

PROPOSAL FOR A G8 PROJECT FOR THE PROTECTION OF BRAZILIAN ANCIENT FORESTS FROM ILLEGAL LOGGING

Project: To increase the capacity to control and halt illegal logging operations and related trade in illegal wood and wood products from ancient forests in the Brazilian states of Amazonia Legal.

Goal: To halt illegal-logging activities, and thereby **contribute** to the achievement of sustainable forest management in Brazil.

I. Introduction

This draft proposal for a Project to halt illegal logging in Amazonia Legal (AL) is based on research carried out by Greenpeace Brazil, involving extensive field analysis and discussions with several Brazilian organisations and institutions on the problems facing tropical forests, both in Brazil and globally. It was prepared with the aim of complementing and supplementing the G7 Pilot Programme, which does not directly address the principal cause of forest loss in Brazil, illegal logging.

Within AL, research confirmed that tropical forests were under chronic and unsustainable pressure. Current forestry practices are characterised by increasing rates of land clearance, endemic illegal logging operations, poor enforcement of existing laws, lack of institutional infrastructure for inspection and licensing of forestry operations, and the absence of a co-ordinated federal/state/local government system capable of reducing and effectively eliminating illegal activities.

To assist analysis of this proposal, Greenpeace has followed the format of World Bank project guidelines. It has been intentionally prepared as a draft proposal, which could serve as the basis for further discussion and development by government bodies, non-governmental organisations (NGOs) and others.

This proposal focuses on one important underlying cause for illegal logging: the lack of capacity to control and stop illegal logging. The costs for the initial 4 years are estimated to be approximately US\$30 million. It should be noted, however, that there are other important underlying causes for illegal logging such as poverty, landlessness or lack of land rights. These are currently not addressed within the PPG7 but will also need to be covered in order to finally eliminate illegal logging, and to help the PPG7 successfully stop deforestation and forest degradation in AL.

II. Project Area and Its Importance

The proposal addresses the area known as Amazonia Legal (AL), including all forms of forest north of Latitude 14°S and West of Longitude 45° in Maranhao. The types of forest found in this region are tropical rainforest (open and dense), dry tropical forest, transitional and seasonal, including in the states of Acre, Amapa, Amazonas, part of Maranhao, Mato Grosso, Rondonia, Roraima and Tocantins.

AL covers an area of almost 5 million square kilometres (5.000.000 Km²). Approximately 75% of that area is covered by forests. AL also represents about 140-360 tonnes/ha of carbon sinks and may contain as much as half of the world's known species. Its inhabitants include about 2.5 million species of insects, more than 60,000 species of plants, more than 300 species of mammals, and more than 2000 species of fish. (Museu E. Goeldi, 1998). It is estimated that today there are approximately 20 million humans living in AL, including the indigenous population.

III. Justification/Problem

AL's biological and socio-cultural richness and diversity is increasingly threatened, or being lost. The underlying cause of this trend is the conversion of primary tropical forests to other uses.

The rate of clearance of tropical forests in the Amazon has increased more or less progressively over the last two decades. In 1978, the annual rate of forest loss was estimated at around 20.000 km². In the years thereafter, the average annual rate of forest clearance was approximately 13,000 km², reaching a peak of 29,085 km² between 1994 and 1995 (INPE, 1997). Overall, it is estimated that by 1998 total forest clearance exceeded 548.000 Km², representing a conversion of close to 13% of the original forest cover of the Amazon.

III.1 Relationship between Logging for Agricultural Expansion and Timber Industry

Analysis of the rates of forest clearance in Amazon over the past four years, both by type of vegetation and by size of the deforested area, suggests that the open and dense tropical rainforest and transitional forest are most adversely affected by land clearance activities. Approximately 70% of the forest clearance in the AL project area during this recent period occurred in these forests, with more than half of this involving areas up to 100 hectares.

This data demonstrates the clear relationship between forest loss, on the one hand, and the extension of farmland, government rural resettlement and land redistribution programs, and the activities of the timber industry, on the other. While it is difficult to distinguish the specific impacts, it is clear that forests are significantly diminished as a result of the expansion of the agricultural frontier, and by the associated activities of the timber industry in opening up areas of primary forests, most often for illegal logging. The magnitude of the problem is underlined by the fact that only 10% of the total area of forest cleared each year in AL can be accounted for by the logging licences issued by the Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA) (External Commission of the Chamber of Deputies, 1997).

