VENEZUELA
THE IMATACA FOREST RESERVE AND ENVIRONS: ISSUES IN RESOURCE PLANNING, PUBLIC PARTICIPATION AND SUSTAINABLE MANAGEMENT

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WEIGHTS AND MEASURES

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MAIN ABBREVIATIONS AND ACRONYMS

ABRAE	Land Area under Special Administration (Área Bajo Régimen de Administración Especial)
ASOINBOSQUES	Umbrella Group Representing the Forestry Sector
CAMIVEN	The Venezuelan Congress for Mining (Cámara Minera de Venezuela)
CAS	Country Assistance Strategy (Estrategia de Asistencia al país)
CENDA	Center for Sustainable Community Development and Environmental Conservation (Centro de Desarollo Comunitario y Conservación Ambiental)
CIERFI	Special Internal Commission for the Imataca Forest Reserve (Comisión Interna Especial de la Reserva Forestal de Imataca)
CODESUR	Colonization and Development Plan for the South (Corporación de Desarrollo Rural del Sur)
CONIVE	National Indigenous Congress of Venezuela (Consejo Nacional Indio de Venezuela)
CORDIPLAN	Central Office of Coordination and Planning (Oficina Central de Coordinación y Planificación)
CVG	Venezuelan Corporation in Guyana (Corporación Venezolana de Guayana)
DAI	Indigenous Affairs Unit (Dirección de Asuntos Indígenas)
EIA	Environmental Impact Assessment (Evaluación de Impacto Ambiental)
FAO	Food and Agriculture Organization
FIB	Indigenous Organization representing the State of Bolivar (Fundación Indígena del Estado Bolivar)
FSC	Forest Stewardship Council
FUDENA	Foundation for the Defense of Nature (Fundación para la Defensa de la Naturaleza)
GDP	Gross Domestic Product (Producto Territorial Bruto/PTB)
GOV	Government of Venezuela (Gobierno de Venezuela)
IAN	The National Agrarian Institute (Instituto Agrario Nacional)
ILO	International Labor Organization (Organización Internacional del Trabajo/OIT)
LFSA	Forestry Law on Land and Water (Ley Forestal de Suelos y Aguas)
LOA	Environmental Law (Ley Orgánica del Ambiente)
LOPOT	Land Administration Law (Ley Orgánica para la Ordenación del Territorio)
IRDP	Integrated Regional Development Program
MARNR	Ministry of the Environment and Natural Resources (Ministerio del Ambiente y de los Recursos Naturales Renovables)
MAB	UNESCO's Man and the Biosphere Program
MEM	Ministry of Energy and Mines (Ministerio de Energía y Minas)
MINERVEN	Venezuelan Mining Trade Group (Empresa Venezolana del Sector Minero)

NGO	Non-Governmental Organization (ONG, organización no gubernamental)
PMSC	Proyecto Minería sin Contaminación
PORFI	Land Zoning Plan for the Imataca Forest Reserve (Plan de Ordenamiento Reserva Forestal Imataca)
PRODESSUR	Sustainable Development Project for the South (Proyecto de Desarrollo Sustentable del Sur)
RLFSA	Norms from the Law on Forest, Land and Water (Reglamento de la Ley Forestal de Suelos y Aguas)
RIL	Reduced Impact Logging
SEFORVEN	National Forest Service (Servicio Forestal Venezolano)
TA	Technical Assistance (Asistencia Técnica)
UCV	Central State University (Universidad Central de Venezuela)
ULA	Andean University (Universidad de los Andes)
UNDP	United Nations Development Programme PNUD/Programa de Naciones Unidas para el Desarollo
UNEG	Guyana's Experimental University (Universidad Nacional Experimental de Guayana)
UNESCO	United Nations for Education, Science and Culture Organization, Organización para la educación la ciencia y la cultura
USB	Simon Bolívar University (Universidad Simón Bolivar)
WMI	Whitehorse Mining Initiative
WRI	World Research Institute

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POLICY NOTE DOCUMENT (VE-SR-57617)

AUGUST, 1999

This report is the product of two Bank missions: A fact-finding mission in November 1997, and a legal/institutional analysis mission in May 1998. Extensive discussions were held with GoV officials, politicians, environmental NGOs and indigenous peoples organizations. Both missions were led by Richard M. Huber (LCSES). The first mission included: Mr. Jose Ramon Llovera, NGO Coordinator (LCCVE), Gary Costello, Miguel Fernandez, Consultants (LCSES), Jose Pereira, Ms. Cristina del Pozo, and Alvaro Atilano (Consultants). The second mission included: Charles Di Leva (LEGEN), Marta Molares (LEGLA), and Jorge Uquillas (LCSES). Additional research and analysis for this note was conducted by Gernot Brodnig. Karim Burneo and David Gray have established a website that includes background reports and will be continually updated. Mr. Bruce Carlson, Felipe Sáez, and María Magdalena Colmenares (LCCVE) and Eduardo Wallentin, Vicente Fretes Cibils, and Jonathan Parker (LCC4C) provided valuable assistance in mission preparation. Roundtable discussions were held in Washington with pertinent NGOs that included the World Resources Institute, Forest Peoples Program, Environmental Defense Fund, and the Coalition for Amazonian Peoples and Their Environment. Several focus group discussions are ongoing with pertinent green NGOs and indigenous umbrella organizations that include Consejo Nacional Indio de Venezuela (CONIVE) and the Federación Indígena del Estado Bolívar (FIB). Spanish and Austrian Trust Funds and Social Compact Funds were used to cover part of the costs of the analytical work. Work is currently being conducted by the LCSES task team, by Gregori Colomine, Director of the Environmental Quality Division, MARNR, and coordinator of CIERFI (Comisión Interna Especial de la Reserva Forestal de Imataca) and the Dirección de Asuntos Indígenas (DAI) of the Ministry of Education.

CONTENIDO

1. INTRODUCTION

1. In September 1997, the Government of Venezuela requested World Bank assistance in analyzing a range of policy options for the vast mineral and biological resources of the Imataca Forest Reserve. This area is the subject of an intense debate about optimal resource use, particularly as the government had issued Decree 1850, that contained a new zoning and management plan for the reserve. This zoning plan allows increases in mining and commercial forestry and has led to numerous confrontations between indigenous peoples, environmental groups and the government.

2. In response to the government's request, the Bank mounted two missions to Venezuela - in November 1997 and May 1998. The overall objective of these missions was to evaluate the current situation in the Imataca Forest Reserve and environs in its legal, socio-economic and environmental contexts. This policy note provides a detailed report on the findings of the missions and complementary research undertaken during 1998, and its timing is designed to assist the new administration in disentangling the complex web of issues surrounding Imataca.

3. This assessment of the Imataca conflict is guided by the framework of political ecology; a set of analytic approaches which emphasizes that environmental change is not a technical phenomenon but largely the result of political and socio-economic processes among actors at various levels of organization (Blaikie 1985; Bryant and Bailey 1997). Thus, the focus of this review will be on the interests and power relations of the stakeholders, and how they evolved into the specific institutional regimes of resource management.

4. For illustrative purposes, this note will occasionally diverge from the local and national contexts and supplement the analysis with a series of examples, best practices and lessons learned from the region and elsewhere. It is hoped that this format will not only be useful to the government but also provide some guidance to Bank management in identifying technical assistance options.

2. BACKGROUND

IMATACA - A TEST CASE

5. The Imataca Forest Reserve is located in Venezuela's eastern states of Bolívar and Delta Amacuro, covering an area of 3.6 million hectares[1]. Its largely intact tropical forests are rich in biodiversity, including several endemic species (Huber 1995). Imataca is also home to some 10,000 indigenous people (OCEI 1994-5), along with non-indigenous Venezuelan and non-Venezuelan inhabitants, the majority of whom work in mining operations and support sectors. Social relations among these various groups have become increasingly strained as more forest and mining concessions are awarded. Small and medium scale miners resent the presence of large multinational companies. Indigenous groups have been drawn into conflict with timber companies and miners over claims to ancestral lands in the reserve, and the effects of pollution and land degradation associated with mining and forest exploitation, as well as over the construction of a power line that will supply electricity to these and other sectors.

6. As a forest reserve, Imataca is an area under special administration (ABRAE), whose main objectives are the conservation of public lands and forests to ensure forest production, guarantee the supply of timber to the Venezuelan lumber industry, and administer forest resources (MARNR, 1992). According to the Land Administration Law (LOPOT), every ABRAE is supposed to be governed by a special zoning and management plan, which outlines the scope and location of uses in the area. It was this Land Ordinance Plan for the Imataca Forest Reserve (PORFI), promulgated in May 1997 as Decree 1850, which made Imataca the focus of national debate and international concern. Prepared in a fast-track approach, the decree opened up significant parts of the reserve to mining. This has led to an increasingly charged controversy between the government, environmental NGOs, indigenous groups and private mining companies over the future of the area. Four petitions were filed with the Supreme Court, alleging the unconstitutionality and illegality of Decree 1850 calling for cautelary measures, as well as a number of writs adhering to the petitions. In November 1997, the Supreme Court ordered the Ministry of Energy and Mines (MEM) to suspend all new mining concessions in the reserve as a cautelary measure until a final decision is reached. Whatever the verdict will be and the important precedent it will set, Imataca has already become a

[1] The expanded surface area of the reserve according to Resolution N° 15, published in Official Gazette N° 26.044 of January 7, 1993, is 3,640,899 hectares. This surface area is not precise because of a lack or precision in maps. The area between the Rio Yuruán and the Río Chicanán up to parallel 62°00' remains to be defined (MARNR: SEFORVEN-POA 1966).

beacon for a much wider reflection on the challenge posed by sustainable development and human rights in Venezuela.

THE POLITICAL ECONOMY OF SUSTAINABLE DEVELOPMENT IN VENEZUELA

7. The scope and nature of the Imataca conflict and Venezuela's development and environmental policies can only be understood in the broader context of her political economy. One of the main features of Venezuela's political identity is the prevalence of corporatist structures and mechanisms. Each interest group has its own well-defined patronage network, through which it relates to the government. Traditionally, the political parties have fulfilled this intermediation role with the government. More recently, however, the growing crisis and public discontent with the old regime have put this system under strain (Keohane 1998).

8. So far, environmental interests largely lacked access to these corporatist networks. Other stakeholders were better represented in the political landscape. This partly explains the constant uphill struggle of the lead environmental authority, the Ministry of the Environment and Natural Resources (MARNR), with more powerful ministries such as CORDIPLAN (Planning), MEM (Energy and Mines) and others, who possess a *de facto* veto power in the Council of Ministers. This inter-ministerial logrolling has led to a series of unfeasible arrangements, where jurisdictional overlap and lack of institutionalized coordination have stifled environmental policy-making (Hanes et al. 1995; Müller et al. 1998).

9. The political turmoil of the last years has led to a major breakdown of relations between the executive and the legislature. Therefore, the role of Congress in shaping important environmental policies has been very limited. The number of important bills that are awaiting enactment give ample testimony of this stalemate. Thus, the sustainable development agenda has been mainly dominated by a small group of government technocrats and a top-down command-and-control approach (Keohane 1998).

10. Efforts to change this system have not been particularly successful. The process of decentralization and devolution of power to states and municipalities has been slow. The business sector shows little interest in environmental policies, and is still largely controlled by the state. A greater involvement by civil society in the political discourse has been hampered by the fragmentation of the NGO community and major information gaps about environmental issues among the public. Only the recent cases of Imataca and Canaima National Park, where a transmission line is under construction, have seen a certain mobilization of a broader "environmental community".

INSTITUTIONAL MATTERS

The Landscape of Stakeholders

11. As Imataca is a forest reserve, according to the provisions of the Land Administration Law (LOPOT) and the Forestry Law on Land and Water (LFSA), its management and

administration is primarily vested in the MARNR[2] General Sector Office of Forest Resources. The mandate includes both the exploitation of its forest resources and environmental conservation issues. This duality has been responsible for an inherent tension in the execution of policies (Keohane 1998). Moreover, the ministry lacks sufficient human and financial resources, and its authority is largely curtailed by the often competing responsibilities of other entities which also participate in decisions regarding the area.

12. CORDIPLAN is the main planning authority and in charge of Venezuela's overall spatial resource allocation. The Ministry of Energy and Mines (MEM) - a very powerful body due to the importance of oil in Venezuela's economy – issues and administers mining concessions. Economic activities in Imataca are also undertaken and regulated by the para-statal industrial conglomerate Corporación Venezolana de Guayana (CVG). Over the years, all these agencies have tended to operate on their own, which resulted in a substantial number of overlapping mining and timber concessions. Given Imataca's location at the disputed border with Guyana, the Ministry of Defense and its National Guard exert considerable influence in the area. The responsibility for indigenous peoples' issues rests with the Dirección de Asuntos Indígenas, which is part of the Ministry of Education. The impact of poor institutional coordination has been exacerbated by ambiguous legislation. While, in general, the legislature (Congress) plays no major role in setting environmental agendas, in the case of the Imataca controversy, the Environmental Commissions of both the Senate and the Chamber of Deputies have assumed important "watchdog" functions.[3]

13. In addition to these federal entities, state and municipal governments are increasingly staking their claims in the wake of the central government's decentralization initiative. While so far these efforts have not dramatically changed the power balance, there is, however, a growing trend towards acknowledging the interests of sub-national actors. A case in point is CVG's devolution of its management authority for water, solid waste and electric power to municipal governments. In the specific case of Imataca, the Organic Law for the Decentralization, Delimitation and Transfer of Public Competencies, has brought a new actor on the scene when it comes to granting mining concessions: the Government of Bolivar State. With the publication of the Mining Law of Bolivar State in 1997, the state government has taken over competencies in the non-metal mining sector and has become the administrator of the sector, as well as the authority with power to grant these types of concessions, even in the Imataca Forest Reserve. It should be noted that the Supreme Court measure does not limit the local government's activities, since the cautelary decree only affects MEM.

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[2] Until Janauary 1999, this authority was exercised by the National Forest Service (SEFORVEN). The structure of MARNR and distribution of responsibilities changed on the date indicated as a result of the publication of Decree N° 3151 and Resolution N° 33 containing the Organic Regulation of the Ministry of the Environment and Renewable Natural Resources and the Internal Regulation of the Ministry of the Invironment and Renewable Natural Resources, respectively.

[3] See, for example, the very critical report of the House of Representatives' Environmental Commission on Imataca (Congreso 1997).

