced consumption patterns and low pressure on their environmental resources.

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Voices of the Forest' Collection on Environmental Education - Chile

This collection of educational guides for professionals, Voices of the Forest, is part of an environmental education program developed by non-profit organization (NGO) "Defensores del Bosque Chileno" (Defenders of Chilean Forests). Books for libraries, practical manuals for the reproduction of native species, colouring books for children, didactic posters, and tapes of music and sounds of the Chilean forest, are the materials that form part of this Program, whose main motivation is the protection of Chilean forests.

To mark this project, hundreds of teachers are being qualified. Thousands of children and young people have experienced ecological hikes to native forests; and the communities developed practical projects for reforestation and environmental recovery, besides their participation in activities, exhibitions and other public events.

The initiative also integrates the international effort for the creation of the 'Intercontinental Shrine of Native Forests, South of Parallel 40 - Gondwana'.

Voices of the Forest is an initiative that regains the value of forests for societies, which have mostly destroyed their own forests and, at the same time, has the important task of stopping the cutting of priceless remnants of primitive forest. The broad theme and character of the collection contributes to inserting the environmental theme into distinct school subjects and therefore educates young people to develop a new mentality.

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Model Pilot Plan: Sustainable Forest Development - Mexico

The state of Quintana Roo, in Mexico, is an organization of 16 towns that are cultivating 360,000 hectares of humid subtropical forest to benefit their members, while at the same time preserving the forest. Of the whole forest area, 150,000 hectares are set aside fundamentally for the permanent production of cedar and mahogany. After negotiations with timber companies, the participants - 3,000 in 1991 - began to work the tree trunks, value-adding to the primary product, which then gives more profit to the communities than through the simple extraction of raw materials (wood).
**EXPERIENCES**

Before the management of the forest, local communities did not obtain any benefit from the cutting operations. Now, the participants work to maintain the natural forest, cutting only in 25 year cycles, which allows native species to be regenerated; and they increase the cedar and mahogany proportion by using enriched sowing. After eight years, the communities are already observing a good restoration of the natural forest, together with an increase in profits, and the incentive to continue on with their good work.

*Themes and Problems of the Forest* – an educational and editorial project, coordinated by the ‘Lemu Project’ and financed by the Ministry of Education of Argentina

This book is dedicated to the Andean and Patagonian forests, as seen by an expedition member at the beginning of the 20th century, that emphasizes the actions of cattle and the effects of fire in the forests, as well as biological competition. The proposed themes are: the forest understood as a complex ecosystem; forests and their relationship with life on earth; how the Andean and Patagonian forests were formed; threats to forest biodiversity; the current situation of the world’s forests; the concept of forest borders; and, proposals for the present and future of the forests.

The objective is to show how the forest was inhabited at the beginning of 20th century, when the European settlers had still not populated the area. The glance back through history is useful to understand the process of forest occupation and how this human relationship with the forest has developed through the generations. The book also presents alternatives for forest use through responsible forestry mechanisms.

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*Lemu Project*

The Lemu Project is an initiative created in Epuyen Valley in 1990, and its prime objective is the protection and revaluation of the Andean and Patagonian native forests. The actions accomplished to reach that aim are divided into four main branches:
EXPERIENCES

1. Awareness raising of the population, through use of the didactic material - Stories for children, texts for educators, manuals, instructive games, separates for television, musical tapes, reports, calendars, pamphlets, guides, and other documents, etc.
2. The training of students and academics of all rural schools of the cordilleran bio-region, with an intense academic program that includes the forest theme, starting from a point-of-view that integrates all the social, ecological and economical aspects of the Patagonian bio-region.
3. Stimulating incentives and promotions to create native tree nurseries in all Patagonian educational establishments.
4. Working with forest management planning and regional laws for the creation of new protected natural areas and the enlargement of already existing ones, through the interconnection of biological corridors, as intended in the plan for the Intercontinental Shrine of Forests South of Parallel 40.

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Capacity Building Training Platform - "Native forests and Us"

This proposal was accomplished in 1996 as a practical experience after the publication of the book Learn with the Forest - a text for teachers.

