
WORLD RAINFOREST MOVEMENT

**Sustainability and Decision-making in the Venezuelan Amazon:
the Yanomami in the Upper Orinoco-Casiquiare Biosphere Reserve.**

Article prepared for the Centro Amazonico de Investigaciones Ambientales Alexander Von Humboldt and the Servicio Autonomo para el Desarrollo Ambiental del Territorio Amazonas (SADA-AMAZONAS)

Marcus Colchester¹
 Director, Forest Peoples Programme
 World Rainforest Movement
 8 Chapel Row, Chadlington
 OX7 3NA, England
 Tel: +44 608 676691
 Fax: +44 608 676743
 Email: wrm@gn.apc.org

Contents

Summary.....	1
The Politics of Sustainability.....	2
Protected Areas and Community Management.....	3
- Box: Indigenous Rights in Venezuelan Law.....	6
The Yanomami.....	7
Yanomami Institutions.....	8
- agnation.....	8
- corporateness and decision-making.....	9
- leadership.....	10
- the village as a socio-political unit.....	12
- changing patterns of residence and leadership.....	14
The State Intervenes.....	15
From Territory to State: ' <i>municipalizacion</i> '.....	18
Future Options.....	19
References.....	21

¹ I would like to thank Fiona Watson of Survival International for comments on a previous draft. This paper draws on fieldwork carried out among the Yanomami with the permission of the Direccion de Asuntos Indigenas of the Ministerio de Educacion and funded by the Social Science Research Council, the Emslie-Hornimann Foundation, the Ruggles Gate Trust, the Fundacion la Salle and the Corporacion Venezolana de Guayana. The research was also assisted by Novib and a Conservation Scholarship from the Pew Foundation.

Summary

The concept of sustainability as developed by the World Commission on Environment and Development implies equity between and within generations. Achieving sustainability requires a shift in power from centralised authorities to local institutions. It implies a respect for indigenous peoples' rights and that they be given a decisive voice over their lands.

Conservation policies have long been at odds with these ideals. Protected areas have vested authority with State institutions and denied local peoples' rights. This has caused severe social and environmental problems. Experiences with 'buffer zone' management have likewise been disappointing, mainly because they have been imposed without adequate regard for local social and political realities. New models of protected area management are gaining acceptance that recognise indigenous peoples' rights and involve them centrally in decision-making. To achieve this conservationists need to understand the social systems of the peoples they are dealing with.

The Yanomami, much of whose territory in Venezuela has been defined as a Biosphere Reserve, live in widely dispersed communities in the headwaters of the Orinoco and Rio Branco. Despite their very low population density, their mobile way of life based on hunting, fishing, foraging and farming extends their area of resource use over the majority of their territory. Environmental degradation is minimal but they do not 'manage' their resources by regulating access or use.

Yanomami social institutions are kinship based, villages being made up of several descent groups. Important decisions favour the interests of kin. Leadership is weak and corresponds to a strong egalitarian tradition. Yanomami villages are unstable and contrast with the neighbouring Yekuana whose cognatic traditions favour village solidarity and formalised leadership and who manage exclusive hunting zones. It is mobility and the hostilities between Yanomami villages that ensure that they are widely dispersed and do not deplete resources.

The Venezuelan government has been slow to exercise its jurisdiction over the Yanomami area, preferring to delegate its responsibilities to missionaries. Recently, however, the Ministry of the Environment has been given authority over the region, through the creation of the Biosphere Reserve and is seeking to implement a management plan with European Community funding. At the same time, the State is trying to extend its administrative and electoral structure over the region, imposing culturally inappropriate institutions which constitute a serious threat both to Yanomami culture and to the management of the reserve.

The very fluid and informal nature of Yanomami decision-making poses problems to outsiders attempting joint management. On the other hand, given the overall lack of environmental degradation, there is little need for intervention or rapid change. Conservationists need to focus on the outside threats to the reserve, by regulating access and through preventive medicine. Successful management will depend above all on a respect for Yanomami autonomy and minimal intervention. Hasty impositions of centralised management systems and community development programmes could have negative social and environmental consequences. The best chance for the Biosphere Reserve and the Yanomami is that they be given time and the opportunity to develop their own institutions and ways of dealing with the outside world.

