
Environmental Narratives on Protection and Production: Nature-based Conflicts in Río San Juan, Nicaragua

Anja Nygren

ABSTRACT

This article focuses on local processes and global forces in the struggle over the fate of forests and over the contested claims of protection and production in a protected area buffer zone of Río San Juan, Nicaragua. The struggle over control of local natural resources is seen as a multifaceted process of development and power involving diverse social actors, from agrarian politicians and development agents to a heterogeneous group of local settlers, absentee cattle raisers, timber dealers, transnational corporations, and non-governmental organizations. The initial interest is in the local resource-related discourses and actions; the analysis then broadens to include the larger political-economic processes and environment-development discourses that affect the local systems of production and systems of signification. The article underlines environmental resource conflicts as one of the major challenges in subjecting structures of social power to critical analysis.

INTRODUCTION

In recent years, nature-based conflicts revolving around competing claims over forests, land, and wildlife have emerged with growing intensity in the international public sphere. Transnational environmental movements and non-governmental organizations (NGOs) have joined forces with local communities in defence of local rights of access to natural resources, while media reports on tropical deforestation and declining biodiversity have brought local conflicts over natural resources to the attention of a broad international audience (Conklin and Graham, 1995; Gadgil and Guha, 1994; Vivian, 1994). This internationalization of local resource struggles is closely related to contemporary world politics, in which the issues of

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environment and sustainability have moved to centre stage, and where the discourses on the global environmental crisis, the sustainable use of tropical forests, and international environmental management are closely linked (Peet and Watts, 1996; Redclift and Benton, 1994; Taylor and Buttle, 1992).

This article analyses the conflicts between local populations, NGOs, and state authorities regarding access to natural resources in a protected area buffer zone of Río San Juan, in southeastern Nicaragua. The aim of the study is to show how control over natural resources is defined and contested within the political arenas at different levels, from localities and regions to state and multilateral institutions (see Ghimire and Pimbert, 1997; Ribot, 1995). In order to analyse the struggle over the fate of forests in the buffer zone of the Indio-Maíz reserve, the study examines a set of environmental narratives presented in a debate over protection *versus* production, and the forms of authority and power beyond these narratives. Besides illustrating the practical struggles for livelihood and survival, these accounts also include the 'truths' and images through which people think about, speak of, and experience environmental problems (Peet and Watts, 1996). The study aims to reveal the multiplicity of environmental perceptions, and the complexity of power structures mediating the social relations of natural resource utilization and the ebb and flow of competing environmental images.

By analysing local resource-related narratives and actions and their links to the larger political-economic processes and environment-development discourses, the study builds upon the insights of political ecology (Peluso, 1992; Rocheleau et al., 1995; Schmink and Wood, 1992). Although local environmental discourses and social relations are given special weight, the relations of power can never be understood within narrow local boundaries. Rather, it is through a process of struggle, negotiation, and resistance at different levels from local to global, that the multiple environmental discourses and nature-society relations are created (Fairhead and Leach, 1995). By emphasizing the interplay between conflicting environmental discourses, this study relies upon poststructuralist and feminist researchers who question the homogenization of distinct groups and their diverse discourses within one-dimensional analyses (Agarwal, 1997; Haraway, 1996; Townsend, 1995).

The simple starting point is that speakers and actors are always positioned and that there are many voices with different intonations speaking about forests and nature. Whatever approach we adopt for portraying social discourses on natural resources, it is never devoid of an ethical-political stance. The truth is socially constructed, and concepts and categorizations play a vital role in how we perceive, think about, and act upon the world (Gerber, 1997). In this regard, the study also explores the absences, silences, and repressions produced during the debate. By referring to questions not asked and views not articulated, valuable insights may be revealed about

who defines how 'reality' is presented, and how alternative voices are marginalized. In this respect, environmental accounts can be seen as narratives of control and exclusion, as well as narratives of diversity and resistance. Depending how they are positioned, people act or refrain from acting. Yet such positions are subject to constraints, for the social dominance of any given kind of narrative is politically contested and ties in with agents' access to power resources (Moors, 1995: 18–19).

A one-dimensional focus on narratives and meanings, however, runs the danger of leaving out people's non-discursive experiences and the ways in which these are structured through differential access to power resources. Rejection of all historical processes runs the risk of reducing development to texts, while rejection of all claims to truth runs the danger of leaving no ground for deciding between competing interpretations (Everett, 1997; Moors, 1995). In this respect, perspectives which are based on the notion of development as discourse, but which incorporate a stronger focus on struggles of power and how they relate to resource access and control, may be helpful (Agarwal, 1997; Neumann, 1997; Ribot, 1995). As will be shown in the following analysis, diverse social actors, such as local smallholders, forest extractors, absentee cattle raisers, timber dealers, conservation authorities, development experts, NGOs, transnational companies and international aid agencies are involved in the competing claims over natural resources in Río San Juan. All these actors suggest their own solution to the local nature-based conflicts and in this way attempt to strengthen their power in the control over resources and environmental discourses.

By connecting the nature-based conflicts of Río San Juan to the corresponding processes and discourses at regional, national and global levels, this study aims to shed light on wide-ranging debates over conservation and sustainability, nature and culture, and control and participation. The first section of the article includes a brief description of the environmental and social landscape of Río San Juan. Then, environmental narratives forming part of the debate over protection and production are presented. The analysis of these narratives is focused on two interrelated themes. First, the accounts are examined as a struggle over knowledge and authority, involving contested claims of who has the right to make decisions concerning the local forests. Secondly, the analysis progresses to the contents and meanings of the debate, examining the narratives as a multifaceted struggle over resources and environmental images.

THE FOREST-EDGE COMMUNITIES OF RÍO SAN JUAN: DIVERSITY OF ACTORS AND POLICIES

Inspired by the ideology of nature conservation and by the international concern over tropical deforestation and loss of biodiversity, Nicaragua is transforming much of its remaining forests into protected areas. The idea of

tropical forests as a 'natural patrimony for future generations' has provided a powerful justification for forest protection in Nicaragua, as elsewhere in the tropics, although there are also those who question the policy of allocating as much land area as possible to regimes of protected area management.¹ At present, 18 per cent of Nicaragua has been set aside as protected areas (Segura et al., 1997).