As part of the same training platform, several activities took place; such as the planting of 100 native trees in the streets of El Bolsón and Lago Puelo, and different knowledge-acquisition trips to the forests; in the Lago Puelo National Park and in the Provincial ‘La Casada Escondida’ reservation (the Hidden Marriage), in Mallin Ahogado. Seeds of native trees were used in the nursery of Rio Preto municipal district. A group of art teachers and plastic artists participated in the project to represent what was experienced.

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EXPERIENCES

Urban forests

The cities of Taubaté (SP) and Piraí (RJ) possess, respectively, the Monteiro Lobato Park and the Amador Forest Park, both involved in environmental education and forest preservation activities. Besides this, São Paulo has the Trianon Park, in the middle of Paulista Avenue. Rio de Janeiro city shelters the largest urban forest of the world, located in the Tijuca National Park and, in Volta Redonda city, to the south of Rio de Janeiro State, there is the Cicuta Forest, considered a Biosphere Reservation by Unesco. In Manaus (AM), the National Institute of Amazonian Research (INPA) opened to the public a 'Forest of Science' (Bosque da Ciencia), to be used in environmental education and to serve as leisure space for the local population and tourists. In Belém (Pará) the Escola Bosque (Forest School) develops its school program totally linked to the surrounding forest.

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Communities and Forests

In Santarém (Pará) the 'Health and Happiness' project stimulates and rescues the local community’s participation in forest management. At Chico Mendes Reservation, in Acre, rubber farmers and technicians are searching for alternatives for the sustainable extraction of non-timber forest products (NTFPs). In Amapá State, the public office is stimulating the development of participative projects in forest management. The network of Environmental Monitors of the Ribeira Valley (REMA), in São Paulo, looks for creative economic alternatives for the area, mainly through eco-tourism. The Matutu Foundation, in the Serra da Mantiqueira mountain range, in Minas Gerais, protects an extensive area of forests and altitude fields and has a voluntary fire-combat brigade. In the Céu de Mapiá (Amazon), 600 people live in permanent search of sustainability, inside a forest of more than 400 thousand hectares.

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**Strategies for Forests’ Protection**

Ancient Forest International (AFI) is an American NGO that purchases land in South America and other parts of the world, in order to protect primitive forests. The purchase of the land happens at the same time as the development of economical long-term support projects in the adjacent communities, guaranteeing the participation of local residents in forest protection. In the same way, a community can develop an innovative strategy to reestablish natural environments and to profit from that work, but if the existing wilderness is not protected, the initiative will hardly have success.

The purchase of forests for biomass and biodiversity conservation is an effective instrument - an "application of dollars to conservation". The creation of networks of private reserves provokes a moral conservation effect that spreads out to the adjacent communities, increasing the existing efforts already launched by land-owners and communities, in the sense of wisely caring for their land.

In terms of acquisitions in Chile and Ecuador, it is well known that foreigners who buy land in an area can lead to resentment, as well as an elevation of land prices. Therefore, AFI’s efforts are focused on creating partnerships with local organizations. The AFI considers that after a decade leading the world in consumption, pollution, and threats to the ecosystems, the American people should assume some responsibility and take the initiative to help other nations to protect their natural treasures.

*Contact: Ancient Forest International*

**Adopt a tree in the ‘Tierra del Fuego’ region**

South-American ecologists launched a campaign to buy the forests of Tierra del Fuego, at the border of Chile and Argentina, a property owned by Trillium Corp., based in Bellingham, USA. The non-profit organization ‘Defenders of Chilean Forests,’ from Chile and ‘Finis Terrae’, of Argentina, launched a campaign "Adopt a tree in the Tierra del Fuego", with a concert in Bellingham. The ecologists said their goal has been to convince Trillium to sell the forests of Tierra del Fuego Island since the mid-nineties.
EXPERIENCES

The idea is to transform the Trillium forests into an intercontinental protected area, like Gondwana, which would include lands in several countries throughout the Southern Hemisphere. The program “Adopt a tree” asks for $25 to $1,000 from donors. Large NGOs, like Ancient Forests International, are trying to raise money by donations. The ecologists say they are not sure how much is necessary, but they suspect it will be more than the $30 million paid by Trillium for the first piece of forest, in 1993. Trillium possesses more than 840,000 acres of the island, just less than two-thirds the size of the whole municipality of Whatcom. Most of the property owned by the company is in Chile, however approximately 170,000 acres are in Argentina.