14. The private sector in Imataca ranges from the individual miner, prospecting with *cajas* and *bateas* for gold and diamonds through middle-sized, family-owned logging companies to the large, multi-national mining enterprises[4]. In addition, the CVG, through its network of resource-based industries, holds a considerable share of the market. Compared to the timber sector, the mining industry in and around Imataca is more diverse and far more significant in terms of its contribution to the local economy and the generation of employment (Miranda et al. 1998). Both the mining and the logging sector have organized in corporate structures to represent their interests. Most industrial mining companies are part of the powerful CAMIVEN, while small-scale miners are grouped in a number of regional associations and local cooperatives. The forestry sector is represented by the ASOINBOSQUES, which has not been able to exert much influence (Franco et al. 1997; Silva 1997).

15. In the controversy over Imataca, environmental NGOs and the scientific community have played a prominent role. National NGOs have teamed up with local organizations and regional universities. The latter administer a wide range of scientific programs in the area.

16. Indigenous organizations and community groups who live in Imataca and environs, have been the most vocal in expressing their concerns over the future development of the reserve. The Consejo Nacional Indio de Venezuela (CONIVE) and the Federación Indígena del Estado Bolívar (FIB) have been working to provide indigenous communities with rights to land and do not support the policy framework that had been laid out in Decree 1850.

17. Among the international actors, a number of US government agencies have provided technical assistance to Venezuelan institutions. The US Forest Service, from 1992 to 1995, carried out studies for CVG on environmentally sound mining practices and reclamation of degraded lands (US Forest Service 1997). In addition, the European Union, Spain and Germany have been active in the wider region in the frame of their

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[4] The following classifications of mining operations will be used in this document:

Small-scale mining: includes individual panners, crews not related with groups belonging to cooperatives and associations (semi-automated mining). They use rudimentary mining methods (v.g. hydraulic monitors) and separate gold using mercury. This type of mining does not generate tax benefits for the government and it does not handle its own capital. The gold is extracted from alluvial deposits.

Medium-scale mining: includes "junior" mining outfits (or minors) whose capital depends on how their stock trades on the stock market. Their activities concentrate on exploration, identification and negotiation of areas with mining potential, plus establishing mines. Environmental responsibility is limited and the technology is not as safe as that used in large-scale mining operations. Gold is mined with heavy machinery from alluvial deposits and veins.

Large-scale mining: includes "senior" (or larger) mining companies whose capital comes from their own operating mines. Activities are extensive from exploration to administering large mines. They are companies with highly developed corporate images, environmentally responsible and financially solid. Gold is mined with heavy machinery from alluvial deposits and veins.

technical assistance programs. Finally, different United Nations agencies such as UNDP (United Nations Development Programme) and FAO (Food and Agriculture Organization), as well as international conservation NGOs have been engaged directly and/or through national counterparts in a number of resource management and conservation projects.

Box 1: The Role of the World Bank

The Bank is currently supporting four related environmental activities in Venezuela:

- INPARQUES Project (Loan No. 3902-VE)
- Environmental Management and Cartography Project (Loan No. 4253-VE)
- GEF Medium-sized grant to the NGO FUDENA for Sustainable Development of the Llanos Ecoregion. (VE-GE-57029)
- Pre-Investment and Institutional Strengthening Project (Loan No. 3225-VE)

These investments demonstrate the Bank's commitment to helping the government incorporate environmental considerations into its development agenda. Through the CAS 1997-2000, the Bank assists Venezuela in its efforts to modernize and decentralize national government operations. This cooperation gives the Bank some leverage in addressing key environmental and social issues.

With regard to Imataca, the Bank has provided technical expertise in the areas of legal and environmental policy analysis. In addition, it has played the role of "honest broker" in the conflict management process. In this regard, CORDIPLAN has credited the Bank for its contributions to opening a dialogue between the executive and legislative branches of government, industry, NGOs, universities, and indigenous communities.

The Maze of Policies and Laws

18. The framework for Venezuela's development policy in the Guayana region is the Sustainable Development Project for the South (PRODESSUR), which forms an integral part of the Ninth Development Plan (CORDIPLAN 1995). A successor to the ill-fated Colonization and Development Plan for the South (CODESUR) of the 1970s, whose large-scale expansionist schemes were never implemented. PRODESSUR represents yet another ambitious development model. It favors the integration of the region south of the Orinoco into the rest of the national economy through increases in mineral and oil production, transmigration of settlers and major infrastructure projects. While a diversification of the economic base away from the dependency on oil seems wise, many observers question the strategies advocated in the project. They note that such policies have been "tried out" in other Amazon Basin countries, where they led to widespread environmental damage and social conflict (Miranda et al. 1998). This reflection gains special relevance at this time because of the important emphasis by the new government on integral development of the Southern Orinoco axis and the population de-concentration of the northern coastal area to populate the southern portion of the country.

19. Within the broader development framework, policies on forestry and mining specify sector objectives and strategies. As far as forestry is concerned, the policy framework, elaborated in the early-1990s, comprises many progressive elements (see Box 7). Mining

policies, on the other hand, reflect the large-scale development philosophy of PRODESSUR (Sustainable Development Project for the South). With regard to biodiversity conservation, Venezuela will soon comply with its obligations under the Convention on Biological Diversity and present a National Biodiversity Strategy. The biggest gap, however, seems to be the lack of a comprehensive policy on indigenous peoples.

20. To implement the above-mentioned policies, Venezuela can draw on a body of over 80 laws and 400 regulations.[5] While the legal framework is fairly comprehensive, it suffers from content overlaps and conflicting institutional mandates. Efforts are underway to review and streamline the regulations pertaining to the tourism and hydrocarbon, gas, power, and mining sectors. Because of the Expediting Law (Ley Habilitante)[6] approval of these regulations lies with the National Executive. A major legal vacuum exists with regard to the rights of indigenous peoples. The special regime stipulated in the constitution has not yet been implemented, and a Draft Organic Law on Indigenous Communities has been making the rounds in Congress for the last 10 years.

3. KEY RESOURCE MANAGEMENT ISSUES IN THE IMATACA FOREST RESERVE

21. As noted above, Decree 1850 and the ensuing legal actions have sparked a vivid debate both inside and outside Venezuela. While the scope of legal issues raised in the Supreme Court case is broad and complex, many observers see Imataca as a symbol of the underlying puzzles and problems of sustainable resource management policies and practices in the country. These issues are discussed and analyzed in a number of recent briefs and reports on Imataca, which were reviewed in detail by both Bank missions.[7] In addition, many stakeholders including indigenous groups, NGOs, representatives of national and local governments and the private sector participated in a workshop which evaluated the implications of Decree 1850. The report that emanated from this meeting - *Encuentro de Evaluación y Consulta Reserva Forestal Imataca* – represents a broad consensus on the shortcomings of Decree 1850.

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[5] A detailed analysis of the legal framework for natural resource management can be found in Appendix 2.

[6] The Organic Law that authorizes the President of the Republic to enact special measures in economic and financial matters that are in the public interest. Official Gazette N° 36.687 of April 26, 1999.

[7] Ministerio Público, Fiscal General de la República, Análisis legal del Decreto 1.850; Congreso de la República - Camara de Diputados, Informe Técnico de la Universidad de los Andes, Facultad de Ciencias Forestales y Ambientales, La situación actual de la Reserva Forestal Imataca y propuestas para orientar su ordenamiento.

22. The *Encuentro* and the other analytic documents have identified a number of key issues with regard to resource management in Imataca. They can be divided into four main areas:

- Land and Resource Planning
- Forest Management
- Mining
- Indigenous Peoples

LAND AND RESOURCE PLANNING

23. Venezuela's framework for land and resource planning is laid down in the Ninth Development Plan (1993-1998)[8] and its legal basis are the *Ley Orgánica para la Ordenación del Territorio*, the *Plan Nacional de Ordenación del Territorio* and the *Ley Forestal de Suelos y Aguas*. These instruments recognize and define a set of "protected areas" (ABRAES), including forest reserves. Land use in ABRAES is to be regulated and controlled by way of a *land zoning and use regulation,* in accordance with the primary functions and purposes of the respective ABRAE.

24. In the case of the Imataca Forest Reserve, established in 1961, the *Plan de Ordenamiento Reserva Forestal Imataca* (PORFI) was initially developed in December 1996 by a team of forest engineers and geographers within the Ministry of Environment. It was then reviewed by an Inter-Ministerial Commission, which included the Ministries of Energy and Mines, Environment, Defense, Planning, and the CVG. The information and analysis contained in PORFI served as the main input for the preparation of Decree 1850. The main impetus for the plan was the desire to find a multiple use formula for the area, which was increasingly "plagued" by overlapping claims between miners and foresters. The result is a zoning scheme, which opens up more than half of the reserve to mining operations.[9]

25. In the framework of the sustainable development paradigm various guidelines and best practices emerged, establishing principles for sustainable resource planning (see Box 2). It is against this yardstick that the current *land zoning plan* needs to be assessed.

Box 2: Principles for Sustainable Natural Resource Planning and Management

- Land and resource planning must be based on **scientific knowledge.** Sound decisions for sustainable development must be grounded in science in order for those responsible to make informed decisions. An informed decision is one that is made with an understanding of the interrelationships of the resources and issues involved, the short-term and long-term effects of a proposed action, and the potential cumulative effects.
- Management decisions are formulated with **public participation.** Public participation in

[8] The X Development Plan is being planned by the new government.

[9] Decree 1850 allows metal and non-metal mining only in the Mixed Management Zone (36% of the Imataca Forest Reserve-IFR). In the Floodplain Management Zone, mining is limited to exploitation of peat within a specific area earmarked for this purpose. Adding both surface areas brings to the fore that mining is allowed on more than half of the IFR.

ecosystem management planning processes is critical for several reasons. First, the land and resources in public forests belong to the people of the country and are a legacy for future generations. Second, members of the public depend on these resources for their livelihoods. Third, public participation builds support for decision-making processes and also develops a sense of social responsibility or collective appropriation of implicit rights and duties.

- Land and resource management is based on an **integrated ecological approach**, and not on a functional approach. The functional approach focuses on the development or exploitation of individual resources without much consideration given to other uses or resources. The ecosystem management approach requires an integration of comprehensive resource inventories with analysis and monitoring programs at various scales.
- Land and resource planning includes the formation of **partnerships** for the purpose of improving the integration of information, improving economies of work and planning resources, and improving collaboration among the partners. Partnerships may or may not be limited to governmental entities, depending on the various laws that may come into play.

Adapted from US Forest Service 1995

Science-based Planning

26. One of the more conspicuous features in the preparation of PORFI and Decree 1850 is the lack of a sound information base to guide resource management options. Baseline studies – both biological and socio-economic - seem to have been absent from the planning process, and no monitoring program on the environmental impacts of logging and mining is included in the plan. The majority of the information provided in PORFI is descriptive and lends itself more to a regional profile than an operational plan based on rigorous data analysis. As Box 3 illustrates, scientific information has been considered elsewhere as an integral part of resource planning and management.

Box 3: Iwokrama International Centre for Rain Forest Conservation and Development

The Iwokrama Centre is responsible for the management, conservation and sustainable development of 360,000 hectares of tropical rain forest, which the Government of Guyana dedicated to the international community to demonstrate that tropical forests can provide economic benefits without destroying their biodiversity. Iwokrama has accepted this challenge by adopting the following mission: promote the conservation and the sustainable and equitable use of tropical rain forests by undertaking research, training, and the development and dissemination of technologies. Approximately half of the Iwokrama Forest will be maintained in its current pristine state as a functioning wilderness preserve, in order to provide a reference standard of ecological processes and biological diversity. Traditional uses by the sparse indigenous Amerindian communities will be permitted, together with non-destructive observational research. The other half of the Iwokrama Forest forms the Sustainable Utilization Area. This area will be managed for commercial production of forest goods and services, and for experimental research and non-consumptive uses such as nature tourism.

Iwokrama's research program forms an integral part of the Operational Management Plan. It is primarily demand-driven and policy relevant, in order to address the problems and needs of the stakeholders. Iwokrama has followed a consultative and analytical process for identifying three research lines:

- Use of the biological resources by the Amerindian communities in and around Iwokrama
- Development of non-timber forest products
- Sustainable management practices for timber production

Source: Iwokrama 1997

Public Consultation and Participation

27. Under the Venezuelan Organic Land Administration Law, public consultations among key actors are required for the development of management plans for the corresponding areas. In the case of Imataca, five round tables on the first draft of PORFI were scheduled to solicit comments and suggestions. On May 7, 1997, after three canceled public hearings, the Ministry of Environment scheduled a consultation in the region. Those present at the meeting requested an extension until the end of the month to prepare comments, noting that they had received necessary documents only a few days before the meeting. Despite the fact that the extension was granted, one week later, on May 14, PORFI was approved by the Council of Ministers.

28. While the term "consultation" is elusive and multifaceted, and covers a broad spectrum of phenomena, there are, however, certain key principles that define a meaningful and equitable process. There is a growing consensus on what these features are (see Box 4), and it seems that the preparation of PORFI and of Decree 1850 fell short of these requirements.

Box 4: Conditions for Meaningful Consultations

- **Building Constituencies for Change:** Sustained improvements in environmental policymaking, which will usually involve winners and losers, are more likely with a well-informed public and active support from the affected groups. Authorizing participation in the decision-making process guarantees the viability and sustainability of policies.
- **Favorable Policy Environment:** Meaningful consultations require a number of legal, policy and institutional factors to guide the process. These include a minimum set of ground rules, confidence- and trust-building measures and, in certain instances, independent facilitation.
- **Iterative Process:** For consultations to reflect the interests and aspirations of all stakeholders, they need to allocate sufficient time for the exchange of information and viewpoints. The development of compromise positions typically raises more issues, which need to be addressed in a new iteration of talks.
- **Clarity about Stakeholder Roles:** Participants in consultations need to be aware of each other's personal and institutional identities. Questions of representation and legitimacy are crucial for the credibility of commitments and the implementation of decisions taken.
- **Flexible Positions:** Consultations that are limited to informing stakeholders about *faits accomplis* are not effective, as this "lowest" form of participation is often responsible for conflicts that erupt at a later stage of implementation.
- **Information Sharing and Dissemination:** Consultations have a higher chance of success, if they are embedded in a larger process of information exchange. Widespread publicity about "what's happening" not only enables the inclusion of "overlooked" stakeholders, but also exposes commitments and their implementation to public scrutiny.

Zoning

29. The approved zoning plan establishes five management zones in the reserve: forest management, management of the floodplain, special investigation, protection, and mixed management. While each of these zones has unique ecological, geological and climatic features, the proposed uses are virtually the same in forest reserves and areas adjacent to

the Zone being disputed with Guyana, with the exception that mining is not permitted in three of the five zones (see Table 1).