Similarly, approved forestry operations are not free from question. Timber originating from the Sustainable Production Forestry Management Plans (PMFRS) can be questioned on two grounds. Firstly, the quality of government decisions must be doubted when management plans often apply the same environmental and technical criteria to very diverse forest environments. The second relates to the technical capacity of the institutions responsible for the approval of the PMFRS, where several years may be required to obtain approval of forest management plans. These shortcomings have been confirmed by IBAMA itself. After publication of paper "Evaluation of Sustainable Forestry Management in Amazonia", IBAMA suspended and/or cancelled more than 70% of the management plans authorised between 1977 and 1996 (IBAMA, April 1997).

Despite the withdrawal of approvals for 70% of these PMFRS in AL, timber production in the region still showed a significant increase from 1996. This appears to have been driven by the exhaustion of the forests in the south of Brazil, the decrease of timber production in Southeast Asia,

and the building in AL of new local access roads, opening the forest to exploitation and clearance. These factors, combined with the imperfect environmental regulation regime in place, is likely to facilitate the rapid growth of the (mostly) illegal timber industry in AL in the coming years.

Between 1976 and 1998, forestry production (in logs) in Amazonia increased from 4,5 million m³ to 28 million m³ (Verissimo/Amaral, 1998). Currently it is estimated that growth will continue at an annual rate of between 5 to 7%.

The data above supports the conclusions of the report from the now defunct Secretariat of Strategic Issues (SAE) that 80% of timber exploration in Amazonia is of illegal origin. This means that, with rare exceptions, almost all timber exploitation in AL is predatory.

III.2 Regulation and Control of the Forests

The Brazilian forestry sector is subject to extensive regulation. Legislative and other regulations are of five basic kinds: (i) environmental impact assessment procedures; (ii) authorisations for burning and logging; (iii) restrictions on logging on properties and specific geographical areas; (iv) conditions for forestry management; and (v) restrictions on certain kinds of export of forestry products.

The history of implementation of the Forestry Code over the last thirty-five years has been chequered, often with implementation on the ground of contradictory policies and practices. These have included government support to the agricultural sector, including land distribution to small farmers and approval of extensive cattle raising on large rural properties. In AL, regulations require protection at two levels. Firstly there is a requirement that between 50% to 80% of the forest area (the legal reserve area) should be protected from clearance. While this area can be used economically, it should remain as forest, and any development must be subject to approval of a forest management plan.

Second, the Forestry Code provides that certain ecologically sensitive areas should be excluded from clearance under any conditions. These include riverbanks, steep slopes, hilltops, and the areas around lakes and lagoons.

These regulations have prompted some people in the agricultural sector to seek a weakening of forest protection laws, and even the adoption of anti-democratic methods.

By and large, the forest industry views the laws regulating timber extraction activities as an impediment to their business. Local and state governments, anxious to attract and maintain investment, are often encouraged by the timber industry to weaken their compliance inspections. Over the years, local election politics have increasingly emphasised the importance of large-scale forestry in maximising short-term economic gains, and neglected the value of sustainable long-term forestry practices (Arima, 1999).

The growing influence of the timber sector in regional political life in AL, combined with the lack of infrastructure and state-of-the-art equipment for field work, and a scarcity of well-briefed and trained personnel at the federal, state and municipal sectors have all contributed a situation where regulations are widely ignored or unenforced, thereby facilitating the further degradation of the ancient tropical forests in AL.

Also to be highlighted in this context is the lack of effective linkage and co-ordination between the three branches of government responsible for forest management. While the federal Constitution of 1988 delegated to the Union, State, Federal District and Municipalities a shared competence and responsibility to conserve, preserve and protect the environment, eco-systems, forests, flora and fauna, and to legislate on these issues, there is still uncertainty or unclarity as to their respective

roles and activities. This is particularly the situation with regards to the forest management control and inspection procedures in AL, where the capacity of OEMAs (State Institutions for the Environment) is also very limited.