The biological reserve of Indio-Maíz, located in the humid tropics of the department of Río San Juan, is one of the biggest protected areas in Nicaragua, covering 264,000 hectares of land.² The reserve, which was established in 1990, has acquired an international reputation as one of the most outstanding protected areas in Central America, with a great diversity of tropical flora and fauna. It belongs within the category of strictly protected areas; the only activities permitted inside the reserve are scientific investigation and wilderness protection (*Plan de acción*, 1992).

The establishment of the Indio-Maíz reserve has many implications for the livelihood opportunities of the surrounding forest-edge communities. The buffer zone of the reserve in the municipality of El Castillo covers 180,000 ha of land and has some 15,000 inhabitants (*Documento de Proyecto*, 1998). It belongs to one of the most intensive agricultural frontiers in the country, with high rates of immigration and deforestation. To secure the support of the local population, the programmes working for the protection of Indio-Maíz are linked to compensatory rural development projects in the buffer zone. In 1994–8, there were thirty projects under way in Río San Juan with a total budget of US \$21 million, involving agricultural diversification, community forestry, ecotourism, environmental education, local organization, non-timber forest products, and women in development, with financing from USAID, IDB, the European Union, DANIDA, GTZ, and various NGOs from Canada, the Netherlands, Italy and Spain (Veracruz, 1995). Most of the projects were implemented by Nicaraguan state institutions, NGOs and local municipalities.

Until the 1950s there were scattered hamlets of smallholders in the buffer zone. These households cleared small patches of forest for crop production, and they also practised hunting and gathering. The extraction of rubber,

1. The policy of declaring large areas of forests as protected reserves, and the lands surrounding them as buffer zones, is a heavily contested subject. According to Gadgil and Guha (1994) and Neumann (1997), it has a powerful impact on the local poor, who are the most dependent on forest resources for their survival. For this polemic, see also the article by Soulé and Sanjayan (1998), suggesting that the target percentages of the international nature conservation organizations for protecting at least 10 or 12 per cent of the total land area in each nation are not sufficient. According to Soulé and Sanjayan (1998), the amount needed to protect most elements of biodiversity would be about 50 per cent. For criticisms of such a view, see Ghimire (1994), Ghimire and Pimbert (1997) and Gómez-Pompa and Kaus (1992).
2. The reserve originally covered 295,000 ha, but 31,000 ha was eventually excluded from the reserve area after violent confrontations: more on this below.

chicle, wild animals, and precious timber species formed an important part of local livelihood strategies.³ During the 1960s and 1970s, a wave of new colonists entered the region, principally smallholders from Pacific areas who had lost their lands to cattle estates and cotton plantations. These 'people without land' searching for 'land without people' began to open up Río San Juan forests to slash-and-burn agriculture. According to the agrarian legislation of that time, those who 'improved' the land through forest clearing acquired a perpetual right to the area they had cleared (Maldidier and Antillón, 1996). After the decline of rubber and chicle extraction in the 1940 and 1950s, the extraction of raicilla (*Psychotria ipecacuanha*) became an attractive livelihood strategy until its price began to fall dramatically in the late 1970s.⁴

The Nicaraguan civil war (1979–90) largely depopulated the region. Most of the people left for Costa Rica as refugees, or were evacuated to government-established settlements (*asentamientos*) located in the more controllable regions of the municipality. In these settlements, agricultural production was organized through co-operatives which had access to state-owned land, credit, and assistance. The deforestation in the interior parts of the municipality declined, although a state-owned enterprise, COREXSA, was authorized to conduct commercial timber logging everywhere in the region (Utting, 1993: 147–50).

Since 1990, a considerable number of the refugees and internally displaced people have returned to their farms 'in the interior'. At the same time, the flow of new colonists entering the region has dramatically increased. Most of them come from the cattle-raising area of Chontales, where there is no free land left for cultivation. As a compensation for making peace, the Chamorro government donated large areas of land in the buffer zone to those who had occupied a high rank in the Sandinista or Resistance army during the war. Many of these demobilized groups were given ownership of

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3. Resource extraction has characterized the history of Río San Juan for centuries; the economic and political significance of this periphery has largely been determined by cyclical penetrations and withdrawals of such valuable tropical resources as rubber, mahogany and minerals, on the world markets (Didier, 1993; Rabella, 1995).
 4. Raicilla is a natural medicine used against amoebic dysentery. Both wild and cultivated raicilla were extracted and exported from Río San Juan to Europe and the USA, where a commercial medicine was processed from its subproduct. Local extractors were often linked to particular trading networks through debt and patron–client relationships. The prices varied according to the supply and demand and were strongly manipulated by the middlemen. In the late 1970s, the economy of raicilla suddenly declined in Río San Juan. This was partly because a synthetic substitute displaced the subproduct extracted from raicilla. The principal cause, however, was the rapid depletion of the natural supplies of raicilla due to over-exploitation. The great amount of labour required in the cultivation of raicilla at forest gardens, together with the structured forms of commercialization, made the price paid to local producers so low that it was no longer profitable (Gerardo Mora, CIPRONA, Department of Pharmacology, University of Costa Rica, San José, 18 March 1998, pers. comm.; see also Offen, 1992).

land already possessed by smallholders. As they had no title to the land, the smallholders were unable to file legal claims to their possessions. As a consequence, there are deep hostilities between those who possessed the land and those who have benefited from it as a result of the demobilization programmes, dividing the people into antagonistic factions. The land law itself is confusing and is manipulated by different parties. The end result is a high level of land and natural resource conflicts with varying degrees of violence and with temporary and conceptually fine distinctions between legal and illegal.

Most of the current inhabitants are peasant farmers (*campesinos*) who are cultivating maize, beans and rice by slash-and-burn agriculture and supplementing their livelihood with small-scale forest extraction, logging, and trading. Many of them also participate in two-step migration, which involves clearing land for pasture and then selling it to land speculators. There is a high degree of mobility; people come and go, and many of them move ever further into the hinterland where the only infrastructure is a muddy footpath. The agricultural frontier is now reaching the boundaries of the Indio-Maíz reserve.