30. Mining activities appear to have been given high priority in the zoning plan. Not only is mining the primary activity in almost half of the reserve, but any mining concessions previously granted outside of the mixed management zone are legalized. Similarly, Decree 1850 legalizes mining in a very extensive area besides allowing operations to continue on concessions outside the areas where mining is permitted, provided the concessions were granted prior to the publication of the decree. Furthermore, the management zones appear to have been established primarily on the basis of existing concessions rather than specific ecological or social criteria (Miranda et al.1998).

Table 1: Management Zones in Imataca

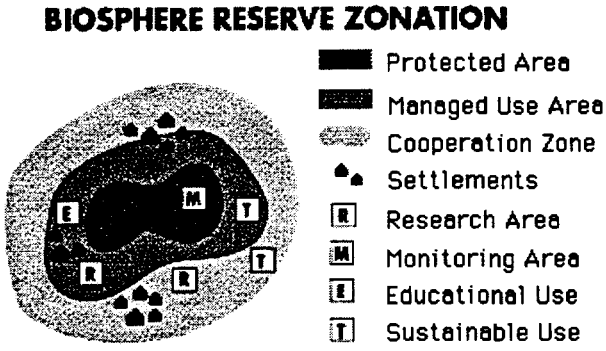
Zone	Size (hectares)	Permitted Activities
Forest management	1,308,800	forestry, research, defense, industrial, recreational tourism, residential (rural)
Management of the floodplain	560,240	forestry, research, defense, industrial, residential (rural), recreational tourism, mining
Special investigation	261,840	forestry, research, defense, recreational tourism, residential (rural)
Protection	127,000	forestry, research, defense, recreational tourism, residential (rural)
Mixed management	1,383,019	forestry, research, defense, residential (rural), recreational tourism, mining, industrial

31. Although the Imataca Forest Reserve contains 14 different forest ecosystems (Huber 1995), the zoning plan defines only two protected zones that comprise less than four per percent of the reserve. These protected zones are, moreover, open for timber extraction and are isolated from one another, which seems to be inconsistent with Venezuela's forest policy.

32. In general, PORFI's multiple use regime seems to foster resource competition and conflict, given the overlap of activities. The theory and practice of protected area management have come up with various zoning models like the biosphere reserve (see Box 5), which take into account functional requirements of different resource areas. In the case of Imataca, the Forest Service, in 1994, proposed an alternative zoning scheme, which would have established a primary forest corridor inside the reserve (SEFORVEN 1995). Such a biological corridor would not have affected the existing concessions and promoted the preservation of an important fraction of biota associated with the forest ecosystems of the reserve.

Box 5: Biosphere Reserves

Biosphere reserves are a unique category of protected areas, dedicated to solving problems associated with human impacts on natural ecosystems. Established under UNESCO's Man and the Biosphere (MAB) Program, biosphere reserves combine conservation, sustainable resource use, and scientific research and monitoring,. A model biosphere reserve consists of a protected (core) area, a managed use area (buffer zone), and a zone of cooperation (transition area). A protected area comprises examples of minimally disturbed ecosystems and has secure domestic legal protection. Only activities that do not adversely affect the natural habitat are allowed. The managed use area is adjacent to the protected area. Here, activities such as fishing, hunting, camping and other activities are encouraged. The zone of cooperation contains settlements, croplands, managed forests, recreation areas, and other economic uses characteristic of the region.



Venezuela has recognized biosphere reserves as a separate category of ABRAE and established two, one in the State of Amazonas, the Alto Orinoco-Casiquiare Biosphere Reserve, and the other in the Delta of the Orinoco. Hence, this approach to zoning and multiple resource use could provide a useful model for Imataca.

Adapted from Batisse 1982

Co-management

33. The institutional and administrative arrangements stipulated in Decree 1850 assigned overall management responsibility to the Forest Service (currently the General Sector Office of Forest Resources- GSO). To assist and advise SEFORVEN[10], a technical commission comprised of representatives of public sector entities such as 6 ministries (MARNR, MEM, MRI, Ministry of Education, Ministry of Defense and CORDIPLAN), state and municipal governments, the Corporación de Turismo, CVG, the private sector and a representative of indigenous organizations is to be formed. This scheme is, however, juxtaposed with a series of "Operational Programs" on management, research, mining, defense, etc., which are to be carried out under different ministries. Thus, the coordinating function of the technical commission is all but emasculated, and overlaps the individual functions of each of the members of the commission.

34. Natural resource management "doctrine" is increasingly recognizing the value of broad-based stakeholder involvement in all aspects of governance (World Bank 1996, Borrini-Feyerabend 1996). Various models of co-management and collaborative management are being tested around the world (see Box 6). They differ from each other mainly in regard to the scope of decision-making authority granted to the different

[10] See footnote on page 2.

stakeholders. In the case of Imataca, one scheme from the School of Environment and Forestry Sciences of the Universidad de Los Andes recommends the establishment of an autonomous agency to coordinate and manage the reserve under an Integrated Regional Development Plan (IRDP). This agency would oversee all development and conservation activities and would represent a broad range of interests (Franco et al. 1997).

Box 6: Co-management

The term co-management describes a partnership among different stakeholders for the management of a territory or set of resources. The stakeholders – which typically include the agency with jurisdiction over the territory or resources as well as organizations of local residents and resource users – develop an agreement which specifies their respective roles, responsibilities and rights in management.

While the scope of management agreements can be very broad, experience shows that there are a number of key factors that are critical in ensuring their success and viability:

- **Clear and recognized boundaries.**
- **Rights and rules must be clearly spelled out.**
- **Information must be made available to all those who participate in management decisions and control.**
- **Effective enforcement of rules.**
- **Conflict management mechanisms.**
- **All parties to the agreement must be accountable, and there must be provisions for sanctions.**
- **Community partners in the agreement must be represented by strong institutions.**

Adapted from Renard 1997

FOREST MANAGEMENT

35. Venezuela's natural forests cover 45 million hectares, or half of the country, and are mainly found south of the Orinoco. These ecosystems are comprised of semi-deciduous, deciduous, evergreen tropical forests, as well as a high number of endemic fauna and flora (Centeno 1995; Huber 1995). Compared to the northwest of the country, the forests contain far fewer commercial species, allowing for harvests of only 2 of every 10 trees per hectare (Franco et al. 1997). Logging in Imataca accounts for about 11% of Venezuela's total annual timber production (SEFORVEN 1993).

36. Venezuela has a long history of managing its forests for timber production. The nation's first forest reserve was created in 1950, in response to the growing encroachment of the agricultural frontier. In 1970, the government began granting timber concessions, which required the development of long-term management plans. While the area under timber concessions currently represents only 4 percent of the country, it has doubled since 1990 and is expected to expand fast, as the National Development Plan has set the ambitious target of 10 million ha (Centeno 1997).

37. Of the total percentage of Venezuelan territory earmarked for selective extraction of timber, 92% corresponds to the Guayana region (MARNR 1992). Inside the Imataca Forest Reserve, SEFORVEN (currently the General Sector Office of Forest Resources-GSO) established 21 management units, of which 12 are operating. In this region, forest concessions average between 80,000 and 160,000 hectares and are granted by the Forest Service for 20- to 40-year cutting cycles. While SEFORVEN has awarded total

concessions totaling 1,917,500 hectares in Imataca,[11] very little area has actually been cut. This is primarily due to weak demand in the domestic market, high costs of harvesting, and a log export ban (Miranda et al. 1998).

Regulatory Framework

38. The main legal base for Venezuela's forest management is the *Ley Forestal de Suelos y Aguas (LFSA),* which has been supplemented by a Regulation that established the technical guidelines for the sectors regulated. These norms established guidelines for forest reserves and set out the legal mechanisms for the commercial exploitation of the forests of Imataca. The institution primarily responsible for the management of the forest resources is the General Sector Office for Forest Resources (formerly the Venezuelan Forest Service / SEFORVEN), created in 1999 as a semi-autonomous entity within the Ministry of Environment.[12] Its tasks include the development of zoning and management plans for public forest lands, the difficult task of enforcing forestry-related regulations, the establishment and collection of royalties and area fees, and the definition of research priorities for the sustainable use of forest resources. The budget of the General Sector Office for Forest Resources depends on the money allotted by MARNR.

39. SEFORVEN's forest policy framework is a sound effort to strike a balance between economic imperatives and environmental constraints (see Box 7). It has been credited as an important step towards a more community-based and grassroots orientation in forest management (Silva 1997). It seems, however, that implementation of this regime has lagged behind.

Box 7: Forest Policy Framework Established by SEFORVEN

- Management based on the conservation of forest ecosystems and sustainable development.
- Integration of forest management functions within SEFORVEN and with other departments in the Ministry of Environment.
- Development and strengthening of scientific forest management research.
- An adequate program of vigilance and control in forest reserves.
- Diminish the pressure to develop forests for uses incompatible with forestry.
- Promote human resources development and staff training.
- Mining is incompatible with forestry and cannot be reconciled with the objectives of forest management.
- Elevate the role of the forest sector in the national and local economy.

Adapted from MARNR 1990 and MARNR 1991

40. The General Sector Office for Forest Resources awards contracts to concessionaires, who are allowed to extract timber from "research parcels" for two to three years. During this time period, the government does not collect any taxes or royalties. In order to obtain

[11] In October 1996 there was a total of 12 timber concessions in the Imataca Forest Reserve covering an area of 2,096,500 ha (MARNR 1996).

[12] See footnote on page 2.

the concession proper, a management plan must be presented and should include components for inventories of commercial species, extraction and management methods, road building and maintenance, and economic and social analysis. Once a concession is granted, yearly harvest plans must be submitted to the General Sector Office for Forest Resources. For these plans, a full inventory of all commercial/potentially commercial species in the block needs to be prepared before any cutting can occur for that season. All concessionaires must put aside some portion of their concession for conservation purposes, although the designation of this area is at the concessionaire's discretion.

41. No environmental impact assessment is required for logging on public lands, despite the fact that under Venezuelan law all individuals and corporations must provide an EIA if they engage in commercial activities that could damage the environment. Decree 1257 stipulates that concession management plans are deemed to replace EIAs. Thus, forestry activities face a less stringent requirement to minimize environmental damage than other industries (Miranda et al.1998).

42. This deficiency is one of the issues most discussed by technical and scientific observers independent of MARNR because no instrument has been included in the management plant to analyze the impacts generated by timber activities. The limited knowledge regarding the ecology of tropical forests complicates this panorama. In this regard, the EIA applied to the lumber industry will contribute to obtaining information on the ecological dynamics of the forests that are being worked, as well as what their most sensitive components are, which would aid in diagnosing the actual impacts on the biotic component of the transformation of primary habitats. However, the ecological measures to prevent these impacts are still rudimentary and more and better information is required for their design and follow up.

43. Research is currently underway that stresses the practical nature of the EIA for Forest Management. Some authors suggest the feasibility of designing sustainable production schemes only if the characteristics inherent to the natural forest are maintained, and if there is minimization of the impacts derived from the extraction process, favoring the existence of biotic components that typify the pristine condition of the ecosystem (Johns 1986 and 1992). In light of this information, scientific researchers and environmental groups have joined forces, more than to oppose the use of forest reserves, to request as a priority the design of more efficient and better-documented alternatives to prepare the Management Plans for forests with commercial species on an ecological basis. They often propose (Luy 1992; Whitmore and Sayer 1992; Blockhus *et al.*,1993; Ochoa 1998): 1) considering concentrating efforts in carrying out specific studies to fill information voids regarding inventories, population dynamics, growth of species, minimum diameter for cutting, ecology of animals that disperse seeds and pollinators, etc.; 2) quantifying the cost-benefit of the silviculture methods used; 3) periodically following up on impacts generated depending on the unique environmental, biological and social characteristics, and 4) modification of the boundaries of protected areas inside the reserve based on criteria of ecological function.

44. The GSO for Forest Resources has insufficient human and financial resources to implement its own policies, because of the limited number of personnel operating in the field. Supervision and monitoring of timber concessions becomes a task of Herculean

proportions for the limited number of assigned personnel, and scant financial resources oblige regional offices to partially depend on the owners of the concessions for carrying out the required inspection activities.

45. This lack of institutional capacity is compounded by the relative weakness of MARNR and its General Sector Offices in the government system. With forestry only contributing 1% of GDP, timber interests have traditionally lost out to more powerful actors such as the MEM. Furthermore, little effort has been invested in assessing the values of Venezuela's forest resources and in reaching out to local communities and the general public.

Forest Industry and Operations

46. Most logging companies in Venezuela are medium-sized, regionally-based enterprises, typically owned by naturalized immigrants (Müller et al. 1998). Most of these roughly 500 companies are under-capitalized and tend to operate with antiquated technologies and methods (Silva 1997). Their annual roundwood production amounted to slightly more than 2 million cubic meters in the last few years (WRI 1998).

47. Forestry operations raise little revenue for the government. Royalties and area fees collected from the concessionaires are very low and have been significantly eroded by the devaluation of the *bolívar* and inflation. Moreover, royalties on the cubic meter of wood produced are calculated on the basis of a fictitious unit, which is two thirds of an actual cubic meter. In total, the combined stumpage fees account for only 3 percent of the value of timber production, which is very low in comparison to other countries in the region[13] (Centeno 1995; Miranda et al. 1998).

48. Moreover, logging operations generate little employment. Most of the jobs are seasonal and low paying. Few of the communities bordering timber concessions benefit from the forest sector, which has contributed to the lack of support for forest reserves.

Box 8: Non-Timber Forest Products

In most tropical countries, government forest policy is primarily concerned with the production of timber. Other non-timber products are generally referred to as "minor", although studies have shown that they can be of comparable or even higher value than timber. In addition to their economic potential on national and international markets, non-timber products serve as a significant source of livelihood for local communities. They also have a positive role to play in forest conservation and development. Their collection typically has lesser impacts on forest ecosystems than timber operations.

Non-timber products continue to be undervalued and neglected for a number of reasons:

- lack of adequate information
- few established markets
- irregular supply
- economies of scale for timber harvests
- institutional bias towards large-scale projects

[13] See Sizer 1996 for an international comparison of royalties.

Nevertheless, in many tropical forests projects are underway which demonstrate the utility and sustainability of non-timber products. For example, in the Brazilian Amazon, the indigenous Xikrin were able to forge a partnership with national NGOs and international organizations, which allowed them to put a halt on the large-scale mahogany extraction on their territories. Instead, with financial support from the World Bank, detailed baseline studies led to a comprehensive inventory of forest resources, which, in turn, informed a community-based management plan. As a result of this process, the Xikrin's local economy is more diverse and benefits from the commercialization of Brazil nuts, heart-of-palm, fruits and other non-timber products.

Sources: Ashton and Panayotou 1992; Sizer 1996

49. Forest management is basically limited to timber extraction. Non-timber resources remain – with few exceptions [14]- unappropriated, despite their significant commercial value in national and international markets. A sustainable exploitation of these resources could also provide income for local communities, as successful projects in other countries of the region have demonstrated (see Box 8).