For this reason, apart from a few exceptions, regulation of forestry activities in AL is conducted in a largely separate, parallel and contradictory manner, reflecting the diverse interests and authority of federal and state governments. Frequently these differences result in disputes over competence and jurisdiction, thereby confusing or frustrating the work of the various enforcement teams in the exercise of their activities in the field to ensure compliance with Brazilian environmental policy.

The importance of improving co-ordinated joint action between the three branches of government is highlighted by the fact that according to official figures 80% of the timber production in AL goes to the internal market and only 14% is exported. While the states of Para, Mato Grosso and Rondonia provide 93% of national timber production, timber from AL provided about 38% of the total Brazilian exports of timber in 1997. Almost 90% of exported timber goes out from the nearby port of Belem. The difference can only be explained by the increase in predatory illegal logging, at ever decreasing intervals in second growth areas. As a consequence of this pattern of behaviour and lack of forest management, an estimated 41 species are currently under threat of extinction (Martini, 1994; Verissimo, 1998).

IV. Objectives

In the light of the situation described above, it is clear that there is an urgent need to develop and implement a program for the control and elimination of illegal logging. Greenpeace has developed a set of proposals which, if implemented within the framework of the PPG7 project, could assist Brazil in providing effective protection to one of the largest remaining intact areas of ancient forest, and enable G7 countries to fulfil their commitments made at the Houston, Denver and Birmingham Summits.

To this end, the draft Greenpeace project has the following objectives:

IV.1 General

To expose, reduce and ultimately eliminate illegal logging and trade in wood and wood products from illegal logging in AL, and develop an effective precedent which could be applied to halt illegal logging at the global level.

IV.2 Specific

a) Monitoring

- Identify the main exit routes of timber from AL to the area of Central-South of Brazil.
- Identify the main exit routes of timber from AL to the ports of exit to consumer markets outside of Brazil.
- Identify technologies which can be adopted to improve monitoring of forests and illegal activities in the forest and trade in forest products.
- Identify associated technologies for improved data collection, assessment and use by government bodies and other stakeholders.

b) Assessment & Analysis

- evaluate the current legal framework and procedures for granting forestry concessions and licences in AL and identify measures to strengthen these.
- Analyse all forms of access to timber from AL (logging, management plans, public forests, selective logging, etc.).
- analyse the different methodologies, types of information and organisation of databases used by the federal and state institutions for the authorisation/licensing of forestry/timber activities in AL and identify measures required to improve co-ordination and efficiency.
- evaluate the system of timber flow between the forest and industry, through the use of permits for the transportation of forestry products.
- evaluate the requirements and procedures for the licensing/registration of facilities and operations of the timber industry in AL.
- analyse the internal and/or independent auditing procedures used by the environmental bodies and institutions in the re-evaluation of authorisations/licenses already approved.
- Evaluate the current system of forestry replacement on the principal that whoever cuts down a tree must compensate it with money or trees.

c) Policy Development

- establish the basis for the effective and efficient management of control and inspection of the forestry/timber activities in AL through co-ordinated joint action by federal, state and municipal environmental institutions.
- propose and establish a new system of procedures for the concession of authorisations/licenses for forestry/timber activities in AL.
- stimulate the development and transfer of technology on low cost alternative practices to reduce the need for new logging in small, medium and large rural properties.
- evaluate forestry practices against sustainability and other ecological criteria, and develop guidelines and communication tools for assisting the application of sustainable forest management principles in AL at all levels.
- In consultation with stakeholders, develop a set of agreed criteria for identification of wood and wood products from sustainable sources to meet national and international market requirements.

d) Technical

- analyse the possibilities of making the current monitoring system compatible with the information that will be generated by the Amazon System of Monitoring (Vigilance) and identify appropriate technologies.

e) Enforcement

- Evaluate the current methodology for use of “geo-processing” of authorisation/licensing activities, control and regulatory enforcement of forestry activities.