A great many of these colonist-smallholders struggle to survive in a situation where access to free land has ceased, crop productivity is low, and high transportation costs and hierarchical forms of commercialization make it difficult for small-scale producers to compete in national markets (Maldidier and Antillón, 1996). The alternatives to slash-and-burn agriculture have never been implemented, and the opportunities for off-farm employment are limited. At the same time, land ownership is being concentrated in the hands of a few relatively well-heeled ranchers, who make tempting offers to smallholders to sell their farms. The ongoing structural adjustment policies have only increased the economic hardships of many smallholders. As a consequence, people move between spheres where different economic opportunities seem available and the informal sector plays a crucial role in this frontier economy.

All this has provoked a series of conflicts between the forest-edge communities, forest authorities, and development projects underway in the region. Despite heavy fines for unauthorized resource utilization, illegal forest extraction from the Indio-Maíz reserve has steadily increased. In a survey completed by the Ministry of Natural Resources (MARENA) in 1998, 300 families were recorded as squatting inside the reserve. Most of them were classified as 'invaders' who had already benefited from land redistribution in another region but who had then sold their land and moved further into the reserve. One third of these families left the reserve peacefully due to governmental pressures, and the rest were to be evicted by the Nicaraguan army.⁵

5. Iván Ortega, Superintendent of Sí-A-Paz, MARENA, Managua, 19 February 1998, pers. comm.; see also *La Tribuna* (1998).

However, after a series of violent confrontations, the government decided to reduce the area of the reserve, by excluding the 31,000 ha of land under 'invasion' (*La Gaceta*, 1999). As the following debate over protection and production will demonstrate, the diversity of actors and interests involved in the nature-based conflicts on this forest-frontier makes the whole struggle over conservation and sustainability extremely complicated.

ENVIRONMENTAL NARRATIVES ABOUT PROTECTION AND PRODUCTION

In order to analyse this struggle, it is fruitful to examine closely some of the environmental narratives which are used in the debate. The following excerpts were recorded at a workshop on 'Rattan⁶ as a Non-Timber Forest Product', organized by a Nicaraguan NGO, *Bosque y Ecodesarrollo*, in 1997. Participants at the workshop included Luís and Sonia (two members of the NGO), José Manuel (leader of a development programme on small-scale enterprises), Gabriel (one of several rattan artisans), Eduardo (an official of MARENA), Anastasio (a local extractor) as well as farmers, a journalist, a biologist, an anthropologist, and the rural adviser of a United Nations development project.⁷

Luís: The aim of this workshop is to find out how we could improve the use of rattan. Most of the producers here were extractors first of rubber and then of chicle and raicilla. They are, thus, used to going into the forest and gathering whatever it offers. We in our NGO want to combine scientific experience with local knowledge; the producers here have an incredible knowledge of forest products. Our aim is to use the forest without damaging it and to convert rattan into a realistic alternative. We are convinced that there is no risk of deceiving people in this project; the only thing is to go ahead and decide what should be done.

Gabriel: As artisans we make countless wickerwork articles. But the problem lies in the system of buying raw material. We don't buy rattan directly from the extractor, instead he sells it to somebody else, and when it reaches us, the price is already high. That's why we want to join forces with the extractors of this region.

Anastasio: I learnt to gather rattan twenty years ago. We went with a ladder to gather it, then we cleaned it, boiled it and dried it in the shade.

6. This includes two plants, locally called *bejugo de la mujer* (*Phylodendron rigidifolium*) and *bejugo del hombre* (*Heteropsis oblongifolia*).

7. All names have been changed to pseudonyms. The following is not a literal translation, but a shortened and slightly edited version of a five-hour discussion that I tape-recorded at the workshop. Because of limitations of space, I have reduced the repetition of certain words, phrases and opinions characteristic to oral communication. On the difficulties of translation and transculturation, see Townsend (1995: 137–43).

Now we don't work with rattan any more because it's scarce, and MARENA became envious and didn't want to grant us any permits. Formerly, people logged timber and extracted vines, and nobody asked who they were, where they came from and where they were going. I sold a lot of timber and nobody asked me anything.

Luis: Today we have our reserve of Indio-Maíz, which is being violated all the time, because many people go there. We think that the only means of conserving the reserve is to use its resources in a sustainable manner. One of the most perfect ways would be by extracting certain non-timber products, while the local people would act as guards of the reserve. An ambassador once came here and said that the solution is to place watchtowers with armed guards around the reserve because otherwise the Nicaraguans don't understand. I told him that they were crazy, that when the first watchtower appears, people will meddle. 'You [the ambassador] have no bloody idea how the Nicaraguans will react!' Indio-Maíz belongs to the category of an absolutely protected reserve, untouchable, untouchable, which is absurd. And, in any case it's being used, and it's being used badly. Concerning the advance of the agricultural frontier, in 2005 we'll have an enormous pastureland there all the way to the sea.

Anastasio: I remember when MARENA came here to control the forest fellings, I cut down my whole forest for pasture — bam, bam, bam. Seventy *manzanas* — whruum! I cleared all the land even close by the river. So when MARENA came, they didn't catch me. You know, if they want to control us, we fell our forests. But if they give us a chance to live on something, we aren't going to cut down the trees.

Luis: Our efforts depend a great deal on the government, but we can't define the politics of MARENA. The only thing we can do is to propose alternatives and see if they authorize them. Here in Río San Juan, millions of dollars are allocated to the reserve per year; projects sponsored by AID, the World Bank, DANIDA, etc. We don't need them any more, what we need is a political decision how to manage the reserve.

Eduardo: I work for MARENA, and the Ministry sent me a report saying that all investments are welcome when and if the laws are respected. In the case of rattan we are very strict, we don't give any permits without regulating those who'll extract the product.

Sonia: Could you then tell us what kind of opportunities MARENA gives? Does a *campesino* need a permit to extract rattan from his own farm?

Eduardo: Anyone who wants to extract rattan has to inform the forest inspector, and he grants a permit according to the regulations. A management plan has to be made and the technical guidelines must be followed.

Luís: There are many other natural products, like mushrooms and bacteria, and I know that US experts have taken samples of them without any permit from MARENA to examine their potential use. This means that nobody respects the law.

Eduardo: Today the law is already followed in Nicaragua; I'm authorized to enforce the law.

Sonia: But for you the most important thing is nature! But I'm asking from the social point of view. There should be some space for people to participate and to express their problems. It's a lie, one hundred *manzanas* that are cleared daily, MARENA has not been able to enforce the law.

Eduardo: The government can't do everything alone, it needs the co-operation of the people. The government is not bribable any longer, earlier there was a lot of smuggling.