Environmental Impacts

50. As logging operations are fairly recent in Imataca, the Reserve has so far been "spared" from major environmental impacts. The experiences of other reserves, particularly in the North, are, however, far from promising.[15] Venezuela's deforestation rate, at 1.1%, is among the highest in South America (WRI 1998).

51. Timber extraction methods currently in practice do not incorporate reduced-impact-logging (RIL) techniques, such as directional felling, planned road development or other silvicultural methods. They require relatively large capital investments and intensive management, and the government has provided little in the way of extension support to assist concessionaires with the adoption of these techniques. Current government policy requires concessionaires to compensate for damage caused by harvesting through enrichment stripping. However, available evidence suggests that this method is not very cost-effective and can cause significant damage to the remaining forest biomass (Mason 1998). In order to stem the negative effects of many current forestry practices, FAO and non-governmental organizations like the Forest Stewardship Council (FSC) have developed guidelines and best practices for reduced-impact logging (see Box 9).

52. Scientific research documenting the impact of logging on the forests of the Guayana region indicates that extraction and enrichment strip planting practices have resulted in fragmentation of the remaining forest, degradation of higher value species, as well as a general decrease in biodiversity. In fact, in one example of enrichment strips, virtually

[14] Palm leaves for roofing, oil from *Jessenia bataua* for medicines and extracts from the tonka bean for perfume (Miranda et al. 1998).

[15] No forest cover is left in the Turén Forest Reserve, which originally covered 116,000 hectares, and only small fractions remain of Ticoporo, Caparo, San Camilo or Río Tocuyo, where nearly 700,000 ha have been lost (Centeno 1997, PROVEA 1998).

all trees greater than 10 cm dbh[16] were cut per hectare, and the remaining stands of valuable species were damaged (Franco et al. 1997)[17].

53. Imataca is considered a biodiversity hotspot. While no comprehensive inventory of the biological resources exists, several reports indicate that the area is rich at all scales of biodiversity. According to studies of fauna in the forest reserve, the composition of bird and mammal communities was significantly modified by logging activities (Mason 1996; Ochoa 1997). Even though some wildlife species can take advantage of secondary habitats, an important number of taxa declined in abundance and others were eliminated from logged forests. At the same time, the precise effects of forestry operations on plant and wildlife habitat and soil fertility have not yet been analyzed.

Box 9: Guidelines for Reducing the Impacts of Logging

If forest resources are to be available for future generations, timber harvesting techniques must incorporate measures to reduce the impact of extracting timber. Recommended guidelines for harvesting timber and managing forests include the following:

- ***Controlled cutting practices to minimize damage to surrounding forest***: Cutting practices should minimize damage to surrounding trees and vegetation. Trees should be cut so that they fall in the direction that minimizes damage to the surrounding forest canopy.
- ***Minimal impact in hauling timber***: Skidder trails should be planned to minimize their density and impacts on the surrounding forest. A system of designated skidder trails can help reduce impact if the vehicles are required to stay on trails. Trails should be a part of the harvesting plan and should be clearly indicated on concession maps.
- ***Carefully planned road building***: Roads should be built in a manner that reduces the potential for soil erosion, loss of wildlife, or disruption to neighboring settlements. Roads should be no wider than necessary to haul timber safely and efficiently from the concession, and the total length of roads on a concession should be designed to minimize habitat fragmentation.
- ***Areas under logging should be monitored and assessed for their impact on the forest***: Monitoring should include the environmental and social effects of harvesting and other operations, the changes in composition of the flora and fauna, and the regeneration of the forest. Results from monitoring should be made public and incorporated into the management plan.
- ***Natural forests should be maintained***: Primary forests and other well developed secondary forests should be conserved and should not be replaced by plantations or converted to other uses.

Source: Miranda et al. 1998

Social and Community Issues

54. Many local communities in Imataca and environs depend on forest resources for their survival. It has been demonstrated that they receive far more nutritional and economic benefit from the consumption of forest resources than they could possibly afford to purchase if they were to become low-skilled day laborers (Melnyk 1995; Ojasti 1990).

[16] diameter at breast height

[17] An average of 1,200 individual trees were felled per hectare to plant an additional 400 commercial saplings.

79. In order to stem mercury pollution, mitigation measures need to focus on low-cost alternatives to the currently employed technologies. Retorts and other devices have been developed and successfully tested in other countries of the region. Adoption of these devices and dissemination of knowledge about environmental health issues have been encouraged in a number of programs, such as Ecuador's PMSC (see Box 14).

Box 14: Proyecto Minería sin Contaminación (PMSC)
A joint venture between the Centro de Desarollo Comunitario y Conservación Ambiental (CENDA) of Ecuador, the Swiss aid organization COSUDE and the German consulting group Projekt-Consult, PMSC is an integrated project, which aims to minimize the environmental impacts of small-scale mining. It targets environmental engineering, social and institutional issues and consists of four major components:

1. Technical Assistance for Miners
2. Economic and Other Incentives
3. Environmental Education
4. Cooperation between Governmental and Non-governmental Entities

Maybe the most innovative feature of PMSC is *Plan ECO+*, which provides a framework for the development of "collective environmental impact assessments" and mitigation plans for the small-scale miners. The Ecuadorean legislation requires an EIA from each mining entity irrespective of its size. Some of the requirements are hardly applicable to artesanal mining, and the costs involved are often beyond the means of the small-scale miners. Therefore, *Plan ECO+* "sponsors" collective EIAs for similar technical activities under similar environmental conditions. Once the collective EIAs have been approved, they form the basis for more detailed, "individualized" micro-environmental management plans. PMSC and *Plan ECO+* are currently being implemented in the province of El Oro, a major mining region in Ecuador.

Source: Hruschka 1997

Social and Community Issues

80. While environmental impacts may vary according to the type of mining, many social effects are common across any scale of operation. In general, opportunities for gold mining in Venezuela have resulted in an increase in migration to the Guayana region and the Imataca Reserve. This influx has exposed local and, in particular, indigenous communities to various threats.

81. A major negative impact on local communities has been the greater exposure to diseases, especially malaria and tuberculosis. Pools of stagnant water and waste tailings, which are characteristic of hydraulic operations, are fertile breeding grounds for malaria-bearing mosquitoes. Furthermore, the social profile of mining operations often entails the proliferation of alcoholism and prostitution and a corresponding surge in sexually-transmitted diseases, while exposure to contaminants (such as mercury) leads to the appearance of chronic associated diseases.

82. Mining negatively affects the social fabric of many local communities by weakening their leadership structures and undermining traditional systems of reciprocal exchange and communal labor. In addition to the erosion of social capital, there have been a number of incidences of aggression between indigenous groups and miners, the latter

substantially over the last years, from 8.7 tons in 1993 to nearly 20 tons in 1997 (Torres 1996).

58. As far as Imataca is concerned, a portion of the reserve was declared open for mining as early as 1965. Since then, the southern portion has been a key site for mining activities, both by illegal small-scale miners and formal mining concessions. There are at least 300 concessions and contracts in the Imataca Forest Reserve, most of which were granted by the CVG, but the exact number is under debate. The majority of these are at the preliminary exploratory phase.

Regulatory Framework

59. The management of mining operations in Imataca is based on a number of laws and decrees which vest policy, management and regulatory authority primarily in the Ministry of Energy and Mines (MEM), which is responsible for the award of concessions under the 1945 Mining Law[18] currently in effect and being revised. In 1990, this authority was delegated to the CVG, which made ample use of it, but subsequently lost this competency again.[19] As of 1993, with the publication of the Organic Law for Decentralization, Delimitation and Transfer of Public Competencies and the Mining Law of Bolívar State, excluding competency with respect to non-metal mining was transferred to state government. In addition to these two entities, the MARNR is in charge of handling environmental questionnaires and administering environmental impact assessments by granting territorial occupation permits and authorizing the impacting of renewable natural resources.

60. One of the main difficulties for the governance of the Imataca Forest Reserve results from the overlapping mandates of these organizations. For example, the Organic Law of Central Administration stipulates that the MARNR has exclusive jurisdiction over conservation, defense and improvement of Forest Reserves, but the Organic Land Use Zoning Law gives the MEM the right to control the implementation of ABRAE plans in land and marine areas with an important energy and mineral potential. Conflicting resource use objectives have made the efficient management of Imataca exceedingly difficult and engendered disputes between the two ministries.

[18] The new Mining Law will be sent to the Council of Ministers for approval during the second week of August.

[19] For a more detailed discussion of the CVG's role see Miranda et al. 1998

Box 11: The Proposed New Mining Law

In order to update the current legal framework on mining, a new mining law has been drafted by the Senate Mining Commission and been circulated in Congress. This draft was criticized by a number of environmental organizations, as it appears to sub-ordinate ail land-use planning to the geographic distribution of minerals. This is also expressed in the fact that the new law was supposed to be given the status of an organic law. This would enable it to derogate other norms, lower in the hierarchy, such as the Forest Law but also earlier organic laws such as the Organic Law on the Environment.

As a result of these concerns, a new draft has been introduced by the Ministries of Mines and Environment. This version foresees the establishment of a superintendency of mines, whose primary responsibilities would be to collect taxes on mining concessions and monitor mining activity. An environmental management unit would be part of the this body, in order to facilitate the granting of permits.[20] The superintendency would reside within the MEM, although both the Ministries of Mines and Environment would coordinate monitoring and environmental regulation. While such an arrangement may make sense from a technical mining standpoint, it could lead to decreased environmental oversight, especially since the two ministries have little record of collaborating in the past. Such a measure would directly contradict the intent of the Organic Law of Central Administration, which establishes that the responsibility for environmental regulation, administration, and monitoring belongs to the Ministry of Environment.

Source: Miranda et al. 1998

61. A considerable amount of confusion surrounds contracts issued by the CVG. The CVG awarded over 300 contracts in the Imataca Forest Reserve, many of which went to CVG affiliates. These contracts were issued independently of the 92 concessions in the same area awarded by the MEM. As a result, several companies claimed concessionary rights to the same areas. For example, a lawsuit over concessions in Las Cristinas between Minera Las Cristinas (a partnership between the Placer Dome Group - 70% - and the CVG –30%-) and Inversora Mael (owned by Crystallex), was recently decided by the Supreme Court in favor of Placer. Furthermore, many CVG contracts have not followed environmental regulations and requirements by the Ministry of Environment. In 1992, of the 23 contracts in operation in the upper Caroní river basin, nearly half did not have the required permits from the MARNR (Miranda et al. 1998).

62. The process of obtaining a mining concession under the 1945 Mining Law is a lengthy and complex one. A series of permits are required both from the MEM and the MARNR.[21] Once all signatures have been collected, concessions are then awarded for an average of 20 years, with the possibility of a renewal for an additional 20 years.

63. In addition to the complexities of the regulatory framework, the authorities lack the human and technical capacities to implement these norms. The Ministry of Energy and Mines has three professionals to monitor over 400 mining contracts in the Guayana region. Although authority with regard to environmental matters lies with MARNR, none of these inspectors has been trained in environmental impact assessments. The Corporación Venezolana de Guayana has no personnel to monitor environmental impacts

[20] Mining concessionaires would not have to wait for the necessary paperwork from the Ministry of Environment.

[21] A recent study showed that the process to get all required permits for a mining concession takes nearly two years and 76 single decisions (quoted in Müller et al. 1998).

from mining, although the agency does provide laboratories and helicopters. Even under the proposed new mining law's superintendency of mines there would be only six professional staff to monitor existing mining concessions, as well as the activities of an additional 30,000 small-scale miners (Miranda et al. 1998). Under these conditions traditional command and control structures are not very effective. Alternative and more cooperative models of governance and conflict management, as introduced in other countries (see Box 12), could provide a more viable option.

Box 12: The Whitehorse Mining Initiative

In 1992, the Mining Association of Canada, on behalf of the mining industry, launched a process of cooperation between different sectors of society concerned with mining issues: the mining industry, federal and provincial governments, labor unions, aboriginal peoples, and the environmental community. What became known as the Whitehorse Mining Initiative (WMI), led in only two years of consultations and negotiations to an accord laying out a consensus strategic vision for the mining industry in Canada.

The Whitehorse Accord calls for improving the investment climate for investors; streamlining and harmonizing regulatory and tax regimes; ensuring the participation of aboriginal peoples in all aspects of mining; adopting sound environmental practices; establishing an ecologically based system of protected areas; providing workers with healthy and safe working environments and a continued high standard of living; recognition and respect for aboriginal treaty rights; settling aboriginal land claims; guaranteeing stakeholder participation where the public interest is affected; and creating a climate for innovative and effective responses to change.

The document contains a vision statement, 16 principles, 70 goals, more than 150 recommendations, and a statement of commitment to follow-up action. The WMI has been successful in obtaining consensus on a broad range of important issues and with a highly diverse group, representing many interests and agendas. At the time of the signing of the accord a decision was made not to create any formal organization or structure to oversee implementation, but to allow each stakeholder group to follow up with its own plan of action based on the tenets outlined in the "WMI Commitment".

Source: B.C. and Yukon Chamber of Mines 1997

Mining Industry and Operations

64. Venezuela's mining industry shows a great diversity both in terms of company size and type of operations. It is, however, common to distinguish between large-scale industrial and small-scale mining.[22] Among the industrial mining companies working in the region, the majority are medium-size (typically investments of $10 to 40 million) enterprises commonly referred to as "juniors", as opposed to the few large-scale companies ("majors"). Many Venezuelan companies, including those controlled by the Corporación Venezolana de Guayana, have entered into joint ventures with foreign companies. The latter, whose number amounts to roughly 40, are predominantly based in

[22]For a schematic chart of the different forms of mining operations see Müller 1997, quoted in Miranda et al. 1998

Canada. Some of the major players in and around Imataca include Placer Dome, Crystallex and Monarch.

65. Due to the fairly recent *apertura minera* and long bureaucratic approval procedures most multinational mining ventures in Imataca are not yet operational, with the exception of Crystallex's Albino mine in the reserve[23], and CVG-MINERVEN's and Monarch's activities in El Callao just outside Imataca. Maybe the most significant project includes Placer Dome's 4 mining contracts of 1,000 hectares each (Cristinas 4, 5, 6 and 7), signed by Placer Dome (inside the reserve), which encompasses one of the largest deposits of gold in Latin America.[24] After the above-mentioned recent legal victory over concessionary rights, this property is expected to become operational in 2001 and produce over half of Venezuela's current annual gold supply.