The Politics of Sustainability

As made popular by the United Nations' World Commission on Environment and Development, the phrase 'sustainable development' refers to the means by which 'development' is made to meet the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1987). Since the needs of future generations are undefinable and the future potential for wealth generation of species and ecosystems are equally unknowable, the term apparently implies that total biological assets are not reduced, in the long term, through use.

In a rural context, sustainable use thus includes not just conserving biological diversity, fauna and flora, but also maintaining ecological functions such as soil quality, hydrological cycles, climate and weather, river flow and water quality. It also implies maintaining supplies of natural produce - game, fish, fodder, fruits, nuts, resins, dyes, basts, constructional materials, fuelwood etc - essential to the livelihoods of local people.

It is important to distinguish between the WCED definition of sustainability, with its emphasis on human needs and sustaining livelihoods, and those subsequently adopted by many development institutions, whose more technical definitions of sustainability are in terms of ecosystems' continued production of goods or services or the maintenance of biodiversity (see, for examples, Pearce et al 1989: 173-185; ITTO 1990; World Bank 1991). Many definitions strip the concept of 'sustainability' of the social and political issues implicit in the notion.

As the WCED study acknowledges, achieving sustainability implies a radical transformation in present day economies. It requires a fundamental change in the way natural resources are owned, controlled and mobilised. To be sustainable 'development' must meet the needs of local people, for, if it does not, people will be obliged by necessity to take from the environment more than planned. Sustainability is fundamentally linked to concepts of social justice and equity, both within generations and between generations, as well as both within nations and between nations (WCED 1987; UNEP 1989).

Achieving sustainability thus implies major political changes. As the WCED notes:

'The pursuit of sustainable development requires a political system that secures effective participation in decision-making... This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizen's initiatives, empowering peoples' organisations, and strengthening local democracy.' (WCED cited in Durning 1989:54)

Such a notion of popular 'participation' in development is very close to that adopted by the United Nations Research Institute on Social Development.

'Popular participation is defined as the organised efforts to increase control over resources and regulative institutions in given social situations, on the part of groups and movements of those hitherto excluded from such control' (UNRISD/79/C.14, Geneva, May 1979 cited in Turton 1987:3)

The WCED develops this concept even further in its discussion of indigenous and tribal peoples, of whom it notes:

'In terms of sheer numbers these isolated, vulnerable groups are small, but their marginalisation is a symptom of a style of development that tends to neglect both human and environmental considerations. Hence a more careful and sensitive consideration of their interests is a touchstone of sustainable development policy.... Their traditional rights should be recognised and they should be given a decisive voice in formulating policies about resource development in their areas' (WCED 1987:116, 12, emphasis added).

The same principles are echoed by the International Union for the Conservation of Nature and Natural Resources (IUCN), which, in its 'Guidelines for the Management of Tropical Forests' notes that:

'the people who live in and around tropical forests should control their management'
(IUCN 1989)

Protected Areas and Community Management

A serious problem for conservationists is that such a notion of community control of decision-making does not accord well with conventional notions of protected area management. On the contrary, the whole western tradition of 'wilderness' preservation and biodiversity conservation has evolved within a world view which sets mankind apart from nature and sees nature both as a threat to the social order and as a refuge from the stresses of civilized life. Protected areas have been conceived within this tradition, as areas freed from human occupation and disturbance (Colchester 1994).

Such notions of conservation and wilderness are entirely foreign to indigenous peoples for whom their natural environment is their home. Peoples like the Yanomami identify closely with their forests, seeing 'nature' in 'culture' and 'culture' in 'nature' (Colchester 1982b).