Sonia: But in what way is MARENA looking for solutions to the people's everyday problems? How can the law be applied so harshly?

Eduardo: The scope of the programme is twofold: the aspect of control and the aspect of development. These projects have had a great social impact; schools, wells, and health centres have been built in various communities. We work to stop the advance of the agricultural frontier and to mark the boundary of the reserve.

Sonia: But the problem can't be solved only by marking boundaries!

José Manuel: If the law is too strict, it's violated anyway. What we'd like to know now is if there are any possibilities for small producers to extract rattan?

Eduardo: They have to go through the inspector and make an application. You know, that's the law. It's not allowed to extract without a permit, that's prohibited.

Sonia: You use all the time the word: prohibited, prohibited, prohibited!

Eduardo: That's how it is, that's what the law says!

Luís: But you have to bring that law close to the people. The law only intends to conserve the forests, without taking into account that people are dying of hunger and that they depend on these forests for their livelihood. It's a pity that our government still falls into the trap of fighting only for protection. We, as members of the Third World network, have participated in negotiations on behalf of biodiversity where those from the North say: 'You don't know how to use your forests, you only destroy them, don't touch them for we'll come with our scientists to see if we can extract bacteria, flowers and perfumes. Preserve them, nothing more'. And we from the Third World say: 'No, we don't want to destroy our forests, but we need to use them. You can't stop us from using our forests until you do it'. The negotiations have been very difficult and the discussion emphasizes either protection on the one hand, or sustainable use on the other.

Contested Claims of Authority

Planning for the People

As the above discussion shows, the discourse on sustainable use of natural resources is hotly contested in Río San Juan; one of the principal questions revolves around the issue of who holds the power to control access to these resources. According to the forest and conservation authorities, it is the task of the state to control the 'national heritage' of Indio-Maíz through improved vigilance. At the same time, these officials stressed the need to enforce forest surveillance and permit control in the buffer zone. They argued for increasing restrictions on local people's access to forest products and for more efficient sanctions for unauthorized forest clearing. Most of them were of the opinion that local people exploit the forests in order to make profits, rather than because of a lack of alternatives to meet their basic needs of living.

Given this conservation agenda, the reserve authorities showed little sympathy for local claims on resource extraction. Most of them held the view that the local extractors encroach on the forests with little environmental awareness. They also questioned the suggestion that local people participate as guards of the reserve. According to Eduardo, the existing power structures should remain in place — it was only necessary to give the reserve managers new forms of authority to make the people respect the law. He believed that earlier conservation efforts had failed because of the lack of coherent policy to prohibit entry to state property and because the compliance of the officials was bought by bribes; but in today's Nicaragua, the laws are enforced and the government rejects all attempts at corruption.

There were also forest authorities who argued that the only possibility to save Indio-Maíz would be the utilization of the 'hard hand' (*la mano dura*). They supported the forced eviction of the squatters inside the reserve, and they also had plans to use a 'green army', composed of Nicaraguan armed forces, to patrol the reserve.⁸ All this was justified by the arguments of the local 'culture of violence', in which the only recognized law was seen to be the 'law of the jungle' (*la ley del monte*). According to these officials, 'as everybody on this forest-frontier can use a rifle and is accustomed to appropriate whatever he wants without the presence of the army, people will invade the whole reserve'.

The authorities of the National Institute of Agrarian Reform (INRA) defined the task of the state in that region to be its stabilization. According to them, the primary need in this zone of 'spontaneous' colonization was to rationalize the chaotic land use patterns by 'ordering the disordered', and

8. In 1995, an agreement was signed between the Nicaraguan army and the International Union for Nature Conservation (IUCN) on the participation of the Nicaraguan armed forces in the defence of nature in Nicaragua (*IUCN Bulletin*, 1995).

registering all the settlers and farmlands in the institution's archives. Such property registration was then proposed to stimulate more consciousness of conservation. There was little indication that, given the existing complexity of land and resource tenure, the institution's ambiguous land registration programme would rarely state explicitly which rights were secured for whom.

Not all the state authorities supported such a rigid agenda of controls. As Rangan (1997) points out, the state cannot be homogenized as a monolith with a 'fixed internal logic'; instead state policies are formed in a contested arena of struggle by competing social forces. The authorities at the Ministry of Economy and Development (MEDE) criticized the view of forest and land registration officials as too paternalistic. According to them, the concept of untouchable protected areas is outdated. Instead, the door should be left open for ecotourism and bioprospecting, and for the increasing participation of the private sector in natural resource management, because the sustainable marketing of natural resources is one of the few possibilities Nicaragua has to improve its future prospects. Ultimate control of this biobusiness was to be given to MEDE; among such authorities of the central government there was little enthusiasm for decentralization.

The strengthening of local governments is, nonetheless, an increasing tendency in Nicaragua, a trend which is being strongly supported by international donors. Through decentralization, local people are supposed to develop a sense of ownership of the rules regarding resource use and be more inclined to obey them. There is, however, little empirical evidence as to whether decentralization is good for the forests and the people who depend on them. In the case of Río San Juan, this may at worst lead to increasing concentration of power, with the local governments becoming even more vulnerable to political pressures from the regional powerholders. There is at present intensive lobbying underway by timber companies, African oil palm entrepreneurs, cattle raisers, and a transnational mining company, to pressure the municipal authorities into releasing the buffer zone of Indio-Maíz from the strict conservation agenda. Moreover, a vital role in the politics of Río San Juan has historically been played by a handful of local *caciques*. These generally older, male settlers act as invisible political figures behind the collectively elected local committees of development, controlling all the flow of benefits and access to resources in their communities. Without careful consideration of local power structures, decentralization may only lead to *caciques* taking the power to redefine the development projects and to determine who is to benefit from them.

Together with decentralization, another tendency in Nicaragua today is toward more locally-based development projects implemented by NGOs. According to those NGOs working in Río San Juan, the state has proved itself unable to manage protected areas, to diminish the rate of deforestation, and to improve the living conditions of the ever-expanding rural poor in Río San Juan, as elsewhere in the country. The state should therefore agree to the key role which civil society plays as promoter of development.

Most of these NGOs challenged the state's coercive policies in order to halt the advance of the agricultural frontier by pointing out that nature conservation has no future if the livelihood requirements of the local inhabitants are not taken into account.