The ‘Finis Terrae’ group organized a campaign that sent more than 3,000 e-mails to the offices of Trillium in Bellingham, U.S.A, asking the company not to cut down trees in the Tierra del Fuego region.

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Ecological coal

In the rural area of Morogoro, in Tanzania, Africa, the main fuels are firewood and coal, often produced from native trees. Consequently, there are many devastated areas. Teacher Yohana Komba, with his friends and students, developed a group of activities in the area which demonstrate that it is possible, through cooperation, to recover degraded areas.

The group discovered a mixture of vegetable paste, ashes, grass surplus, and mud that works like a vegetable coal. This fuel, made without damaging the local biodiversity, generates heat, does not produce smoke and does not leave poisonous residues. This experience shows that, with imagination, it is possible to find ways and means of avoiding the constant destruction of the world’s forests.

Contact: Yohana Komba, Tânzania, Africa.
EXPERIENCES

Forest management in Amazonia

Until 1990, few experiences in forest management were in process in the Amazonia. In that decade, Imazon - Institute of Man and Environment of the Amazon - began a draft pilot project of forest management, trying to reconcile the activities of applied research and forest extension. They forged a partnership with a Paragominas timber company, in Pará - the largest timber pole manufacturer in Brazil - and conducted their (research) work at a local sawmill, in two adjacent portions: one was submitted to intense unplanned exploration practices and the other submitted to a forest management regime.

The study revealed the advantages of forest management. Results showed that forest management can double the production rate in various situations. In this case, sawmills would need only half the forest areas that they use today to supply their raw material needs. Forest management also guarantees the maintenance of healthy tree populations of commercial species in the extraction areas.

The Imazon project has been acting as facilitator and collaborator for promising forest management initiatives in the Amazon. The Tropical Forest Foundation is replicating this model in other areas of Amazonia. The Precious Wood Timber company is operating a management project on a commercial scale. There are many more existing community initiatives in forest management, involving NGOs and local communities, in the areas of Machadinho do Oeste (RO), Carajás (PA), Altamira (PA), Marabá (PA) and other municipal districts. Besides this, the Socio-Environmental Institute (Instituto Socio-Ambiental -ISA), in partnership with the Xikrin Indian Association, Bep-Noi, is launching a draft plan of forest management in Cateté reservation, in the south of Pará state.

Regional Center of Preservation Units - NURUC

The recent creation of the Regional Center of Preservation Units (NURUC), linking several national parks, reservations, ecological stations, environmental protection areas and others of relevant ecological interest - has been significantly and gradually contributing to improve the performance of all units through an approach of flexibility, self-sufficiency and administrative agility. This experience has produced results that will be extremely valuable to the process of discussion and identification of suitable conditions for the administration of national systems of Conservation Units in Brazil.

Since the creation of Brazil’s first Conservation unit, Itatiaia National Park, in 1937, few attempts were put into practice for refining the organization of these Conservation units. During the last few years, the units have been run by the classic bureaucratic administration, which does not answer to the daily needs of the unit, or the increasing demands from society regarding environmental protection.

The Regional Centers of Nature’s Preservation Units are based on modern methods of participatory organizational development. For this reason, the first center was created after an experimental phase and practical operation that lasted for one year. There were several phases of training of administrative personnel; the implementation of administrative procedures with the inclusion of new technologies; a definition of inter and intra-organizational relationships; implementation of participatory management practices, and objectives directed to the end user: society. Only after these initial phases was the first unit created: as the Regional Center of Preservation Units - NURUC - in Teresópolis, which includes 12 Federal Preservation Units, directly related to IBAMA.

Contact: Jovelino Muniz de Andrade Filho; ‘Serra dos Órgãos’ National Park Director, Ibama, Brazil
**Project of self-sustainable development in a voluntary community of 800 people in an area of 200 thousand hectares of humid tropical rainforest – Amazonia.**

'Céu de Mapiá' is a voluntary, sympathetic and spiritualist community that settled 20 years ago in a place with difficult access at the head of Mapiá igarapé, a tributary of Purus River (left margin), that today houses approximately 800 people. It is located in the center of the Purus National Forest, a reserve area of 200,000 hectares, bordering other reservations and indigenous areas. For the last ten years, the community has had a cooperation agreement with the Brazilian Institute of the Environment (Ibama), seeking the co-administration of this immense area of humid tropical rainforest.