66. Industrial gold and diamond mining provide greater revenue for the government than timber extraction. For a concession like Las Cristinas, the government will earn roughly 16% of the revenue. In terms of employment, mining operations are generally more labor-intensive than forestry. For example, the construction phase at Placer Dome's Las Cristinas mine will employ 3,500 people. Thereafter, a maximum of 900 people will be required to operate the mine. Currently, very few people are employed in the formal mining sector, since there are few operating mines (Miranda et al. 1998). In addition, the dramatic drop in gold prices which recently were the lowest recorded in decades, jeopardizes the progress of the Las Cristinas project and, generally speaking, diminishes the attractiveness of the gold mining industry in the Imataca Forest Reserve.

67. Even if multinational companies increase employment in industrial mines, they are unlikely to absorb the large contingent of local miners who risk being displaced by the arrival of the multinationals and the drop in gold prices. Indeed, preliminary estimates in the region suggest that industrial mining employs fewer people per hectare than small-scale mining (Müller 1997). In addition, these independent miners may not be willing to work for multinational companies at all, considering recent conflicts between small-scale miners and multinational mining companies in the region.

68. In contrast to the industrial mining operations, the scope of small-scale mining in Imataca and environs has been difficult to determine. Recent estimates vary between 20,000 and 70,000 miners (Franco et al. 1997). The majority are Venezuelan, but at least 2,000 to 3,000 come across the border from Brazil, Colombia, and Guyana, and recent reports suggest the number is rising, although a slowdown in this flow is expected because of the current gold market situation.

69. Approximately half of the small-scale miners in Bolívar State are organized in 12 cooperatives and 76 associations (Müller 1997). These organizations assist miners in the financing of equipment and help organize work groups. Semi-organized mining consists of work teams of local miners, who have no other organizational structure and who operate using the same techniques as organized miners. Unorganized individual miners who operate solely with rudimentary panning methods are rare. Other miners are

[23] Open-pit mining has been suspended since Summer 1998 (Crystallex n.d.).

[24] It is estimated that the deposit contains 11.8 million ounces of gold (Placer Dome 1996).

operating illegally as *garimpeiros*, although these operations are not regulated or taxed (Miranda et al. 1998).

70. In Venezuela, where the minimum wage for unskilled labor is roughly $200 per month, small-scale miners have a strong incentive to pursue their activities. In general, for every kilogram of excavated material they can obtain about $1-worth of gold. Almost half of that amount will be spent for renting exploration, mining and processing equipment. The other half accrues to the miner, and remains usually untaxed. Small-scale gold production reaches between 5 and 10 tons per year, which - at current international prices - represents a value of $50 million to $100 million (Miranda et al. 1998). This figures changes on the basis of current international gold prices, because the price of gold per ounce has decreased by approximately 15% since the date previously indicated.

Environmental Impacts

71. Both small- and large-scale mining operations can have serious environmental impacts. It is argued that the mitigation of impacts from industrial mining is potentially easier, as the pollution sources are less dispersed and the companies have the necessary human and technical resources for these activities. Others have suggested that large-scale operations are easier to control because they are tend to comply to a greater degree with the regulatory framework adapted to their operating sites. At the same time, land clearing associated with large-scale operations, along with the government's inability to provide adequate monitoring may increase the level of impact from large-scale operations. In any case, political willingness and the commitment to enforce environmental regulations are necessary to ensure impacts are minimized in both large- and small-scale operations. Table 2 provides a list of the most common environmental impacts associated with mining operations.

72. Industrial gold-mining companies in Guayana use both open pits and underground mines for the extraction of the mineral. While the former typically involves the removal of large quantities of waste rock and groundwater, the latter method is less "conspicuous", using a network of shafts. Once dug from the ground, the ore must be further processed to extract the gold. This is generally done in industrial plants by means of closed and controlled processes that include leaching or mill flotation, both of which use cyanide and other toxic chemicals and produce tailings that need to be and are contained.

73. Among the more prominent environmental impacts of industrial-scale mining figure the pollution and degradation of soil and possibly water resources, associated with the huge amount of toxic waste generated in the extraction process.[25] Solid wastes stored on land tend to interact with water and turn into acid drainage (depending on the ferrous sulfide content). This type of drainage is capable of solubilizing the metal content in

[25] Sources of toxicity are mainly the use of cyanide, and acid mine drainage, which can occur when water and air come into contact with geologic material containing iron sulphide, as in abandoned waste piles and tailings.

these materials releasing them into the environment, which is considered to be a potential source of contamination. On the other hand, tailings stored in tailing ponds contain cyanide and heavy metals that can find their way into the environment in the event of accidents. Although tailings are often deposited in lined facilities, leaks are not uncommon. A high groundwater table and high rainfall, both typical in the Guayana region, can aggravate this problem by causing tailings ponds to exceed their recommended capacity and either overflow or rupture dams, contaminating groundwater and nearby streams. These potential problems are usually considered in the design of large-scale mining facilities in order to minimize risks.

Table 2: Potential Environmental Impacts from Small-Scale and Industrial Mining		
Stage	**Potential Impacts from Small Scale Mining**	**Potential Impacts from Industrial Mining**
Site Preparation	• Erosion and loss of soils • Increased sediment load in surface water • Deforestation	• Erosion and loss of soils • Increased sediment load in surface water • Deforestation • Habitat fragmentation/loss from road and site construction
Development	• Collapse of underground mine shafts • Mercury pollution of soils, groundwater and rivers • Toxicity impacts on aquatic species • Sedimentation in surface waters • Habitat and species loss/population decline	• Toxic sludge from treatment of contaminated water • Acid mine drainage • Increased run-off and subsequent reduction in local groundwater • Potential toxicity impacts on organisms • Habitat and species loss/population decline
Post-mining	• Changes in river trajectories • On-going mercury pollution • Continued high sediment loads in surface water	• Persistent acid mine drainage • Continued water contamination • Persistent toxicity impacts
Source: Miranda et al. 1998		

74. In addition, mining operations, particularly open pits, reduce and damage forest covers and affect vegetation and habitats. While very little data on these impacts are available for the Imataca region, mining activities are reported to be directly responsible for deforestation of approximately 10,000 hectares (Franco et al. 1997). Indirect effects resulting from the increased access to otherwise remote areas include the widespread and unregulated hunting/capture of valuable wildlife species.

75. In order to minimize the impacts on fragile ecosystems such as Imataca, it is paramount that mining companies follow strict environmental standards and adhere to the various industry guidelines that have been prepared to this effect (see Box 13). These standards need to be accompanied by an effective system of monitoring and impact assessment.

Box 13: Guidelines for Responsible Mining
Avoiding environmental damage involves careful and sometimes costly prevention and mitigation measures, which include:

- Adequately manage rainfall run-off.
- Control surface water.
- Monitor leach pads, piping systems and impoundments for leaks.
- Protect wildlife and nearby communities.
- Reclaim and landscape mining sites after operations are complete.
- Monitor the mine site over the long term, even after the site has closed, and train local communities to conduct water quality tests.
- Require monitoring by a citizen oversight board.
- Require performance bonds that adequately reflect potential costs to the environment.

Adapted from Mineral Policy Center 1996 quoted in Miranda et al. 1998

76. As noted above, many small-scale mining operations generate similar environmental impacts on water and soil as their industrial counterparts. While more limited in scope, their dispersal can actually have more significant effects because of the type of minerals mined. Due to the lack of sophisticated technical equipment and geological expertise, artesanal miners usually cover extensive areas in the exploration phase. Once a promising deposit has been identified, low cost panning and mercury amalgamation techniques such as sluice boxes, suction dredges, hydraulic pumps, are employed. Despite government's best efforts to stop the use of mercury, it remains the cheapest, quickest and most efficient means to separate the gold from the alluvium and hydraulic pumps continue to be used.[26]

77. Mercury is discharged into the environment when small-scale miners fail to recover mercury tailings (from screens), either by dumping waste directly into rivers or by releasing mercury vapors into the atmosphere when the mercury-gold compound is burned. While the impact of mercury pollution may be severe at the site of mining activity, it is by no means restricted to that area and can affect communities many kilometers away. It has been estimated that the main tributary of the Orinoco, the Caroní River, annually receives 2000 kilograms of mercury (Hamilton n.d.).

78. Despite the lack of more data regarding levels of mercury contamination in Venezuelan rivers, the evidence suggests that the bioaccumulation of the element in the ecosystems of the Guayana region is well established, and has begun to affect not only miners but also the population at large.[27] In view of the fact that the Caroní River extends right across the area, and that mining activity has increased in the tributaries and sources of the river, the likelihood of widespread pollution is great.

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[26] Once the material has been extracted, small-scale miners who use picks and shovels take this material to a mill for processing where the crushed material is mixed with mercury and burned, releasing mercury into the atmosphere as vapor. In the case of hydraulic pumps, mercury is added directly at the mining site and then during panning making gold particles join or amalgamate to the mercury. Pressurized water injected at the work site replaces the mill allowing crushing to takes place *in situ*. The crushed material is then circulated through a screen allowing the recovery of a concentrate from which the gold-mercury amalgamate is extracted. Final separation takes place as a result of the difference in boiling points.

[27] A study (Litos 1989) of the lower Caroní basin determined that 69% of miners and 37% of the non-mining population presented clinical cases of mercury contamination.

79. In order to stem mercury pollution, mitigation measures need to focus on low-cost alternatives to the currently employed technologies. Retorts and other devices have been developed and successfully tested in other countries of the region. Adoption of these devices and dissemination of knowledge about environmental health issues have been encouraged in a number of programs, such as Ecuador's PMSC (see Box 14).

Box 14: Proyecto Minería sin Contaminación (PMSC)
A joint venture between the Centro de Desarollo Comunitario y Conservación Ambiental (CENDA) of Ecuador, the Swiss aid organization COSUDE and the German consulting group Projekt-Consult, PMSC is an integrated project, which aims to minimize the environmental impacts of small-scale mining. It targets environmental engineering, social and institutional issues and consists of four major components:

1. Technical Assistance for Miners
2. Economic and Other Incentives
3. Environmental Education
4. Cooperation between Governmental and Non-governmental Entities

Maybe the most innovative feature of PMSC is *Plan ECO+*, which provides a framework for the development of "collective environmental impact assessments" and mitigation plans for the small-scale miners. The Ecuadorean legislation requires an EIA from each mining entity irrespective of its size. Some of the requirements are hardly applicable to artesanal mining, and the costs involved are often beyond the means of the small-scale miners. Therefore, *Plan ECO+* "sponsors" collective EIAs for similar technical activities under similar environmental conditions. Once the collective EIAs have been approved, they form the basis for more detailed, "individualized" micro-environmental management plans. PMSC and *Plan ECO+* are currently being implemented in the province of El Oro, a major mining region in Ecuador.

Source: Hruschka 1997

Social and Community Issues

80. While environmental impacts may vary according to the type of mining, many social effects are common across any scale of operation. In general, opportunities for gold mining in Venezuela have resulted in an increase in migration to the Guayana region and the Imataca Reserve. This influx has exposed local and, in particular, indigenous communities to various threats.

81. A major negative impact on local communities has been the greater exposure to diseases, especially malaria and tuberculosis. Pools of stagnant water and waste tailings, which are characteristic of hydraulic operations, are fertile breeding grounds for malaria-bearing mosquitoes. Furthermore, the social profile of mining operations often entails the proliferation of alcoholism and prostitution and a corresponding surge in sexually-transmitted diseases, while exposure to contaminants (such as mercury) leads to the appearance of chronic associated diseases.

82. Mining negatively affects the social fabric of many local communities by weakening their leadership structures and undermining traditional systems of reciprocal exchange and communal labor. In addition to the erosion of social capital, there have been a number of incidences of aggression between indigenous groups and miners, the latter

often being accused of "disrespectful behavior." Furthermore, conflicts between small-scale miners and mining companies have also begun to erupt, as small-scale miners begin to find that areas previously open to extraction are now under the control of a private company. Efforts by the National Guard to evict illegal miners from mining concessions have resulted in violence, as recently as January of 1997 (Miranda et al. 1998).

83. As a result and recognizing the difficulties of carrying out exploration activities in an environment characterized by poor socio-economic conditions and conflict, many large companies have adopted a policy of "peaceful coexistence" with small-scale miners and local communities. In Las Cristinas, for example, Placer Dome has initiated a long-term social investment program for indigenous and *criolla* communities and has encouraged the establishment of a small-scale mining cooperative, which would be granted access to parts of the company's concession, and receive training in management of the cooperative, use of new extraction methods, environmental education, use of retorts and reduction in the quantities of mercury (Placer Dome 1996). The long-term goal is to arrive at a partnership between the company and the local community, which provides economic benefits to both while utilizing environmentally responsible technologies.

84. While conflicts and social impacts have been documented in an *ad hoc* manner, a systematic social assessment of local institutions, communities, and indigenous groups has not been undertaken. The implementation of any resource use and management plan needs to take into account the social dynamics at work in the area. While the economic opportunities associated with new mining operations may provide some benefits, in all likelihood there will be significant social and environmental costs, particularly for communities currently living in and around the reserve.

INDIGENOUS PEOPLES

85. Venezuela is home to 28 indigenous peoples, 24 of which live in the Guayana region. These groups make up 11.5 percent of the regional population and occupy and use 80 percent of the area. Like their counterparts in other parts of the country they remain highly marginalized in political, economic and social terms (see Box 15).

Box 15: Profile of Indigenous Peoples in Venezuela

- Indigenous people represent 1.5 % of the total population.
- 42 % of indigenous peoples live in urban areas.
- 58% is younger than 20 years.
- 60% are illiterate.
- 66% of the indigenous communities have no school.
- 87% lack a dispensary.
- 96% have no radio communication.
- 73% have no land title.

Source: OCEI 1994-5

86. The Imataca Forest Reserve is inhabited by at least five different indigenous peoples - the Pemon, Kariña, Arawako, Akawaio and Warao. Some communities continue to maintain their traditional subsistence economies, a combination of shifting cultivation, hunting, gathering and fishing. With the growing access to and colonization of their traditional territories, others have become sedentarized in or around "frontier settlements"

and partake in various economic activities, including mining, to a small degree. In part, this is due to government policy, which has encouraged once semi-nomadic indigenous groups to settle in permanent villages.

Land and Resource Rights

87. The main bone of contention among indigenous peoples in Venezuela is the general lack of secure communal tenure over their ancestral lands and natural resources. Although Article 77 of the Constitution calls for a special regime for the "protection of the indigenous communities and their progressive incorporation into the life of the nation" and despite Venezuela's ratification of ILO Convention 107, the country possesses relatively weak legislative and institutional structures for safeguarding indigenous peoples' rights[28].