One such NGO is the above-mentioned *Bosque y Ecodesarrollo*. Luís, an active member of this NGO, defined his organization as a movement working for the defence of local traditions, livelihoods, and justice. According to him, sustainable development cannot be achieved by applying laws more harshly. He carefully argued that unequal access to resources, rather than people's environmental unawareness, accounts for the environmental degradation in Río San Juan, in a situation where the wealthy destroy nature in the pursuit of profit, while the poor do so in order to survive. All in all, this requires a collective struggle for a more equal distribution of resources and for a more open vision of the protected areas that challenges the view that they must enjoy absolute protection.

In the general discourse, NGOs are easily represented as a panacea for environment–development problems, based on the assumptions that they work better at the grassroots level, and are more flexible in their methods of empowering local people as active partners in conservation.⁹ In the case of Río San Juan, however, serious questions remain about the ability of NGOs to promote more participatory models of development. Many of them have demonstrated the same lack of attention to local development needs as the governmental projects. By defining themselves as facilitators of change, most of the NGOs seem convinced that their task is to plan for rural people, because ultimately they are the only ones who have the necessary knowledge and expertise to devise feasible strategies for improving the living conditions of the rural poor. In reality, few of their development projects seem to have offered viable livelihood alternatives to the local people.

In Río San Juan, the majority of NGOs were urban organizations, consisting of educated middle class members, many of whom worked as state officials in earlier governments. They thus ran the risk of becoming professional, profit-making NGOs and thereby losing their legitimacy as civil society actors and as a critical intermediary force between the state and the markets. Most of the NGOs presented their projects in an idealistic light, but the competition for funding hindered fruitful co-operation between projects. The majority of them were dedicated to conventional issues, such as agricultural diversification and environmental education, with little attention being paid to the unequal distribution of resources. In order to have a rapid impact, they only worked with landowners, and failed to take a great number of landless people, squatters, and other vulnerable groups into account in their efforts.

9. For detailed analyses of the role of NGOs in current development policies, see Bebbington (1997), Edwards and Hulme (1996), Fisher (1997), Sollis (1995) and Vivian (1994).

The co-operation of these NGOs with the Nicaraguan government proved to be complicated. In the official discourse, the government invited the NGOs to participate in all developmental efforts; at the same time, however, it wanted to maintain a strict surveillance over the NGOs. In this situation, the local NGOs preferred to strengthen their alliances with international NGOs. By pointing out the active partnership of the local people in natural resource management, Luís proved himself well aware of the images salient in international circles. *Bosque y Ecodesarrollo* has for years been financed by Northern NGOs, and it also has close links to some South–South institutions. This strategy of moving directly from the local to the global sphere, bypassing the state-level structures of power, was sharply criticized by Eduardo: he welcomed the rattan project but at the same time remarked that in order to promote democratic development, *Bosque y Ecodesarrollo* must start co-operating again with the state. In our conversations, many government agents bitterly portrayed the NGOs as Sandinistas and anti-nationalists who just want to replace the state.

For their part, the NGOs criticized the governmental conservation strategy as following uncritically a global concept of environmental management. They claimed that the desire of the North to save the rainforests and their rich genetic heritage is based on powerful economic ambitions in a world where the majority of the remaining biodiversity resources are located in the South. They criticized the system by which Northern-based transnational corporations take out patents on a range of genetic, agricultural and pharmaceutical materials that have their origins in the traditional practices of Southern people, and after having secured the patent, sell their commodities back to them for private profit. *Bosque y Ecodesarrollo* had gathered a large database of multiple-use plant species in Río San Juan, and Luís argued that this knowledge is the common property of the people of Río San Juan, which nobody can appropriate. Many NGOs contested the view of Indio-Maíz as a ‘natural’ habitat valued for science, and attacked recreation as an elitist western concept. They pointed out that there is an enormous gap between the Northern ‘environmental’ agenda and the Southern ‘survival’ agenda, as most of the Southern people live at the margins of the environmental discourse of the North.¹⁰

Local Response and Resistance

Closely related to the position of the NGOs is the question of who the ‘local people’ are, and what their role in the natural resource management of Río

10. For discussion on the ‘environmentalism of the rich’ versus ‘environmentalism of the poor’, see Gadgil and Guha (1994), Guha and Martínez-Alier (1997) and Redclift and Benton (1994).

San Juan should be. In conversations with local inhabitants, it became clear that the centralized political authority is increasingly losing legitimacy in their eyes. They seriously doubted whether the benefits to be derived from the protection of Indio-Maíz would ever be directed to the local communities. The coercive policies of regulating resource use were seen as a serious hindrance to their ways of living; prohibiting them from practising slash-and-burn agriculture, ordering them to live in registered settlements, and forcing them to apply for a permit in order to undertake any resource extraction whatever.

The principal preoccupation of the local inhabitants in their relations with the NGOs concerned representation. According to many of them, the same persons always assume that they have the right to represent the community in negotiations with the NGOs, while these NGOs then claim to represent the development needs of the local people in negotiations with the donors. Luís argued that the rattan project had emerged from the collective initiative of the local people; however, the local extractors later told me that the whole idea was the result of negotiations between *Bosque y Ecodesarrollo* and some donors. The few local inhabitants invited to the rattan workshop remained largely silent. No attempt was made to identify the possible beneficiaries of the project, nor was any concern shown for the existing gender inequalities in the resource extraction. In Río San Juan, forest extraction is largely a male activity, while women's access to forest resources is fairly limited.

For their part, the development agents tended to view the local people as 'small-scale farmers', which masks all the social distinctions between men and women, landowners and squatters, poor and better-off settlers. Although all the developers claimed to be fully cognizant of the significance of gender in development, their discourse often remained gender-blind, with little apparent awareness that gendered environmental relations reflect prevailing gender ideologies, and that the lines of resource access between men and women depend upon the type of activity, resource, and location. There was also little recognition of the fact that the local people are simultaneously caught up in different social orders — one being the local hierarchies of age, gender, religion, political identity, kinship and client-patronage; the other that of the national society and world economy, with their centres and peripheries of power.¹¹

This tendency towards homogenization was more than just a reflection of the developers' ignorance of the local social and cultural reality; to some extent it also created certain social images. In my daily conversations with the local people, they repeatedly portrayed their community as a place in 'great need of development' and themselves as 'people of the jungle, who have to wade in the mire to eke out their survival'. A common view was that development comes from elsewhere. Many smallholders recalled the

11. For criticism of the ignorance of local communities' internal differentiation in development politics, see Agarwal (1997), Everett (1997) and Neumann (1997).

time during the Sandinista government when they received all agricultural and social services free of charge. As a consequence, they usually talked of development in terms of things: new breeds of chickens, wells, school buildings, roads; nowadays this also includes a certain amount of rural credit.¹² They felt that the promotion of more locally-based farmer-to-farmer training methods thrust upon them the responsibility to 'develop themselves'.