V. Relationship with Pilot Programme for the protection of Brazilian Tropical Forests—PPG7

As noted above, the Greenpeace draft Project to Eliminate Illegal Logging in AL has been designed to supplement and fill the gaps left by the existing PPG7 programme. These gaps relate both to aspects of the PPG7 which were not originally addressed (e.g. illegal logging), or which are yet to be covered within the existing framework (i.e. areas not yet implemented). It can be recalled that the general objectives of the PPG7 programme mainly concerned the conservation of biodiversity and the reduction of existing logging rates. These objectives are being addressed by the following projects which are either in a preparatory phase or are currently operational: the Sub-programme of Natural Resource Protection (SPRN); the Project for Monitoring and Control of Logging and Burning in the Amazon (PRODESQUE); and the proposal for the project of Forestry Resource Management (PROMANEJO) on systems of control and licensing.

The Greenpeace draft project is necessary for the following reasons:

- To fill the gaps between Brazilian national/state and local authorities, both in relation to implementation of existing law but also implementation of the PPG7. Currently, neither SPRN nor PRODESQUE are able to implement an integrated system for monitoring and control of forestry practices, and enforcement of forest protection laws, from the point of tree felling to the consumer.
- By focusing on illegal logging – the major cause of deforestation in AL - it is complementary to the objectives of the existing PPG7 programme.
- Its central feature is the improvement of procedures for licensing timber extraction and transport, backed up by modern geo-processing systems.
- It is designed to be further developed, and implemented with the assistance of stakeholder groups, whose support will also be necessary for the implementation of the PPG7 programme.

VI. Activities

To ensure successful implementation, the Project to Halt Illegal Logging will need to make optimal use both of existing resources. New technologies and processes will also be necessary in some cases to enhance capacity. The implementation strategies proposed (below) for this project take into account the prevailing environmental and administrative conditions in AL and the particular challenges arising from the links with the relevant federal institutions.

It is proposed that the project give special attention to the following:

- **Computer-based Licensing System:** To ensure proper co-ordination, it will be necessary to adopt a new, special-purpose, computerised system for the oversight and control of the licence application/approval process. This will also be essential to co-ordinate the activities of joint field inspection and enforcement teams.
- **Staff Training:** To ensure integrated and co-ordinated administration, it will be important to develop a joint training programme for all staff from the three branches of government involved in forest management. This should include training on the functioning of the new computerised licensing system (above).
- **Tracking Technologies:** To remove current uncertainties about the origins of wood and wood products, it will be essential to introduce state-of-the-art technologies for the identification, transport and custody of all timber products in AL from the tree to the end user or consumer.
- **Resource Allocation:** To optimise the use of existing infrastructure and databases, it will be necessary to review the current administrative structure for forest management with the objective of eliminating overlaps and duplication of functions, or the inefficient concentration of equipment and human resources in one area or region.
- **Software Compatibility:** Different government bodies use different technological and software systems for monitoring the forest. To optimise efficiency and co-ordination, an early priority will be to review these systems with the aim of ensuring integration between software for the interpretation of satellite images and the Geographic Information System (GIS) adopted by the states in AL, the Institute of Space Research (INPE) and the Centre for Remote Sensing of IBAMA.
- **Extension of Scope of Monitoring:** Currently, monitoring is mainly focused on logging, which has already been done. To ensure forest protection, it will be essential to extend monitoring to areas of intact forest. This can be done by redirecting the monitoring activities through geo-processing and interpretation of satellite imagery.
- **Satellite Data-base:** To increase the capacity of government to take preventive action in the main areas of timber production in AL, it will be necessary to extend to AL the database of satellite images currently used by existing Systems of Geographical Information, mainly in the States of Para, Mato Grosso and Rondonia.
- **Civil Society Involvement in Inspection:** To ensure community involvement and understanding, it will be crucial to develop a new approach to the training of government forest inspection staff, which involves stakeholders and civil society in inspection activities.
- **Educational Curriculum:** To ensure that forest protection is built into the education system, it will be necessary to ensure that existing environmental education programmes are reviewed, and that the curricula include a programme for education on the objectives and procedures for authorisation, control and inspection activities in the forestry sector in AL.
- **Educational Infrastructure:** To ensure that forest protection is given a long-term framework, consideration should be given to the creation of a Model School for Sustainable Forestry Management, involving a partnership between universities and national and international research institutions, IMBAMA, OEMAs (State environment agencies) and NGOs.
- Integrate these activities with corresponding projects of the PPG7.