88. The elaboration and implementation of a *regimen de excepción* (exemption regime) has been stalemated in the Venezuelan Congress, which, in 1989, began debating a proposed Organic Law on Indigenous Communities, Peoples, and Cultures. After years of inactivity, the bill was finally approved in the Senate in 1995 and is now on the pending discussion agenda of the Chamber of Deputies. Among other things, the bill seeks to consolidate and update the scant legislation on indigenous peoples' rights (see Box 16). Similarly, ratification of ILO Convention 169 with its far-reaching provisions on land rights and consultation mechanisms has been held up in Congress.

Box 16: Draft Organic Law on Indigenous Communities, Peoples and Cultures

The latest version of the proposed law, already approved in the Senate and recently modified by a special commission of the Chamber of Deputies after a series of consultations with indigenous organizations and other stakeholders, contains several provisions which could form the basis for a more comprehensive protection of indigenous communities in Venezuelan society.

- Recognition of collective/communal property rights of indigenous communities to their ancestral lands.
- Delimitation and demarcation of indigenous lands and their registration, including in ABRAES.
- Right to sustainable resource use for indigenous communities located in ABRAES.
- Prohibition of displacement of communities by development projects.
- Right to participate in national, regional and local development planning.
- Establishment of an Instituto Indigenista to monitor the implementation of the law's provisions.

Source: 1998 Draft Law

89. Hence, the legal framework for indigenous peoples in Venezuela remains fragmented and draws from pieces of legislation, whose purposes often run counter to indigenous social structures and cultural identities. A case in point is the 1960 Agrarian Reform Law, which allows indigenous communities to claim titles on *tierras baldías* (vacant land). The titling process under this law has been criticized (Colchester 1995; Kuppe 1997), as it requires the establishment and incorporation of agrarian cooperatives as

[28] For a detailed discussion of the legal framework see Appendix 3.

holders of these rights. Moreover, most titles remain provisional or even only usufruct, leaving the vast majority of Venezuela's indigenous people without secure tenure.

90. In forest reserves such as Imataca, land cannot be allocated for agrarian reform purposes, given the restrictions on agricultural use in such areas. Also, because forest reserves are established on unappropriated or government land, access to ownership is restricted due to use regulations. Although some indigenous communities have lived in Imataca since prior to the establishment of the reserve, they continue to occupy it without legal recognition of their rights to the land and natural resources. The existing administrative regulations for forest reserves include some recognition of the cultural/natural resource needs of indigenous peoples, but they do not foresee titles to the land. On the other hand, this situation creates a legal conflict because land use plans are not a legal vehicle for land adjudication. In the absence of juridical mechanisms that would allow the granting of ownership to land in ABRAES, the uncertainty as to land ownership by indigenous inhabitants in these areas will persist.

91. The lack of secure tenure has been singled out as the most important factor for the exclusion and vulnerability of the indigenous communities of Imataca and elsewhere in Venezuela (Colchester 1995; Kuppe 1997). The regularization of land rights is not only paramount to stem the encroachments of development activities, but also to acknowledge one of the fundamental tenets of the cultural identity of indigenous peoples, which derives from the dependence on and close spiritual association with their ancestral lands.

Political Participation and Socio-Economic Inclusion

92. Over the past decade, Venezuela's indigenous organizations have struggled to address the various socio-economic, human rights and environmental problems faced by native peoples. Protests concerning the legality and potential impacts of Decree 1850, and against the construction of an electric transmission line from Macagua to the Brazilian border, have raised the political profile of the indigenous movement. In the case of Imataca, both the national umbrella organization CONIVE and the regional Federación Indígena de Bolívar (FIB) have played a prominent role in negotiations with government authorities and in organizing non-violent actions.

93. The indigenous movement remains, however, fragmented and lacks the human and financial resources and institutional capacity to define and implement a pro-active development program.[29] At the same time, a major concern among indigenous groups is how governments will respond to such grass roots initiatives: through greater dialogue and the evolution of mechanisms to facilitate more participatory decision making, or through ad hoc and often anti-indigenous laws and policies which has characterized past relationships.

94. Venezuela's indigenous peoples have been excluded from the country's social and economical mainstream. This is reflected in the fact that - with few exceptions - civil society at large has approached the recent conflicts in Imataca and Canaima with a mix of incredulity and annoyance. Certain government actions and statements have tried to

[29] See Box 17 for an overview of Bank activities to strengthen indigenous peoples' organizations in Latin America.

situate indigenous groups outside law and order and, in certain instances, even likened them to subversive elements, who aim to undermine the foundations of the *ordre public* (PROVEA 1998).

95. At the same time, efforts for social and political inclusion of indigenous communities can not be de-coupled from economic participation and benefit-sharing. The current political process for constitutional reform to which three representatives of indigenous groups were elected to protect their rights, and the increasing collective awareness of such rights, renews the hope of a social order that will treat indigenous inhabitants of the IFR more fairly.

Box 17: Participatory Capacity-Building for Indigenous Peoples

The World Bank, in collaboration with the Fondo Indígena, is currently supporting an initiative which aims to strengthen indigenous peoples' organizations in Latin America and to increase their options for ethnodevelopment, interpreted as socioeconomic change that is determined by them and is compatible with their specific cultural values.

So far, eight projects have been successfully implemented. They include:

- **"Indigenous Universities" in Chile:** Series of training workshops with the Mapuche, Aymara and Atacameño communities on issues of organizational development, project design and evaluation, negotiation skills, indigenous legislation, etc.
- **Forest Communities in Mexico:** This capacity-building project for indigenous organizations in Oaxaca focused on the development of participatory rural appraisal methodologies as a tool for defining a community-based development strategy, management development for community forest enterprises and participation in the delivery of local public services.
- **Institutional Strengthening of Indigenous Organizations in Colombia:** A total of three national seminars, 15 regional workshops and more than 100 local consultations were dedicated to training indigenous communities in formulating their own development objectives and priorities, strengthening of indigenous leadership skills and revitalizing traditional forms of organization, management and administration.

A preliminary assessment of these projects shows that they have helped indigenous organizations to define their own development agendas. The various workshops and seminars also provided important fora for inter and intra-community dialogue and strengthened traditional forms of political discourse.

Source: Uquillas et al. 1998

4. CONCLUSIONS AND RECOMMENDATIONS

96. This report has analyzed the most pressing legal/institutional, natural resource, environmental and social issues facing the Imataca Forest Reserve. It has focused attention on the impacts associated with the issuance of Decree 1850 in the broader context of Venezuela's political ecology. The scope of the debate surrounding Imataca has demonstrated the need for a comprehensive review of the precepts of the country's sustainable development policies and practices.

97. The decree has drawn attention to the panoply of conflicting laws and decrees that regulate resource use in Imataca. The appropriateness and relevance of some of these instruments is now being questioned, as they have failed to institute an effective system of resource allocation and management. The normative ambiguity and institutional weaknesses have combined for a high degree of insecurity and erosion of public authority. As a result, the existing regime has not only been incapable of managing competing interests, but has actually contributed to social conflicts.

98. In addressing these problems, the government needs to acknowledge that the current *plan de ordenamiento* (zoning plan) for Imataca does not reflect best practices in the areas of participatory planning, zoning and co-management. The question arises whether a revised management plan could be effective under the existing regime, or whether a new protected area category needs to be considered. In making this determination, both local and national level stakeholders should be brought into the review process.

99. The existing forest management regime in Imataca appears inadequate to value the resources and to deal with the threats of deforestation and erosion of biodiversity. Few incentives exist for logging companies to adopt sustainable harvesting techniques, and the government lacks the human and financial resources to monitor environmental and social impacts of forestry operations. Perverse subsidies and low stumpage fees as well as the neglect of non-timber forest products have deprived the government of significant revenues. This policy has also failed to provide benefits for local communities in the reserve.

100. Imataca's biological resources are considered to be very significant. However, few scientific data on the reserve's ecology and biodiversity exist. Better and more reliable information is necessary in order to develop the appropriate use policies and planning mechanisms. Some of the most important knowledge gaps concern species and ecosystem diversity, human ecology, watershed systems and the impacts of current forest and mining practices on the environment.

101. Mineral exploitation and related development activities represent the greatest threat to Imataca's integrity. Largely unregulated mining is responsible for negative environmental impacts such as water and soil pollution, erosion and sedimentation, deforestation, and habitat loss. Current laws and technical capacities do not provide for effective monitoring of extractive activities. Imataca's mineral wealth has attracted a broad spectrum of social actors ranging from local indigenous peoples to large multinational companies. Disputes over the rights to land and resources have led to violent confrontations between different social groups as they try to lay claim to part of the wealth.

102. The existing legal framework applicable to indigenous peoples does not provide a sufficient basis for the recognition of their collective rights. The failure to ratify ILO Convention 169 and to enact the Organic Law on Indigenous Communities is an indication of the lacking political support for the social inclusion of indigenous peoples. While Imataca and other conflicts in the region have raised the profile of many communities and their representatives, their most critical demand, the recognition of communal tenure to ancestral lands, is far from being met.

103. The Imataca case has revealed some structural problems of resource planning and indigenous policies in Venezuela. While an annulment of Decree 1850 probably will not resolve all the underlying conflicts, the deliberations of the Supreme Court and the surrounding public debate have become a window of opportunity to open a dialogue on those issues and to bring about some long overdue reforms.

RECOMMENDATIONS

104. The following recommendations are primarily addressed to the Government of Venezuela and its responsible agencies. It is expected, however, that these measures and actions will be considered in partnership and consultation with other stakeholders such as the private sector, the NGO community and indigenous organizations. As stated in paragraph 24, the Government formed an Inter-Ministerial Commission, which included the Ministries of Energy and Mines, Environment, Defense, Planning, and CVG to review the issues that surrounded the controversy brought on by the issuance of Decree 1850. More recently, just after the new Government came to power, MARNR designated CIERFI (Comisión Interna Especial de la Reserva Forestal de Imataca) to attend to the planning and informational needs to generate the legal/institutional instruments necessary to ensure the sustainable development of the Imataca Forest Reserve and environs. Once the baseline studies currently underway with the assistance of Bank project preparation funds (PHRD) are completed, CIERFI will present a management strategy for the Imataca. At this time the GoV may request Bank assistance based on its inclusion within the Ley Paraguas.

Legal-Institutional Framework

- Establish a *Presidential Commission on Sustainable Development in Imataca*, comprised of members from the relevant ministries, state governments, the legislature, industry representatives, the NGOs and scientific communities and local/indigenous organizations, with the mandate to review the current legal and institutional framework governing resource use and management in Imataca.

- Conduct a survey of the different logging and mining concessions as well as private/communal property and usufruct rights in the reserve, with a view to establishing a spatial socio-legal database.

- Initiate a systematic and transparent public consultation of all stakeholders involved in IFR conflict with the aim to engage the different interest groups in a regular forum of joint learning and problem-solving. Such a process should be facilitated by a qualified, independent institution.

Land and Resource Planning

- On the basis of ecological baseline studies and the logging and mining concession inventory, revise the current zoning and use plan.

- Adopt a participatory micro-level planning approach to resource management in Imataca. Such a formula would stimulate grassroots participation in local planning, and assist local communities in the formulation of development strategies and investment plans.

Forestry

- Strengthen the GSO for Forest Resources' capacity to monitor and evaluate forest management, with particular reference to harvest planning and extraction, and environmental impacts.
- Eliminate/reduce direct and indirect forest subsidies such as the "fictitious cubic meter" and "research parcels" and adjust stumpage fees and taxes to international levels.
- Expand the scope of concession management plans to include biodiversity inventories and environmental impact assessments.

Ecology and Biodiversity

- Develop an applied research program for Imataca in order to establish a set of baselines for the sustainable management of its resources. This program should include biodiversity assessments, studies of regional hydrological cycles and forest systems in order to identify priority conservation and rehabilitation areas as well as other ecological sensitivities. These studies should take into account the traditional ecological knowledge and practices and would serve as a major input into the design of a primary forest corridor and improved forest management and use plans for the reserve.

- Carry out an assessment of the use and non-use values of the natural resources and ecosystem functions of the reserve with the aim to identify costs and benefits of alternative uses such as ecotourism and bioprospecting.

Mining

- Review all current concessions as to whether they fulfill minimum standards of environmentally responsible mining.

- Initiate an assistance program for the small-scale mining sector, which would focus on "collective environmental impact assessments" and the transfer of alternative clean

technologies. Such a program should be accompanied by an environmental awareness module for mining cooperatives and associations.

Indigenous Peoples

- Expedite the process of ratification of ILO Convention 169 and the enactment of the Organic Law on Indigenous Communities.
- Articulate a policy which would address, *inter alia*, land and resource tenure regularization and incentive schemes for the social inclusion of indigenous communities; assign clear implementation responsibilities for the various elements of the policy; and strengthen the capacity of existing institutions to implement it.
- Provide assistance for and train indigenous communities and organizations in legal, economic and environmental aspects of conservation and sustainable resource use.

5. ACTION PROGRAM

To assist the Government with the implementation of these recommendations, the Bank is proposing a three-phase Action Program:

1998: Study Tour -- Government officials from MARNR, CORDIPLAN, MEM, CVG and local authorities, as well as representatives from NGOs and indigenous umbrella groups visited successful sustainable development pilot projects and indigenous peoples organizations in Colombia and Ecuador. This one-week study tour was completed in April 1998.

Prepare Baseline Studies of Imataca and Environs

These studies should begin in 1999 and include the following:
1. socio-economic profiles
2. ecological and biological diversity assessments
3. an institutional and resource management study

They will be undertaken as part of the project preparation process and form the basis for a program of technical assistance to MARNR, MEM, and other relevant stakeholders. The Universidad Experimental de Guayana (UNEG) has agreed to assist with the socio-economic studies that will be carried out in the second half of 1999.

Negotiate a Loan for Training and Innovation in the Imataca Sustainable Development

The development of the third phase would be based on the Government's commitment to a participatory process that fully accounts for the views and interests of all stakeholder groups. Once completed, CIERFI should present a management strategy for Imataca. *If the Government wishes to request Bank loan financing for a project to implement the strategy, it should make a formal proposal that would be included in the Ley Paraguas.* The implementing agency for the proposed project would be selected based on an institutional analysis.

A project might include the following activities:

1. *Institutional Strengthening of CORDIPLAN and MARNR/General Sector Office for Forest Resources*

- Financial and technical assistance for the two agencies in the areas of (i) financial management and administration; (ii) environmental and social assessments; and (iii) monitoring and evaluation.
- Assistance in the design and implementation of a conflict management process consisting of two stages: (i) a detailed stakeholder analysis and socio-economic assessment that focuses on actual and potential conflicts in Imataca and environs; (ii) establishment of a forum which brings together all stakeholders for joint learning and product-oriented collaborative problem-solving.