This does not mean that people were passively waiting for everything to be done for them. When I spoke with the local extractors, they insisted that if the rattan project were to succeed, it would be as a result of their own efforts, not because of *Bosque y Ecodesarrollo*. They made it clear that it was time to eliminate all the intermediaries and all the networks which extended beyond their control. A couple of weeks after the workshop, they even went to MARENA to apply for the permit. There they entered into a bureaucratic maze, told to fill out form after form — something almost impossible for these *campesinos* who had difficulties even writing their own name. Afterwards, they were amazed at the power that the written language has acquired today, for in their own systems of communication, verbal agreements and face-to-face negotiations weigh much more heavily.

The few women participating in the rattan workshop later talked to me of their reluctance to produce their own socially significant discourse in such an official discussion, with all its technical and scientific phraseology. They considered passive resistance to be the most viable strategy. In our daily conversations, people regularly insisted that they had no idea of the development projects operating in their communities — even those persons who regularly attended the projects' village meetings. By their silence they wanted to imply that the developers were not trying to resolve their problems. Many smallholders recalled that they had first been inspired by the projects' promises of local empowerment, but after realizing that — as always — it was the developers' intention to regulate access to local resources, they refused to co-operate further. The muteness of the local people was not simply a sign of their passivity or powerlessness, but also a strategic form of resistance against those planning for their future.

These experiences have provoked a series of local protest movements challenging the amount of funds spent by dozens of development projects with few tangible benefits to local communities. However, in Río San Juan these movements are still fragile and their voices are still scattered. This is partly because their loose forms of organization make these movements invisible, but also because, as migrant colonists, most of the people in Río San Juan have little identification with their locality. The communities are politically fragmented into Sandinistas *versus* Liberals (or ex-Sandinistas *versus* ex-Contras) and religiously into Catholics *versus* Evangelics. This

12. Cf. the analysis by Pigg (1992) on the social construction of a Nepalese village through development discourses.

makes working together on communal matters fairly difficult. Furthermore, many people are tired of the continuous need to organize, perceiving this as a burden imposed upon them by developers for decades: first, they were persuaded to form co-operatives and peasant unions, today they are urged to form community-based organizations, women's groups, and 'friends of the forest' associations.

In the struggle over knowledge and authority, certain state officials, development agents and NGOs thus legitimize their projects of resource regulation by creating images of themselves as protectors of nature and/or facilitators of development, while at the same time labelling local people as target groups in need of governance and guidance. The state attempts to control the territory of Río San Juan and its people through various conservation programmes, while the NGOs direct their attention to controlling schemes of 'integrated rural development'. For many NGOs, local empowerment means simply participation, although the issue is not merely about whether the people can participate, but whether they have the means to define the terms of their participation (Nederveen Pieterse, 1992). Grass-roots partnership is not the same as the local right to control the resource access, which, ultimately, is what most of the forest-edge communities in Río San Juan are striving for.

Struggles over Resources and Environmental Images

In the debate over protection and production in Río San Juan, struggles over resources and meanings have become intricately intertwined. The diverse environmental images, constructions of nature and culture, and social representations of the local resource-users are used as strategic tools to legitimate conceptions of the 'proper' use of natural resources while invalidating others. As remarked by Lease (1995), there is a crossfire of competing interests and interpretations in the contested representations of nature and culture, all our environmental accounts, whether 'scientific' or not, striving for such representations. This relates to the issues of what counts as nature, who controls that nature, and, what is the relationship of humans to nature. Are they in it, out of it, or somewhere between?

In the perception of the Nicaraguan conservation authorities, nature was seen as something 'out there', separated from humankind. This was implicitly expressed by Eduardo when pointing out that the *Gran Reserva* should be left as undisturbed as possible. In this view, any human presence inside Indio-Maíz meant a threat to the reserve's pristine wilderness. Nature was seen as something in opposition to culture, and the tropical forests as a symbol of paradise on the verge of being spoiled by human intervention. This discourse also carried a certain message of eco-catastrophe; the efforts to protect the reserve were presented as the last chance to save Río San Juan, and even all of humanity, from ecological destruction. This discourse

largely followed the international conservationists' agenda for tropical conservation, presenting the 'last frontier forests' as the few remaining remnants of pre-human wilderness and their natural inheritance as a common heritage for future generations (see Bryant et al., 1997; Singh, 1998; Soulé and Sanjayan, 1998; Wright, 1996).

The NGOs working in Río San Juan generally questioned the essentialism of viewing nature as an independent given, outside the human world. Luís, as an ecologist, deconstructed the conception of the unchanging character of the wilderness by pointing out that even when 'untouched', tropical ecosystems are in a continuous process of change. Many NGOs emphasized the role of human beings in establishing what is natural and what counts as nature, and in this way attempted to transcend the strict dualism between nature and culture.

In this respect, the NGOs' position converged with that of the commercial actors. Both argued that instead of struggling for nature itself, the struggle should be for nature in favour of humanity. The remarkable divergence in their views was that whereas the NGOs argued for more benefits to be derived from natural resources for local communities, ecotourism companies, bioprospectors, and timber dealers were striving for the prospective marketing of Río San Juan's resources for their own profit. At the First Forest Congress of Nicaragua in 1996, sponsored by the timber companies, the organizers wore T-shirts with the slogan: 'Our forests cry in the silence; in our hands they smile'. This message reflected the timber entrepreneurs' perception of forest-frontiers as economically underutilized regions that should be integrated into the national and global economy. At the same congress, the ecotourism companies portrayed the protected areas of Río San Juan as unexplored wildernesses that offer a true adventure for ecotourists who wish to admire the scenic beauty of tropical nature. For this reason, they argued for tight restrictions on the use of protected areas by the local inhabitants.