Classical conservation approaches, however, deny indigenous peoples' rights and seek to regulate the use of natural resources by empowering State institutions at the expense of indigenous ones. Despite the fact that most protected areas have long term residents - in Latin America nearly 85% are inhabited by indigenous people (Amend and Amend 1992; Alcorn 1994) - national laws establishing protected areas commonly deny or extinguish prior rights of land ownership, access and use. Severe social problems have resulted ranging from impoverishment and hardship to forced resettlement, cultural collapse, police violence, serious human rights abuse and even summary executions (Colchester 1994).

Conservation approaches of this kind have not only failed to respect human rights and secure the futures of indigenous peoples, they have also, very often, failed in their own terms. By creating insoluble conflicts between State and local communities, protected areas have become unsustainable (cf Peluso 1992). As Jeff Sayer (1991:1) of the World Conservation Union has noted:

'Legal protection is rarely sufficient to guarantee the continuing integrity of conservation areas. Local people, often with good reason, frequently see parks as

government-imposed restrictions on their legitimate rights. Patrolling by guards, demarcation of boundaries and provision of tourist facilities will therefore not deter them from agricultural encroachment. Illegal hunting and gathering of forest products will be difficult to control. Laws which are resented by the majority of the population are difficult to enforce. In these situations, protected areas lose support and credibility, and their condition rapidly deteriorates.'

In Africa, over a million square kilometres of land have been set aside as national parks and game reserves (Hitchcock 1990), yet they have been remarkably unsuccessful at protecting wildlife. Commenting on the problems confronting national parks in Central Africa, Stuart Marks (1984:4-5 cited in West 1991:xviii) argues:

'Materialistic Northerners have sought to preserve African landscapes in the only way they could, by separating them from daily human activities and setting them aside as national parks where humans enter on holiday... Wildlife protection, like other imposed policies, has always carried with it the implications of force, of quasimilitary operations, and of sanctions. It is my contention that for the West to persist in its support of preservationist policies that hold vast acreages of land hostage to its myths is to ensure their certain destruction through African needs and perspectives.'

More recently, World Wildlife Fund authors Jonathan Adams and Thomas McShane (1992:xv, xvii) have reached similar conclusions:

'As long as conservation operates on the notion that saving wild animals means keeping them as far away as possible from human beings, it will become less and less relevant to modern Africans. Parks and other protected areas will eventually be overrun by people's need for land unless the parks serve, or at least are not completely inimical to, the needs of the local population.... Conservation will either contribute to solving the problems of the rural poor who live day to day with wild animals, or those animals will disappear.'

In a like vein, Sanjoy Deb Roy of the Indian Forest Service and Peter Jackson (1993:160) of the World Conservation Union note that:

'All of India's nearly 500 protected areas are virtual islands surrounded by villages and agriculture land, where people are desperately short of the basic resources of life, such as firewood, building materials and grazing areas for their livestock. Inevitably they invade the reserves and come into conflict with the authorities. Poaching of animals, timber and other forest produce is rife, and cattle and goats are found in most reserves. Resentment at the wildlife authorities' attempts to control the situation has exploded in violence against officials and guards.'

Janis Alcorn (1993:424) paints an equally gloomy picture of conservation in Amazonia, where she notes 'paper parks abound, and deforestation rates have increased'. Recognising these problems, many more socially aware conservationists have been actively seeking alternative strategies that better accommodate indigenous peoples' needs and rights.

One approach that has been widely adopted is the establishment of 'buffer zones', around

strictly protected areas, where human activities are permitted but controlled. As the World Conservation Union has admitted in a recent survey, the results have been largely disappointing. Most buffer zone management projects have been initiated and directed by outsiders, have been of short duration, and have focused on ambitious but untried technologies to secure increased economic benefits for local people, in the hope that they would not then impinge on the core zones, which were off limits. These 'ecodevelopment projects' have 'frequently pursued objectives which were inconsistent with the aspirations of the very people they were trying to help' (Sayer 1991:24). They have suffered from paying too little attention to social and political constraints, both of the local communities and the national conservation agencies. Sayer (1991:4) observes that the best buffer zone projects 'have not been short-term aid projects but initiatives taken by local community groups or resource managers who have made creative attempts to solve the day to day problems which they faced.'