2. *Sustainable Forestry and Biodiversity*

- Support under this component would comprise technical assistance modules on: (i) ecosystem approaches to forest management; (ii) techniques of reduced impact logging; (iii) forestry research and, (iv) forest monitoring and accounting.
- Further to the findings of the biodiversity assessment, conduct a feasibility study on alternative protected area categories and management regimes for Imataca.

3. *Environmentally Responsible Mining*

- Development of a monitoring system on the environmental and social impacts of mining activities.
- Technical assistance for small-scale miners on organizational development and environmentally sound mining practices.

4. *Regularization of Land and Resource Rights of Indigenous Peoples*

- Review of the adequacy of the indigenous land titling regime, stipulated in the Agrarian Reform Law, in light of Venezuela's international obligations and the evolution of standards and practices on the recognition of indigenous ownership over ancestral territories.

- Study on indigenous land rights in ABRAES, in order to provide a baseline for clarifying the normative and factual situation, and to develop options for sustainable tenure and subsistence regimes in these areas.

5. Institutional Strengthening of Local Communities and Grassroots Organizations

- Support to indigenous and rural grassroots organizations in the following areas: (i) participatory planning, project preparation, implementation, and monitoring; (ii) financial management and administration; (iii) basic legal training.

APPENDIX 1: BANK MISSIONS TERMS OF REFERENCE

Mission I (November 1997)

The objectives of the first mission were to: (i) take stock of pertinent issues related to gold mining, commercial forestry and indigenous peoples in the Imataca Forest Reserve; (ii) identify those environmental issues which may not be adequately addressed in the proposed Management Plan for the Imataca Forest Reserve presented by the Ministry of the Environment (MARNR) and the Ministry of Energy and Mines (MEM); (iii) analyze the current allocation of government resources directed at environmental issues and management in this area; (iv) identify bottlenecks in the implementation of specific environmental programs; and (v) provide the government with recommendations aimed at improving its environmental performance. In addition, the mission identified priority areas and/or actions to strengthen Venezuela's environmental management and which could provide the basis for identification of new environmental lending operations, Technical Assistance (TA) or investment operation financed either by the Bank or by other multilateral or bilateral agencies.

Mission II (May 1998)

The objectives of the second mission were to: (i) conduct a comprehensive analysis of Venezuela's current environmental, natural resource conservation, and of the legal/institutional framework as it applies to the Imataca Forest Reserve and environs; (ii) review Decree 1850 and the various legal opinions issued on it in the context of the above framework; (iii) identify gaps, overlaps, weaknesses and contradictions in the current framework and propose measures to overcome them by way of legislative reform and institutional realignments; (iv) analyze the land and resource tenure regime in the Reserve and environs with a particular emphasis on customary indigenous property rights and their overlap with existing mining and timber concessions/permits; (v) review existing institutional arrangements to determine the adequacy of the institutional structure and capacity to perform the necessary planning, regulatory, monitoring and enforcement functions; (vi) evaluate the capacity of existing legal/institutional arrangements to manage resource conflicts in the Reserve; (vii) propose alternative dispute settlement regimes; (viii) review the legislative framework of indigenous peoples rights in Venezuela (domestic law and international agreements), as it relates to their rights to ownership/recognition of land and natural resources; (ix) identify the existing gaps in such legislation; and (x) recommend actions necessary to secure or improve the rights of indigenous peoples.

APPENDIX 2: LEGAL ANALYSIS OF NATURAL RESOURCE MANAGEMENT IN IMATACA

Table 1: Primary Legislation Pertaining to Natural Resource Management in Imataca

Legal Instrument	Year	Relevance
Organic Law of the Environment	1976	• Establishes guiding principles for environmental conservation, including the creation and protection of forest reserves and use of natural resources.
Organic Law of Central Administration[30]	1976	• Creates the Ministry of Environment and defines its competencies.
Organic Land Use Zoning Law	1983	• Establishes processes for national land use zoning. • Establishes administrative procedures for planning in ABRAES.
Forest Law	1965	• Regulates conservation and use of forests and watersheds. • Prohibits deforestation or alienation of forest reserves without prior approval from Congress.
Environmental Penal Law	1992	• Establishes penalties for acts that degrade the environment. • Punishes public sector employees who grant permission for activities that damage the environment without an environmental impact assessment.
Special Law Ratifying the Convention on Biological Diversity	1994	• Ratifies Venezuela's adhesion to the Convention on Biological Diversity
Decree 636	1990	• Prohibits any activity in forest reserves that is contrary to the objectives for which the reserve or forest lot was created.
Decree 2214	1992	• Defines and regulates activities in forest reserves, forest lots, and other forested protected areas. • Defines land use zones in forest reserves.
Decree 2219	1992	• Establishes guidelines on environmental impacts of

[30] During the first half of August 1999 and in the context of the Expediting Law, the Executive will discuss a Draft of the Reform of the Organic Law of Central Administration for final approval.

Legal Instrument	Year	Relevance
		mining activities.
Decree 1257	1996	• Establishes the administrative procedure and requirements for environmental impact assessments. • This variable will be included for timber sector in the respective Management Plans which incorporate this type of assessment in their methodologies
Decree 1850	1997	• Management and zoning plan for Imataca.
Decree 2945	1998	• National land use plan.
Adapted from MARNR 1995		

MINING ACTIVITIES IN IMATACA

One of the key arguments in the Supreme Court dispute is the alleged incompatibility of mining activity in the Reserve, given the status of Imataca as a *"Forest Reserve"*. In this context, it is noted that some forms of mining have been going on in Imataca for decades. The first concessions were granted in the 1960s based on a number of Decrees, which opened certain parts of the Reserve to mining operations. Thus, one issue that the Supreme Court might choose to consider is whether to allow mining in a Forest Reserve where the mining arises from concessions granted prior to Decree 1850 and even prior to the establishment of the Reserve.

As noted earlier, the framework for land use and the spatial distribution of economic activities is primarily outlined in the Land Administration Law (*Ley Orgánica para la Ordenación del Territorio - LOPOT*) of 1983. This law includes a hierarchy of different planning instruments and establishes in its Art. 15 seq. a system of "protected" areas, the *ABRAE* (*Areas Bajo Regimen Administrativo Especial- Areas under Special Administration*), which include Forest Reserves. The *LOPOT* does not specify uses in Forest Reserves. It leaves this to the Forestry Law on Land and Water (*Ley Forestal de Suelos y Aguas - LFSA)* of 1965, and its implementing regulations and the respective land zoning plan and land use regulation for the specific Reserve.

The *LFSA* defines forest reserves in Art. 55:

> *Forest reserves will comprise forest masses that because of their geographic location, floristic qualitative and quantitative composition or because they are unique to the area, constitute indispensable elements for maintaining the national timber industry*

When the conflict erupted, supporters of Decree 1850 noted that Article 55 could be read to suggest that the main function of a Forest Reserve is purely commercial, contrasting, for example, with that of a National Park, which is primarily dedicated to conservation and recreation.

The Regulation of the Forestry Law on Land and Water *(RLFSA)* of 1977, in Chapter VI, *the Use of Forest Reserves* elaborates the purposes and criteria of Forest Reserves and also introduces the notion of rational use of forests, following the evolution of the forest management doctrine towards the paradigm of sustainable resource use.

In terms of other permitted uses, Art 136, point 1 stipulates: The preceding paragraphs do not exclude **other rational uses compatible** with the purpose for which forest reserves were created, in accordance with technical studies to be undertaken by the Ministry of the Environment and Renewable Natural Resources. (emphasis added)

Thus, it appears important to rationalize whether mining activities constitute a *compatible rational use* within the goals of a Forest Reserve. In this context, another implementing regulation of the *LFSA*, the *Standards for the Administration of Forestry Activities in Forest Reserves* ...have been referenced in the Supreme Court petition. These rules essentially repeat the *LFSA* 's definition of a Forest Reserve but broaden the notion of *the use of forests*, which is defined in Art. 2 as:

> *The use of spaces with or without forest cover, by implementing management practices for permanent lumber production, and the protection, research, recreation, conservation and promotion of the forest resource geared to its sustainable development.*

This formulation indicates a more integrative approach to forest management that goes beyond the mere productive functions specified in the *LFSA*.

The "*Standards*" list activities that are allowed, restricted and prohibited in Forest Reserves. They do not make any reference to mining. To some in the environmental community, the absence of the reference to mining indicates that Congress could not conceive of mining activities in Forest Reserves. Another perspective is that the list of prohibited uses is only enumerative, as indicated by the "*tales como*" (such as) in Art 16. Another possible reading of the provision is to exclude mining from Forest Reserves under reference to some of the explicitly prohibited activities such as the destruction of natural forest, human settlements, etc. which might result from it. The latter view seems to be supported by a more holistic and teleological interpretation of the relevant norms. This would leave the management authority with the discretion to allow mining, as long as it does not impact negatively on the primary objective of a *Forest Reserve*, which would translate into an appropriate Forestry Management Plan to guarantee sustainability.

There is national debate on the co-existence between mining and timber concessions in the Reserve. In the case of Imataca and *Decree 1850,* environmentalists questioned whether the opening of mining in the Reserve can be compatible with sustainable forestry. In this context, the argument before the Supreme Court is that large-scale mining represents an *enajenamiento* (alienation) of the Reserve, which would require the authorization of the National Congress (Art. 57 *LFSA*).

Environmentalists also argue that the potential for overlapping timber and mining concessions could, in the majority of cases, not only be irreconcilable but also create a kind of legal insecurity that has been plaguing the Reserve since its inception. Regardless of the

Supreme Court's final decision regarding Decree 1850, the legislature can work towards "reducing the complexity" of the logging-mining tug-of-war by amending and streamlining the relevant regulations and clarifying the status of mining activities in *Forest Reserves*.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

The proficient application of environmental impact assessment (EIA) techniques are key to environmentally sustainable development, in Venezuela and elsewhere. According to Art. 19 of Venezuela's *Organic Environmental Law (LOA)* of 1976 "*... activities capable of degrading the environment are subject to control by the National Executive through the competent authorities*". This control consists of a system of authorizations and permits granted by the Ministry of the Environment and Renewable Natural Resources *(MARNR)* on the condition of an environmental impact assessment for most industrial activities and, where necessary, the implementation of prevention, control, mitigation and/or corrective measures.

The main legal instrument that is key to the success of EIA is *Decree 1257* of 1996 on *Standards Regarding Environmental Assessment of Activities Capable of Degrading the Environment.* This Decree provides the procedures and general guidelines for conducting environmental impact assessment. Venezuela does not appear to have had the time, nor perhaps the resources, to dedicate significant time to the operations of this important Decree. Thus, EIA is an area where assistance could be very useful. Regarding mining, Article 6 of the Decree makes EIAs mandatory for the exploitation of metals and precious stones. Thus, even if mining might be allowed in Imataca, it remains subject to a process of authorization that integrates the environmental component and weighs it against economic benefits. At the same time, it does not refer to some of the specific types of activities that plague Imataca, such as artisanal mining. It does refer to "small scale" mining, and perhaps this term might be considered to cover artisanal mining.

While it has been noted that few inter-agency channels exist, the procedures for environmental impact assessments are an exception. Detailed rules and regulations exist for a system of permits and authorizations required for operators of activities potentially damaging to the environment, and it is required that all relevant agencies take part in the process, and that there be public participation if the MARNR deems this to be advisable. In addition to the requirements under the *Mining Law* of 1945, the exploitation of most mineral resources, including gold and diamonds, is subject to *authorization/approval to occupy territory* and *to impact renewable natural resource* granted by the *MARNR.* These permits, in turn, are dependent on the positive technical evaluation of an environmental impact statement by the *MARNR.* Art 15 of the *Standards Regarding Environmental Assessment of Activities Capable of Degrading the Environment* makes it clear that the authorizations need to be secured before concessions are granted by the *MARNR.*

While these procedures are well defined, they have not led to a significant inter-ministerial dialogue at the policy level, which might have resulted in guidelines for environmental aspects of mining activities. Thus, land use and environmental permits are issued on a highly casuistic basis, since technical know-how of industrial methods, large-scale projects

and associated processes is the province of other ministries (MEM, MTC and others). In many cases mining has been going on without any of the required permits.

A new Mining Law is currently being debated in Congress[31]. While it is fairly well-written, some in the environmental community believe that it has the potential to reduce further the cooperation between ministries. This new law seems to provide that the *Ministry of Energy and Mines* will be in charge of all environmental aspects of mining. This is ironic, because according to the "Statement of Motives -- Draft Mining Law", which accompanies the law as explanation, a stated purpose in drafting the law was to try to reduce bureaucratic overlap. A preliminary review of the law indicates that the law could succeed in this manner, depending upon the efficacy of other legislation, principally, that of the EIA legislation. This Mining Law does not refer to MARNR as extensively as some may have hoped. However, if the law works well, and MARNR is sufficiently supported, the EIA norms and the Mining Law could work in tandem. The Bank should seek further clarification on this point. The Bank should also address the concern that the Mining Law does not provide clear guidance on how to address subsoil rights, especially in those areas which might otherwise be protected areas. (*"The right to mining exploitation as referred to in this article will be limited to mineral substances found in the subsoil in those areas where the law will not allow surface mining.")* (See Article 25) It could be that this concern can be addressed through protection that exists in other legislation, but this point should be clarified.

This point was raised in the recent controversy over whether the new mining law could imperil other national parks. The erosion of the competencies of *MARNR* would add to the fragmentation of environmental control. Thus, again, while these points seem at least on paper to be addressed in the *Standards,* it would be useful for them to be clarified.

In the context of EIA procedures, it is worth noting that for logging operations in Forest Reserves the EIA is considered to be fulfilled by the respective forestry and wildlife management plan, called for by the Forestry Law on Land and Water for commercial logging operations. These management plans, do not, however, require stringent environmental assessments.

PUBLIC PARTICIPATION

The Supreme Court petitions concerning Decree 1850 make explicit reference to the lack of public participation in the elaboration of the *Plan de Ordenamiento y Reglamento de Uso* (Zoning and Use Regulation Plan) for Imataca. In this regard, Art.32 paragraph 2 of the *Organic Land Administration Law (Ley Orgánica para la Ordenación del Territorio)* stipulates:

> *In the preparation phase the draft of the plan must be submitted to the public in order to hear the opinions of interested parties and receive contributions from the duly organized community, all in conformity with the provisions of the Regulation.*

[31] It is expected that, within the scope of the powers granted by the Expediting Law to the Executive, the Council of Ministers will approve the new Mining Law during the first half of August.

While participation is a versatile concept - highly context–specific and covering a broad spectrum of modes - there are certain minimum criteria of due process recognized in current Good Practices. These include the intent on the part of the decision-maker to allow for a transparent and accessible process. At some point it may be possible to clarify (if Decree 1850 is ratified by the Supreme Court) whether Decree 1850 complies with the preceding requirements. The language of the above provision indicates that the participation process is a "passive" one (*"hear the opinion of the interested parties", " receive contributions from the community")* so that it is not immediately clear whether it is sufficient to integrate adequately the rights and interests of stakeholders.