The group's proposal is to improve the experience in search of a self-sustainable life model, in harmony with nature, that could serve as a paradigm for Amazonian occupation, for productive human settlements, with the minimum environmental impact on the forest.

To accomplish this goal, they are in contact with waterside people, as well as performing seminars with community leaders and several other projects.

The following organizations make up part of the institutional partnership: AMVCM (Vila Céu de Mapiá Residents Association); IDA/CEFLURIS (Raimundo Irineu Serra Environmental Development Institute); COOPERAR (Mapiá and Médio Purus Co-operative Agro-Extractive), plus other non-profit organizations dedicated to medicinal herbs and food production.

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**The Colina Works for the Colina**

The Colina is a rural region in the Serra da Mantiqueira, 1600m high, near Itatiaia National Park, in the south east of Brazil. Since 1999, the community has been developing activities that include educational workshops with young people and children, and the collective construction effort of a 'seed' nursery. Most of the work so far has been accomplished in a voluntary way, but now it counts on financial support from the Diaconian Lutheran Foundation. These resources are being invested into activities with young people and children and supporting the development of distinctive and ecological products - such as weaving, handicraft, seedling production, honey - that can be traded based on fair trade criteria. The long-term objective is to create sustainability in the relationship between human beings and the (Mantiqueira) mountains.

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The proposals presented throughout this notebook express technical and human contents of people involved directly or indirectly with the forest theme. In spite of the diversity of ideas, and eventual contradictions, there is a common request of urgency for a new world attitude regarding the forests, especially those that remain in a primitive state. The sad story of the forests and the distrustfulness provoked by modern "plans of sustainable management" tend to strengthen a reactive attitude not to touch any more forest in still intact areas - or very little altered.

The relationship between the forests and world macroeconomic policies is also evident. However, the distance between the rhetoric and practice, at different levels, is almost shameful.

The discovery of new values relating to the forests can be an indication that points to a new coexistence of possibilities between humanity, the trees and all living beings and elements that are in deep alliance. Native (indigenous) people certainly have a strategic role in the construction of a new logic. Moreover, humanity as a whole can visualize and make real a future that will revert the history of more than 6 thousand years of forest destruction - a destruction that has always brought the loss of life quality.

The successful experiences and good examples are numerous. There are many more than the ones just described in this document. The continuity of ideas and exchange of experiences is fundamental for their multiplication, as well as a consciousness of the fact that the construction of new values does not only answer an attempt at saving forests, but also the recovery of humanity. Therefore, let us work towards a forest culture.

Any other action would hurt our conscience.
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The lands and the forests were and still are the base for all of civilizations. The growth of great empires and countries were accomplished starting from the forest resources, that had become more and more distant and rare in the same proportion as the cities grew.

The countries colonists imposed the rules on the conquered lands and plundered the forests in their colonies. Today, the countries of the North are the largest consumers of the tropical wood forests. Besides, a few people concentrate on their hands most of the lands’ ownership, impeding the families farmers’ access. The lands and the forests are common goods and their use in environmentally sustainable way constitutes a citizenship’s right.

The forests are part of and the whole constellation of the world’s livings, being essential for the maintenance of the biodiversity, of the water, of the soil, enchantment of the landscapes and development of the spirituality. It is fundamental for the of the forests’ preservation to include their residents’ participation, knowledge and traditional or ancestral culture, that should be integrated into the processes of sustainable use and biodiversity protection. It is not a coincidence that the tropical area shelters, simultaneously, the largest biological and geo-cultural diversities of the planet, that should be preserved in their fullness, because they are interdependent.

The Alliance can intimately support and integrate all of the initiatives for a responsible and sympathetic use of the lands and forests in the following way:

- contributing to inform governments and citizens about their several and intrinsic values;
- supporting the accomplishment of the agrarian reform and development;
- supporting the development of the urban reform, potentially the balance field-city and among the people of the earth;
- facilitating the acquisition of resources for these actions.

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Bertioga - SP, Brazil, December 1997.

The above letter was issued during the International Encounter of the Alliance for a Responsible and United World, in Bertioga, December 1997, that gathered about 150 allies of 50 different countries and when was formed the group Allies of the Forest and People of the Earth.