A consensus is thus beginning to emerge that, to be viable in the long term, protected areas must involve local people in management decisions (Hannah 1992:1; Ledec and Goodland 1988:98). Accordingly, 'joint management' programmes are increasingly being promoted. Not all these ventures have proved successful but they have provided important lessons about the best means for avoiding conflict and misunderstanding (Colchester 1994).

In the first place, conservationists note, procedures must be established right from the beginning to ensure communications between State officials and the local communities (Kemf 1993). These procedures need to be open and transparent to ensure that community grievances can be dealt with fairly. Projects must be designed on the basis of an understanding of local political structures and establish management procedures that are responsive to these local realities (Hannah 1992:54). Effective joint management requires provisions for training both indigenous personnel in management skills to ensure that they can act as equal partners in management and of outside managers in indigenous culture to ensure that they have an understanding of the society they are dealing with. Above all the land rights of indigenous people must be respected and local communities must be allowed to remain inside protected areas and make use of natural resources on a sustained yield basis (Davey 1993:203; Kemf 1993:xviii).

Probably the most difficult problem for outside conservationists working with indigenous peoples is identifying the appropriate indigenous institutions through which to mediate. It is a problem that many indigenous peoples also have to confront from their side in deciding in which of their own institutions to vest authority for governing novel activities, be they oriented to conservation or the market. Especially among relatively acephalous societies such as Amazonian Indians and 'pygmy' groups in Central Africa, the lack of central authorities creates tricky problems in the reaching of binding agreements both amongst themselves and with outsiders. There are no generalisations that can be made about how to solve these problems, except that the decisions should be made by the people themselves. Allowing that freedom requires patience and understanding from the outside agencies concerned.

Indigenous Rights in Venezuelan Law

Venezuelan law is ambiguous about the status of indigenous peoples' rights to land. On the one hand, under the Venezuelan Constitution (Article 77, clause 2), 'the law establishes a special system as required to protect the Indians and permit their incorporation into the life of the Nation'. The principle has been partly secured by Decree 250 of 1951 which regulates access to Indian areas and Decree 283 of 1983 which provides for a bilingual intercultural educational system for the Indian communities of the country.

As regards land, Article 2 of the Agrarian Reform Law of 1960 explicitly

'guarantees and acknowledges to the indigenous population that it may actually keep its communal or extended family condition, without diminishing the rights which belong to it as Venezuelans, in accord with the above sections, the right to have the benefit of the lands, woods and waters that they occupy or which belong to them in those places where they habitually dwell, without prejudice to their incorporation into the national life as conforms with this and other laws.'

Moreover, in December 1990, Venezuela formally recognised Convention 107 of the International Labour Organisation article 11 of which states that:

'The right of ownership, collective or individual, of the members of the populations concerned over the lands which these populations traditionally occupy shall be recognised.'

However, these legal assurances have provided little security for the Indians. Indigenous 'reserves' created by a variety of decrees have been ineffective (Colchester and Fuentes 1983). Decree 250 regulating access to the Indians' areas is now rarely applied to the State of Amazonas, while the land titling programme implemented under the Agrarian Reform Law by the Instituto Agrario Nacional (IAN) has resulted only in provisional titles being granted to the Indians. These titles are also often small in extent and do not correspond to the indigenous hunting, fishing and collecting territories and they impose a system of organisation into '*Empresas Indigenas*' (indigenous enterprises) that are not well suited to indigenous economies or social traditions. To date no single Amazonian Indian community in Venezuela has gained secure title to its lands.