A similar assessment has to be made of the public participation procedures for EIAs. The provisions on public participation in the *Decree 1257* contain the standard recognition of public participation, but appear rather discretionary - *MARNR "may order a public review and consultation process of the Assessments."* **Of course, public participation is mandatory for Bank financed projects**. Mandatory public participation appears to be limited to a right to be informed about the fact that an Environmental Impact Assessment is under way and to consult approved EIAs in Documentation Centers of the MARNR.

The example of Imataca could provide an incentive to review, both for the land use planning and EIA processes, whether the ruling standards and practices are in conformity with international doctrine in this matter and to develop alternative participatory mechanisms, particularly as far as indigenous and other local communities are concerned.

BIODIVERSITY CONSERVATION

A particular dimension of ecological impacts concerns the threat to biological resources. It has been noted that the Imataca Forest Reserve is very rich in biodiversity, requiring special conservation measures. In this context, reference is made to Venezuela's obligations under a number of international conventions, such as the Convention on Biological Diversity and the Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere of 1940. Both Conventions call for the conservation of biological resources through the establishment of a system of protected areas. The Convention on Biological Diversity goes a step further and also calls on the Contracting Parties to regulate and manage biological resources outside protected areas (Art. 8c).

While the two treaties provide for binding obligations under international and Venezuelan domestic law, both Conventions are programmatic in nature and leave it to the Contracting Parties how to implement the objectives set forth. Therefore, these norms cannot form the legal basis for concrete rights or violations in regard to the protection of specific resources or areas such as Imataca. Furthermore, it could be that the productive and commercial nature of *Forest Reserves* would exclude them from the IUCN definition of protected areas and the corresponding management categories, which are central to the coverage of the two Conventions.

There remains, however, the concern as to how increasing scientific evidence about the high levels and distribution of biodiversity in Imataca can be taken into account. Although Decree 1850 foresees in its zoning plan a small *protection zone,* this might not be adequate –

neither in terms of the legal status nor with regard to the extent of the area. More comprehensive biological assessments and resource inventories are required to determine the adequacy of the current management category and the potential need to "upgrade" the Reserve (or parts of it) to a National Park or similar category. The Biosphere Reserve status with its multiple-use concept could prove a viable alternative, even more so as it is a legal category in Venezuela.

APPENDIX 3:
INDIGENOUS PEOPLES' RIGHTS

LEGISLATIVE FRAMEWORK FOR INDIGENOUS PEOPLES

The 1961 Constitution of Venezuela contains only one provision that refers to indigenous peoples, and it is among other provisions of protection of special groups (*campesinos* and Indians). There are no special rights of indigenous peoples set forth, but for a regime of exception, of a temporary nature. The State's obligation to protect them is not well defined, and it has an "integrationist" goal.

Article 77 reads:

> *"The State will aim to improve the living conditions of the campesino population. The law will establish the regime of exception that the protection of the indigenous communities and their progressive incorporation to the life of the Nation will require."*

The special law required by article 77 of the Constitution was never enacted (one draft has been in Congress for some time) and the "integrationist" principle seems to be guiding the policies drawn by some Venezuelan authorities[32]. These authorities believe that after many years of "integration" all inhabitants of Venezuela have the same rights and obligations and, therefore, indigenous peoples have no special rights. Other authorities, however, feel that there are indigenous groups that have the right to a special protection and treatment by the State[33]. Therefore, the "integrational" policy should be understood with flexibility. Congress is now considering for ratification ILO Convention 169 that would bring into legislation a non-integrationist policy approach. Even if such Convention is not enacted, subsidiary legislation is also in force (described below) that is not aiming to assimilate and integrate all indigenous peoples in Venezuela. A decision of the Court on this issue may give some clarity to where the indigenous peoples policy of Venezuela will go.

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[32]In particular those dealing with decree 1850 in CORDIPLAN and MANR.

[33] See paper submitted by *Fiscal General de la República*, to the Supreme Court (re: IMATACA) on October 6, 1997 (copy furnished by MARNR), and opinions expressed by representatives of the Foreign Ministry, the Directorate of Indigenous Affairs and the Treaty of Amazon Cooperation I discussed those matters with.

LAND REGULARIZATION LEGISLATION

Most of the indigenous communities and other ethnic groups live in the tropical forests of the East, South and North-west of Venezuela designated as ABRAES. Their traditional economy is a combination of shifting cultivation, hunting, gathering and fishing.

Despite this cultural reality, and as it is common in many Latin American countries where there is no special indigenous peoples law, the main pieces of legislation which deal with indigenous land regularization are those related to the country's Agrarian Reform policy. Therefore, they apply to lands that can be certified "appropriate" for agricultural use.

The legal regime for indigenous lands in agricultural areas and ABRAES follow:

Agricultural Lands

Some indigenous communities were granted titles to land prior to a 1904 law[34] that required the registration and partition of all such lands. Those that were not registered and partitioned were later transferred to the Municipalities (as *ejidos*) and thus lost by the indigenous communities. Procedures are being implemented by the land regularization agencies to return some of the "not-partitioned and unregistered" lands from the Municipalities back to the indigenous communities.

In the early 1960s, the Agrarian reform law[35] and complementary legislation introduced a new legislative regime to address the titling of indigenous lands but restricted to vacant lands (*tierras baldías*),[36] state lands and expropriated private lands.

Indigenous peoples maintaining a communal or extensive family status are recognized the right of enjoyment of the lands, forests and water that they occupy or own in the places where they usually reside.[37] If the areas owned or occupied by indigenous communities are declared protected areas or equivalent, such communities should be relocated with compensation.[38] Restitution of the lands, forests and waters for the benefit of such communities or families is also contemplated.[39] The National Agrarian Institute - IAN (autonomous but linked to the Ministry of Agriculture) is in charge of the titling and land regularization programs. In the application of the land regularization policies, IAN is

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[34] Copy of law not yet available (being sought).

[35] *Ley de Reforma Agraria* published in the *Gaceta Oficial* No. 611, Extraordinary of March 19, 1960, *Reglamento de la Ley de Reforma Agraria sobre Regularización de la Tenencia de la Tierra* (decree 246) published in the *Gaceta Oficial* on August 23, 1979 and *Reglamento a la ley de Reforma Agraria* published in the *Gaceta Oficial* No. 1089 Extraordinary on March 2, 1967.

[36] *Ley de Tierras Baldías y Ejidos*, published in the *Gaceta Oficial* Extraordinary on September 3, 1936. Article 1 considers *tierras baldías* those that are not *ejidos* and are not privately owned.

[37] Agrarian Reform Law, footnote (12) Article 2.

[38] Ibid Article.

[39] Ibid Article 161 paragraph 3.

required to give preference to small farms and indigenous communities.[40] The Agency for the Defense of Agrarian Rights (*Procuraduría Agraria*) is the legal representative of the indigenous communities in land cases affecting them.[41]

The land ownership recognized by IAN is through agrarian reform titles which: (i) if the lands are left idle can be revoked; (ii) cover a limited lot size (if considering the indigenous peoples subsistence needs); and (iii) can only be granted by IAN when the status of vacant, state or other public entities' land is certified and can thus be transferred to IAN by the appropriate owner (by the Ministry of Agriculture for the vacant lands). As to the latter restriction, in most cases, in the absence of such certainty, provisional titles are given by IAN. Neither peasants nor indigenous communities can directly claim ownership of the lands traditionally occupied and otherwise unclaimed by private citizens which must first be found to be *tierras baldías* (vacant lands) and transferred to IAN. Other features of the titles which have been granted by IAN for indigenous lands are the following: (i) free of charge; (ii) to cooperatives or the individuals forming a community or extended family (the indigenous communities lack juridical personality); and (iii) communal.

Following the enactment of the Land Tenure Regularization Decree[42], usufructuary titles have also been granted by IAN to indigenous communities. IAN is authorized to grant rights of use and enjoyment of the unutilized lands (not yet transferred to IAN) which are occupied by communities eligible for agricultural land rights under the law[43]. The fruits and other produce of the land so granted can be pledged to obtain loans. These usufruct titles, as well as the provisional ownership titles, are both meant to be temporary but in most cases have remained as such without any Governmental action to take the steps required to clarify the legal status.

ABRAES

The national parks, national forests, forestry reserves, protected areas, natural monuments, and wildlife sanctuaries cannot be assigned for agrarian reform purposes[44] due to the restrictive use of such areas. In addition, all ABRAES are ruled by presidential decree.

Most of the indigenous peoples live in ABRAES and have lived there prior to the establishment of ABRAES. As a result, they lack clear policies and authority for the recognition of land and natural resource rights, although limited usufruct rights of indigenous groups residing in such areas have been recognized in the management plans of some ABRAES.

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[40]Decree 246, footnote [(12)] Article 21

[41] *Ley Orgánica de Tribunales y Procedimientos Agrarios* as the amendment was published in the *Gaceta Oficial* No 3015 Extraordinary, on September 13, 1982 – Articles 35/36/37.

[42]Decree 246 – *Reglamento de la Ley de Reforma Agraria sobre Regularización de la Tenencia de la Tierra* – published in the *Gaceta Oficial* on August 23, 1979.

[43]Ibid Article 15.

[44]Ibid Article 28.

There is no institution legally assigned to regularize the land tenure situation of indigenous peoples in ABRAES and this limitation applies to both the areas where productive uses are foreseen (i.e. forestry reserves) and as those of a conservation/recreation nature.

The Regulations for the Administration of Forestry Zones[45] call for special recognition of the cultural/natural resources needs of indigenous peoples, and based on this, some accommodation of their existence has taken place but not extending to any recognition of land tenure rights.

SPECIAL TREATMENT LEGISLATION

Environmental Penal Law -- Indigenous communities and ethnic groups are exempted from the penalties set forth in the Environmental Penal Law.[46] For this exception to be applicable, the activity (otherwise subject to penalty) has to be carried out: (i) in a location of ancestral occupation by the group or community; and (ii) in a manner deemed to be in accordance with their subsistence patterns, space occupation and relationship to the ecosystem.[47] The agency in charge of indigenous affairs[48] is to provide socio-anthropologic reports as requested by the judge, and the judge should consider this report and the indigenous community's opinion.

Decentralization Law -- The 1989 decentralization law[49] aims to develop the framework for transfer of responsibilities and resources from the National Government to the States.[50] Within this framework, the list of activities of joint jurisdiction includes in Article 4 "the protection of the indigenous communities, taking into account the preservation of their cultural traditions and the maintenance of their territorial rights". It remains to be verified how sharing of this generally stated "protection" is being, or will be, pursued.

Tourism Law -- The final provisions of the Tourism Law[51] set forth the requirement that such law be applied, in respect of areas where indigenous communities and ethnic groups reside, in accordance with the exceptional regime set forth in the Constitution. Additionally, all tourist projects, programs or developments that could disturb or affect the life of the indigenous communities were prohibited by such law.

Regulations for the Administration of Forestry Zones -- These regulations provide an illustrative list of the type of management areas that can be authorized within a forestry

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[45]Decree 2214 published in the Gaceta Oficial on April 28, 1992, article 5 (b).

[46]*Ley Penal del Ambiente* published in the Gaceta Oficial No. 4358, Extraordinary on January 3, 1992.

[47]Ibid Article 67.

[48]Currently on Directorate of Indigenous Affairs within the Ministry of Education.

[49]*Ley Orgánica de descentralización, delimitación y transferencia de competencias del poder público* published in the *Gaceta Oficial* Number 4153, Extraordinary on December 28, 1989..

[50]Ibid Article 1.

[51]Tourism Law published in the *Gaceta Oficial* No. 35117 of December 21, 1992, Articles 59 and 60.

reserve, including in such list an "area designated for indigenous communities"[52]. Such area is meant to regulate activities of the community and ethnic groups residing in the forestry reserve who have been in ancestral residence, supported by traditional subsistence activities, and living in consonance with the environment. The description of the indigenous groups that could benefit from such special management zones is almost identical to that of the indigenous groups exempted from the provisions of the Environmental Penal Code.

ILO Convention 107 -- Venezuela ratified ILO Convention 107 in 1983.[53] Even though, the spirit of ILO Convention 107 is integrationist, and was later superceded by ILO Convention 169, the provisions of ILO Convention 107 related to land were considered law by Venezuelan lawyers within the Ministry of Agriculture and IAN . These laws are complementary to those of the Agrarian Reform Law. Article 11 of the Convention sets forth that the collective or individual right of ownership of the areas traditionally occupied by the affected indigenous population must be recognized. In addition, article 12 contemplates compensation in cases of resettlement of indigenous populations due to national security, economic development, and the health of the populations. The lawyers for the Ministry of Agriculture find the provisions of ILO Convention 107 complementary to those of the Agrarian Reform Law[54]. A different interpretation could also be made, namely, that the Convention would recognize an existing (ab-original) right to land, different than the one that is granted by the State through the Agrarian Reform Program, and with the limitation thereof. ILO convention 169 is now in Congress and was discussed the week of our mission. Even if ILO Convention 169 is not ratified, the provisions of Convention 107 could prove useful in the development of a policy of land rights and/or compensation if resettlement is required.

Education Law -- Article 51 sets forth the State's obligation to pay particular attention to the indigenous peoples and to preserve the socio-cultural traditional values of such communities, by educating and familiarizing them with their obligations and rights.

Regulations for National Parks and Monuments[55] -- Article 35 of such regulations sets forth that in the event that indigenous groups had been residing in the park/natural monument for 50 years or more prior to the establishment of the park or monument, their land ought to be demarcated and titled. Therefore, the community was deemed a traditional (*autóctona*) or tourist community.

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[52]Decree 2214 published in the *Gaceta Oficial* on April 28, 1992, article 5 (6).

[53]Law ratifying the International Labor Organization Convention for the Protection and Integration of Indigenous Populations and other Tribal Groups in Independent Countries. published in the *Gaceta Oficial* Extraordinary No. 3235 on August 3, 1983. Some officers in MANR/CORDIPLAN argue that such law is unenforceable because the ratification was not notified to ILO. The Foreign Affairs Ministry believed the ratification to be in order and the Convention legally binding on Venezuela.

[54]See *Conclusiones del Documento Presentado por la Dra. Lucila Clarín*, July 1997 (copy given by the *Consultoría Jurídica* of the Ministry of Agriculture).

[55] *Reglamento Parcial de la Ley Orgánica para la Ordenación del Territorio sobre Administración) Manejo de Parques Nacionales y Monumentos Naturales.*

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