VII. Timelines

It is calculated that the Project to Halt Illegal Logging will take four years. This period takes into account the experience in launching complementary PPG7 programmes (e.g. PRODESQUE and SPRN), and the scale of the studies, research and surveys proposed.

Four phases can be identified within this four-year period.

- **Phase 1 - Review & Research** (one year): During this phase, the project will evaluate and identify the illegal and predatory patterns of forestry exploitation and trade in AL, and identify current gaps and weaknesses in licensing/authorisation procedures, and in the wider regulatory and enforcement regime. This phase should also include broad-based stakeholder and NGO dialogue on project objectives.
- **Phase 2 – Drafting New Regulatory Regime** (six months): During this phase, a new system for approving/licensing concessions will be drafted, together with new procedures for compliance and enforcement of forestry regulations.
- **Phase 3 – Trial Implementation** (two years): Once new regulations are enacted, a period of two years is proposed for on the ground implementation and testing of the new system.
- **Phase 4 – Transition to Stand-alone Operation** (six months): during Phase 3, it should prove possible to make any minor adaptations and improvements necessary to ensure that the new system is operating effectively. Once these have been put in place, it should be possible to move to full scale implementation, including the transition to full national economic self-sufficiency of the new systems (i.e. phasing out of PPG7 funding).

VIII. Interested Parties

Given the current socio-economic context of AL, it is inevitable that any review of forestry practices and regulations will attract some questions and criticism. Companies and organisations - whether private or government - with a vested interest in maintaining the status quo will challenge the proposed project. And, since land clearance is widely perceived as synonymous with economic development, small and medium scale farmers, who wish to increase their holdings, may resist forest protection reforms. Large-scale landowners can be expected to share these concerns, as well as the desire to guarantee the title to their lands.

As the project is developed and implemented, however, there is expected to be an increasing tendency to support it. Clear, transparent and easy-to-implement procedures should be appealing to local communities. These will benefit (in the long term) from sustainable forest management systems, and (in the short term) more equitable involvement in the forest management process and the broadening of the economic base (e.g. non-wood forest products, more valued-added forest industries).

Implementation of the project is also expected to benefit local communities in small cities in the interior of AL through the creation of new jobs. As the timber industry has to embrace new production and transport standards within a transparent chain of custody, there will be a requirement for an increased number of qualified personnel to meet regulatory standards.

Finally, it is also anticipated that initial resistance to the project from the administrative authorities will dissipate once it is recognised that the proposed reforms will increase their efficiency, capacity

and authority, thus giving them greater credibility and work satisfaction. At the same time, after making the necessary initial investments, the private sector may recognise the benefits of the improved chain of custody, including through decreased loss and waste in the production line, and more value-added opportunities, leading to increased profits.

IX. Executors/ Participants

This proposal is in draft form, and will require wide consultation and discussion before being finalised. For this purpose, it is proposed that a working group be constituted, involving NGOs and research institutions, and government institutions (MMA, IBAMA, INPA, INPE, OEMAs, OMMAs, among others).

Once agreed, the implementation of the project will become the responsibility of the government, with support from research bodies, NGOs and civil society groups. In the implementation and execution phase, the principal government institutions involved will include the MMA, IBAMA, INPE, OEMAs, and OMMAs or City halls, working together in a new Federal Forest Management Council. To ensure harmonisation with ongoing and future PPG7 projects, the Federal Management Council would also be composed of the PPG7 project co-ordinators.

At the state and local levels, management and implementation committees will be established, with the participation of OEMAs and OMMAs or City Halls, as well as federal agencies, NGOs, representatives of the public ministry and regional research institutions.

Also at the local level, mobile inspection and enforcement units should be created, comprising representatives of IBAMA, OEMAs, OMMAs, or City Halls, as well as local NGOs or community council representatives.

Precise details on the exact composition of these bodies, and of the respective roles of the potential participants should be agreed during the project consultation phase referred to in the first paragraph of this sub-section.