Some 55% of Venezuelan Amazonas has been defined as '*Areas Bajo Regimen de Administracion Especial*' (ABRAE), which are legally defined as 'public utilities' and thus generally considered as incompatible with private ownership of lands, conferring on the State rights equivalent to land ownership. However, in 1993, 19 provisional titles were awarded to Piaroa Indian communities in the Reserva Forestal Sipapo in the Upper Cataniapo, with the agreement of MARNR and under IAN's land titling programme. This precedent suggests that community rights of land ownership can be asserted within ABRAE. In the same way, the Venezuelan State has accommodated private land ownership titles in National Parks in the north of the country.

The Yanomami

Yanomami is the popular term employed to refer collectively to four closely related indigenous peoples - the Sanema, the Ninam, the Yanomam and the Yanomamɨ - who inhabit the watershed between the Orinoco and Rio Branco rivers. Numbering some 21,000, of whom some 12,500 live in Venezuela, and living dispersed in over 360 communities, the Yanomami are spread out over a huge area of some 192,000 square kilometres (Colchester 1985)². Two of these peoples, the Sanema and the Yanomamɨ, occur within the newly created Biosphere Reserve, an area that they share in the west with the Yekuana.

This upland region, most of it lying over 300 metres, is characterised by steep rolling hills and valleys clothed in continuous rain forest, drenched by between 2 and 4 metres of rain a year. Today most of the Yanomami live from a mixed economy of hunting, fishing, foraging and shifting cultivation, which they practise at a very low level of intensity. Shifting cultivation, which provides a ready supply of carbohydrates mainly in the form of bananas, plantains and manioc, occupies only some 2.0% of their land - allowing for a sixty year cycle between first and subsequent clearances and for the fact that between a third and a half of their territory is not suitable for even temporary cultivation. However, despite this low intensity of farming, the Yanomami make direct use of the majority of the vast area that they occupy. Day hunting, which provides the majority of the daily protein intake, extends the range of community activity to a radius of some 8 kilometres from each settlement and foraging and hunting during extended treks takes the radius of community resource use out still further, to some 25-30 kilometre radius (Colchester 1991b).

In addition Yanomami communities move, divide and join up with great frequency and this extreme mobility combined with regular visiting between villages ensures that the traditional Yanomami never over-exploit any one locale for too long. Villages are also extremely varied in their size. While averaging some 58 individuals, villages range in size from between 6 and 400 individuals. The distances between neighbouring communities are likewise very variable, some being only a few hundred metres apart, others being separated by several days of trek.

Although the Yanomami have an extremely precise geographical knowledge of their forests and hunt and farm within relatively well defined areas of forest around their villages, they do not have a sense of exclusive ownership of their lands. Whereas gardens and crops have well established owners, hunted areas are not even used exclusively by single communities but, rather overlap extensively (Hames 1980; Colchester 1982a; CCPY 1982; Good 1982a). There is no evidence that the Yanomami have ever disputed access to hunting zones.

The corollary of these residence patterns and notions of land ownership is that defined Yanomami villages cannot be thought of as 'managing' their natural resources in the way that western farmers or conservationists might expect. Rather, their use of their environment is indirectly regulated by their social and political order. Because Yanomami communities are very uncentralised, highly fissile, unstable and mobile, the Yanomami never press too long on any one area before moving anew to fresh areas of forest. These tendencies to mobility and dispersion are reinforced by deeply rooted traditions of raiding between villages.

² It is worth noting that the Yanomami today are scarcely less numerous than the Six Nations Iroquois Confederation of the seventeenth century that played such a determining role in the history of North America (Jennings 1984).

For the past century the Yanomami have suffered devastating losses from introduced diseases and their principal need from western society is effective, culturally appropriate, preventive medicine and primary health care to help them cope with these new illnesses (Colchester 1985). Yet, while the Yanomami require territorial security and strict control of outsiders having access to their region, most Yanomami aspire to increasing involvement in the market economy, mainly to acquire simple industrial products like metal tools and clothes.

Yanomami institutions

Like all other indigenous peoples of Amazonia, the Yanomami have a kinship-based social organisation, which provides the principal structure for all decision-making. Anyone interacting with the Yanomami and wishing to understand their relations both with their natural environment and with each other is thus obliged to try to make sense of this complex social universe according to which the Yanomami order their affairs.