For the local people, the idea that the forest-frontier with its abundant resources could be possessed, 'putting the jungle into production', was still a powerful image. This perception was reinforced by earlier agrarian legislation, according to which uninhabited forests were 'idle' lands that could be appropriated by clearing the forest. Some older settlers in Río San Juan were of the opinion that the state still had vast areas of unoccupied forests, but that it did not want to give them to *campesinos* on account of the current politics of nature protection. The more recent colonists already knew that there was no free land left in Río San Juan; all of them had bought their plots of land at rapidly increasing prices. When I asked about the significance of the Indio-Maíz reserve, people first told me about its importance as a 'source of water, pure air to breathe, shade from the blazing sun, and protection for poor animals who do not have any place to live due to the barbarous deforestation'. All this rhetoric they had heard on the local radio, *Voz del Trópico Húmedo*. After repeating this litany, they usually

presented another, alternative interpretation of the area as a ‘reserve of land’ (*reserva de la tierra*) to be later distributed for farming to their children and children’s children. A recurring theme in my daily conversations with local people was their concern for land rights and productive resources. In this way they wanted to point out that nature is not something to be separated from their social exigencies.

People also talked about the difficulties they had encountered in making their home as colonists in ‘this hostile jungle, with jaguars and snakes wandering in their pathways and supernatural beings attacking lonely forest travellers’. In their perception, the virgin forest was a symbol of wild nature, which causes rains, storms, and other natural hazards and supernatural violence in human communities. Nature was something to be mastered by human forces and by culture. This perception was seized upon and largely misunderstood by the conservation authorities, who attributed these settlers’ forest-clearing activities to their primordial ‘land hunger’ or cultural ‘forest phobia’, with no references to the wider contextual factors — such as agrarian policies, land tenure regimes, and market forces — that have reinforced a land use pattern of forest conversion in Río San Juan for decades.

In general, the portrayals of these colonist smallholders tended to be negative. They were often characterized as ‘rootless forest ravagers’ who use natural resources in ways that show no regard for future generations. They were also depicted as ‘intruders of the land’ or ‘predatory nomads searching for quick prosperity’, with little recognition of the difficulties they faced in meeting basic daily requirements, or their vulnerability *vis-à-vis* a far-reaching global economy. They were repeatedly referred to as *haraganes* (idlers), reluctant to work and taking advantage of others if not kept under perpetual surveillance.¹³

These images have largely shaped the programmes of nature conservation and environmental education in Río San Juan. In the words of Said (1994: 7), the struggle over geography is not only about economic dominance, but also about ideas and meanings. Conservation authorities’ images of ‘nature destroying local people’ legitimized their claims of increasing state authority in the buffer zone, while NGOs’ view of local people as ‘ignorant forest-fellers’ justified restrictive development interventions in the people’s production systems. In the calendar of a conservation organization implementing environmental education in Río San Juan, such paternalist slogans as ‘To teach our *campesinos* how to manage their farms is to leave a mark on the Earth forever’, exemplify the key role which the developers see for themselves of improving local farmers as the ‘real’ managers of their productive resources.

13. For the social representations of peasant colonists in Amazonia, see the studies by Harris (1998) and Nugent (1993, 1997). For the picture painted by development experts of local settlers and environmental histories in various parts of Africa, see Fairhead and Leach (1995), Neumann (1997) and Rocheleau et al. (1995).

The settlers of Río San Juan were well aware of the representations that had been thrust upon them. Peasantry used to be a key term of self-description by many smallholders, but it is now often perceived as an identity associated with shame. This can be seen in the comment by doña Tina, one of the older settlers in the community of Kilómetro Veinte who remarked: 'Sometimes I feel ashamed when people come here from the outside, and see how poorly we *campesinos* live in these thatched huts and in this lonely jungle'. As Nugent (1997: 38) argues, these are identities which are constructed in the colonists' everyday hardships and in relationship to the social representations imposed upon them by outsiders.

The members of *Bosque y Ecodesarrollo* were very concerned about the social representations of local settlers as maladaptive others. Luís argued for a need to challenge the forest authorities' conceptions of local resource-users as unruly encroachers by pointing out to Eduardo that: 'The *campesinos* may not be as destructive as you suppose'. According to Luís, it was time to reject the stereotypical distinction between 'forest-benign' and 'forest-malignant' cultures, so deeply ingrained in western thinking, and to begin the reconstruction of peasants' subaltern identities by breaking down the hierarchies of stratification. At the same time, he himself constructed an image of traditional local settlers as 'minimal disturbers' of nature, while arguing that it was the recent colonists, tainted by a western model of development, who degraded the natural resources in Río San Juan. This image conflicts substantially with the narrative of a local extractor, don Anastasio, who recalled that 'formerly, people logged timber and extracted vines . . . I cleared all the land even close by the river'. In this comment, don Anastasio wanted to point out that as settlers they have depended on forest clearing for decades, but this mismanagement is not due to their cultural carelessness, but rather to social and economic constraints on the availability of environmentally sound alternatives.

Many conservation agents also considered the local resource-users to be fettered by cultural traditions; local knowledge was seen as an obstacle to the achievement of 'modern' environmental awareness. Luís, as an active participant in ethnoscientific circles, challenged such a view by emphasizing the key role of local knowledge in new ways of making development. As Conklin and Graham (1995) remark, in recent years many NGOs have discovered the strategic value of local knowledge in their humanist stance of defending disempowered people, rather than just protecting flora and fauna. By highlighting the need to combine scientific experience with local knowledge, Luís argued for a fruitful interaction of diverse knowledges in alternative approaches to development. He did not, however, make it explicit whether the local knowledge systems are to be legitimized only when they conform to scientists' views of sustainability, or whether these knowledge systems are allowed to have their own principles of legitimacy.