In common with all other peoples of the Guiana region, excepting the Warao of the Orinoco Delta, the Yanomami have relationship terminologies that are formally described as 'Dravidian' (after Dumont 1953), in which terms referring to cousins are of the 'Iroquois' type - where parallel cousins are terminologically distinguished from cross-cousins (Migliazza 1964; Ramos 1972; Chagnon 1968a; Lizot 1971; Colchester 1982a). In Dravidian terminologies, parallel cousins are referred to by the same terms as siblings but cross-cousins are referred to by the same terms as brothers-in-laws and wives. The system is prescriptive, in that marriage is always reckoned as taking place between a (male) ego and a woman in the category 'wife', formally one who is a female cross-cousin.

However, some Yanomami relationship terminologies do manifest a significant difference from other Guianan systems, which is that certain terms for affines are only used in the post-marital phase to refer to 'real' in-laws. As Ramos (1972:132) notes 'it is as if alliance relationships between groups are given conceptual expression in the use of the post-marital set of terms'. This feature of the relationship terminology can be explained as being complementary to another important feature of Yanomami social organisation - 'agnation'.

Agnation

The major difference between Yanomami social systems and other Guianan ones - such as are found among the Piaroa (Kaplan 1975) and Carib groups like the Maroni River Caribs (Kloos 1971), the Trio (Riviere 1969), the Yekuana (Arvelo-Jimenez 1971), the Panare (Henley 1982) and the Pemon (Thomas 1982) - is that these others lack 'any type of formal social grouping and, with the exception of the relationship terminology, any verbal categories which have absolute rather than relative value with which to differentiate members of society' (Riviere 1969:61). In these systems, relations are recognised cognatically - that is equally through male and female lines. Among the Yanomami (with the possible exception of the Yanomam sub-group - Ramos and Albert 1977), a definite agnatic principle - according to which descent is traced through the male line - can be detected which has important influences on social organisation, alliances and decision-making.

Contrasting the Yanomami to the Piaroa described by Kaplan (1973; 1975), Shapiro (1974) has pointed out that whereas among the Piaroa 'the Dravidian dualism in the kin universe is neutralized at a different level by the cognatic kindred - the Yanomami do not present such a pattern; the dualism in the kin universe is not subsumed into a higher unity and, as a result,

can be seen as a relatively more salient principle of social organisation' (Shapiro 1974: 305).

The Piaroa and Carib system might be summarized thus; 'instead of two groups exchanging wives, the model is that of a group which maintains itself through time as a consanguineal unit by restricting exchange to within itself' (Kaplan 1975: 2). Central to this system is the sense of unity of the cognatic kindred. This cognatic concept contrasts strongly with the Yanomami concept of an agnatic kindred. Rather than incorporate co-villagers into a unity (see especially Kaplan 1975 and Arvelo-Jiminez 1971) so that the distinction between 'consanguine' and 'affine' becomes blurred (or rather so that these descriptive terms become hard to apply), the Yanomami emphasise the dualism by simultaneously exaggerating the importance of the alliance relationship (Ramos 1972; Chagnon 1977: 58,70) and affirming the solidarity of the agnatic group (Ramos 1972; Lizot 1976b; Chagnon 1977). The social structure is thus simultaneously defined both horizontally and vertically (Lizot 1976b) and contrasts with the cognatic blurring of the Caribs and Piaroa.

The terms crucial to agnation among the Yanomami are the terms '*hĩtu*' (Sanema) and '*mashi*' (Yanomami, also rarely used by the Sanema) (Lizot 1971; 1976b; Ramos 1972:72; Chagnon 1977:61). The exact details of the way these terms are used are described by Lizot (1976b) and Colchester (1982a:163-5). The terms link together as 'related kin' brothers and their patrilineal parallel cousins. Simultaneously, the terms divide this group from matrilineal parallel cousins. Being '*hĩtu*' or '*mashi*' to another individual implies linkage to a proximate male ancestor and places emphasis on descent through the male line, an emphasis that is matched among the Sanema by their ideas of conception (Colchester 1982a:413) - according to Sanema beliefs babies are derived wholly from sperm, the mother contributing nourishment but not being responsible for conception.

The effect of these concepts is to generate descent groups, which are consolidated through the principle of patrilineation. Ramos (1972; 1974) has described in detail how among the Sanema individuals inherit names patrilineally, from father to son, and how such names become fixed as labels for agnatic groups, when a village becomes dominated by an agnatic cluster. Among the Yanomami by contrast, descent groups are not named (Chagnon 1977:65, 1979:385; Lizot 1976b). The Yanomami do however inherit the species of their alter ego spirit patrilineally, so that 'one can say without doing too much violence to the ethnography, that the animal-image actually constitutes the name of the lineage' (Lizot 1976b; my trans.).

Corporateness and decision-making

These identified descent groups provide one of the main organising principles for decision-making among the Yanomami. The descent groups do not share property in common and may be distributed among a number of widely dispersed villagers, yet they provide the Yanomami with kin who can be called on to provide support in arranging marriages, forming alliances as well as in disputes and conflicts.

As Lizot (1976b:6) notes, the group which an individual considers '*mashi*' 'constitute a fused and solidary group, often grouped together in the bosom of the same village'.

'The lineages provide the framework for Yanomami social organisation. Marriage exchanges frequently take place between different lineages, rather than between different local groups, which should better be seen as groupings within single

settlements of diverse combinations of a certain number of lineages' (Lizot 1976b:21 my translation).

The patterns of alliance are structured by agnatic solidarity, which both transcends the community level and is visibly manifest in the lay out of hearth groups around the perimeter of the circular settlements. Within the agnatic group, men share rights of sexual access to each other's wives and they unite collectively during head-beating contests (Lizot 1976b:15). Chagnon (1977:61) likewise notes that 'members of these lineages tend to intermarry with members of a second lineage over a number of generations, being bound to them by obligations to reciprocate women in marriage'. Local descent groups he describes as corporate with respect to the functions of arranging marriages of female members and women rely on the protection of their brothers when physically abused (Chagnon 1977:68).

When communities divide in disputes and because local resources have become too depleted, there is thus a tension between the mutual obligations that tie together groups of affines linked through exchanges of women and the weakly corporate agnatic descent groups which attempt to maintain a shared residence. These conflicting tensions make village fission complicated, but because obligations between descent group members transcend village boundaries, village fission does not undermine descent group solidarity. Constant visiting between settlements for feasting, trading and to discuss marriages helps maintain the coherence of the descent groups.

Among the Sanema the agnatic principle has been noted as organising a number of other aspects of life, including the rules concerning duelling (Taylor 1977), in influencing patterns of warfare, resettlement, residence patterns and food distribution (Colchester 1982a: 171-194, 308), in the inheritance of dietary restrictions (Taylor 1979), in the inheritance of patronyms (Ramos 1972), in the transmission of shamanic knowledge during initiation ceremonies (Taylor 1976:32; Colchester 1982a:498), and in the mourning associated with death (Ibid: 452). Thus, although, descent groups do not corporately own goods or natural resources, they do have a joint heritage in ceremonial and ritual knowledge and tend to act as political units, especially in times of conflict which are principally caused by disputes over women.

Leadership

All the ethnographers are agreed that leadership among the Yanomami is weak even by Amazonian standards (Chagnon 1968a, 1974, 1975; Ramos 1972; Lizot 1976b; Colchester 1982a). Likewise the close link between leadership and agnation has been widely noted. Among the Sanema, 'each community has a single headman who generally belongs to the core group of siblings' (Ramos 1972:40). The leader of the village is the leader of the dominant lineage though the role involves virtually no coercive power (Ramos 1972:79). The village leader may take decisions regarding subsistence expeditions (Ramos 1972:80; Good 1982a) but in general has an advisory rather than a controlling role. In some situations he may play no part in resolving disputes (Ramos 1972:79-80).