Other NGOs constructed the role of local knowledge much more unequally. In their perceptions, local knowledge was characterized as an

underutilized resource to be packaged in development projects in order to gain approval among the target groups. Many of them constructed local environmental knowledge in such a way as to suggest that, although the local people lived in a rich tropical habitat, they were unaware of its ecological diversity and ignorant of how to take care of it. They were deemed to be colonists who knew how to tame the jungle with the *machete* but not how to conserve tropical biodiversity. Local settlers responded to these accusations by pointing out that the appeals for local people to change their attitudes toward nature had little relevance when the power to make a significant difference in local resource management was so unequally distributed. They also challenged this display of concern for biodiversity by critically asking who it benefits. All this demonstrates how developers easily usurp the right to impose particular roles and representations upon the local people, while at the same time ignoring all the alternative representations.¹⁴

The most critical issue in the development vision of *Bosque y Ecodesarrollo* was its unquestioning promotion of a policy of extraction as the basis for sustainable resource management and an alternative income source for the local smallholders. Luís' argument that 'there is no risk of deceiving people in this project' repeated the typical language of certainty and expertise with which every new development project in Río San Juan is presented as a successful pilot project. Nothing was said about the economic disadvantages of non-timber forest extraction, such as substantial price fluctuation, insecure resource tenure, high dependence on outside support, and an unhelpful policy environment. In this respect, *Bosque y Ecodesarrollo* followed the conventional path of many NGOs searching for a simple solution to the region's complex development problems.

This seems curious when taking into account that the members of *Bosque y Ecodesarrollo* were active promoters of the extraction of raicilla in Río San Juan in the 1980s. According to Sonia, the raicilla project failed because the extractors remained economically dependent on the powerful middlemen regulating the prices and marketing opportunities. During the rattan workshop, nobody mentioned the historically cyclical nature of extraction activities in Río San Juan. Luís argued that rattan extraction can generate high economic returns for local smallholders but failed to mention that extraction based on a single product is a very fragile system. Nor did he take into account that profitable extraction requires relatively large forest areas, which are today increasingly scarce in Río San Juan.¹⁵ When proposing

14. For more on struggles over different knowledge systems, see Nygren (1999).

15. The average usufruct area of a forest extractor in Amazonia is 300 ha (Hecht, 1992: 391), while most of the people in Río San Juan have 50 ha of land or less, the majority of which has already been cleared. Analyses of the economic profitability of extraction are confusing. For Amazonia, see Browder (1992), Hecht (1992) and Ruiz Murrieta and Pinzón Rueda (1995); for Río San Juan, see Didier (1993), Offen (1992) and Salick et al. (1995).

small-scale resource extraction from Indio-Maíz, he overlooked the fact that a well-organized human presence is always required to manage extractive resources. Under current policies of nature conservation, it seems unlikely that forest extraction would be permitted in the near future inside the absolutely protected Indio-Maíz reserve.

Local extractors did not expect rattan extraction to succeed under these circumstances. They doubted whether there were sufficient forest and rattan resources to make the extraction profitable. Few of them had any forest left on their farms, so they were clandestinely extracting small amounts of rattan from the forests of absentee landowners and the reserve, depending heavily on fragile black markets. From their earlier experiences of extraction, they were well aware that most non-timber forest products are tied to fashions that are unstable over time. In this situation, they could hardly fail to be sceptical about the completion of the rattan project; as doña Elvira remarked: ‘So many projects we have had here, and ... nothing! How do you think people would believe them anymore?’

While rattan extraction may be one alternative local livelihood strategy, large-scale extraction faces severe limitations. The main question with respect to the sustainable development of Río San Juan always remains, how to integrate feasible income-generating activities into the smallholders’ farm production strategies. When I revisited Río San Juan in 1998, the rattan project was forgotten. According to Sonia, *Bosque y Ecodesarrollo* was now working with essences because rattan resources had proved to be very scarce and the local people were not so interested in it. Don Anastasio claimed that this was because MARENA never authorized the permits, with the consequence that the donors withdrew their support for the project. When I tried to interview Eduardo on the matter, the director of MARENA informed me that Eduardo had been fired from his post because of corrupt management practices. According to rumours, after the presidential and municipal elections Eduardo was no longer considered a politically correct person to be in charge of protected area management at MARENA. For their part, most of the local settlers responded to the decline of the rattan project by criticizing and challenging the developers’ ‘expertise’ as ‘some loose tips’, which change and shift according to the vicissitudes of development policies. They contested the progressive character of development, pointing out that in the cycle of different booms and busts, the developers’ big promises were never fulfilled.

CONCLUSION

This study has analysed the contested struggles over policies of protection and production in Río San Juan as a local example of nature-based conflicts and broader issues concerning environment and development. The competing claims made on resources by diverse social actors, each attempting to

legitimate its authority over the local resources, but for different reasons and with different purposes, are analysed here as a multifaceted process of social discourse and action, pursued in socially heterogeneous terrain and within unequal power relationships.

As Gadgil and Guha (1994) point out, nature-based conflicts are intimately connected to the development process as a whole. State authorities and non-governmental organizations sought to legitimize their control over the natural resources of Río San Juan by claiming that, ultimately, they are the only ones with the necessary knowledge and expertise to devise feasible strategies of local environmental management. The resistance of the local settlers was aimed just as much against the dominant policies of conservation and development as against the paternalistic forms of institutional governance and control. They argued that local natural resources should form a basis for local production and livelihood, instead of being declared global patrimony, subject to strict preservation.

Social categorizations play a crucial role in the struggles over resources and environmental imagery. The conservation authorities perceived local settlers as forest-hostile encroachers who should be kept under continuous surveillance, while development agents saw them as unruly clients in need of education and guidance. These social representations affected the formulation of nature conservation and rural development policies in the buffer zone. The view of local people's nature-society relationships as 'destructive' provided the justification for increased patrolling and resource regulation in the region, with little recognition of the fact that the future of nature conservation lies in fruitful co-operation between conservation authorities and communities surrounding the protected areas. At present, many buffer zone development strategies rely on increasing state authority and interventionist development policies rather than on successful empowerment of local people in conservation management and the search for alternative livelihood strategies.

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Anja Nygren is a research scientist at the Department of Anthropology, Box 59, FIN-00014 University of Helsinki, Finland (e-mail: anja.nygren@helsinki.fi). Her main research interests are nature-based conflicts, cultural representations of tropical forest-dwellers, and hybrid knowledge systems. Her recent publications include 'Local Knowledge in the Environment–Development Discourse: From Dichotomies to Situated Knowledges', *Critique of Anthropology* (1999) and 'Development Discourses and Peasant–Forest Relations: Natural Resource Utilization as Social Process', *Development and Change*, special issue on *Forests: Nature, People, Power* (2000).