Among the Yanomami the villages are somewhat larger. Authority is largely dependent on the backing of the headman's brothers (Chagnon 1977:96). As Chagnon notes:

'Political leaders of all Yanomamo villages in fact come from the largest descent group... their positions as leaders in fact depends on the number and kind of kin they

have to support them in their decisions and actions' (Chagnon 1975:98-99).

The Yanomamĩ leader does have definite responsibilities and, even if he leads primarily by example (Chagnon 1977:96), he plays the part of mediating and controlling disputes where possible (Ibid:94-5). However, the Yanomamĩ position as leader is always equivocal because each local descent group has its own spokesman. Feuding thus readily develops **within** villages (Chagnon 1968b:147). Among both the Yanomamĩ and Sanema, leaders are only secure in their authority, marginal though it is, by virtue of the backing they receive from their kin -- the 'recruitment' of this support is structured according to the Yanomami's concepts of agnation.

Leadership can however become much more forceful among the Yanomamĩ in times of war, and leaders may actually encourage warfare to preserve their advantage (Clastres 1977:177-180; Chagnon 1968c:147; 1975:96; cf Price 1982). Leaders may also seek to expand their agnatic kin groups by having numerous wives and thereby children. Leaders also attempt to gain authority by controlling trading exchanges (Chagnon 1974; Colchester 1982a:358-359) and do so by engaging in a great deal of personal trading and by mediating exchanges between others (cf. Lizot 1976c).

To generalise, we can say that Yanomami leaders achieve political prominence through the backing of their agnatic kin as well as by generating a sense of community consciousness, with themselves as the resolving focus. This sense of community is mainly encouraged by manipulating inter-village tensions, exaggerating the possibilities of warfare, and thus circumscribing the community with threatening foces. The community responds to these real or imagined forces by searching for a renewed coherence of the in-group and down-playing the tensions between descent groups. Such centralization affords individuals with qualities of leadership the opportunity to act as foci for attention structures.

Leadership among the Yanomami is at all times at odds with a strong egalitarian tradition by which no person has the right to assert his authority over another. Apart from the weak sense of hierarchy between elder and younger siblings and the ritually bounded authority that a woman's parents exercise over their son-in-law, Yanomami are extremely reluctant to impose or submit to authority. The lack of real authority of Yanomami leaders is clearly illustrated by the process by which disputes are resolved. Should a leader take it upon himself to punish an individual for anti-social behaviour, he will call out the miscreant in public and the two of them will **exchange** an even number of blows with clubs on the head, or, more usually, smacks with the flat of machete blades on each other's back. Strict equality between the leader and the other members of the community is thus maintained.

The autonomy of the individual is emphasised by the Yanomami. While at the same time expressing detailed concern for the behaviours of others and spending the majority of their time discussing other people's affairs, the Yanomami are nevertheless careful to recognise an individual's right to form, hold and express his own opinions. No one has the ultimate right to control the behaviour of another individual against his better judgement and no one's right to leave a community in the event of disagreement can be negated. A favourite disclamatory phrase that ends a discussion that does not end in unity is 'Oh! Well keep your opinion then!' [in Sanema, '*O! kama pi na kĩ!*'] (Colchester 1982b:100). In sum, the Yanomami to a large extent conform to that stereotypical notion of indigenous authority

whereby 'the chief speaks and then everyone does as he wishes'.

The village as a socio-political unit

Although agnatic descent groups emerge as the most salient units of Yanomami society, nevertheless powerful ties between kin and affines expressed in terms of exchanges of women, food sharing and trading, also bind groups together into settlements. Food-sharing binds individual hearth groups together, while hunted game, which is more widely shared, acts as the main social glue between such groups. Complex rules govern the way meat is distributed with marked distinctions being made between kin and affines (Taylor 1974; Colchester 1982a:291ff, 308). The universal ideal is that all in a community share game amongst each other, with the hunter himself being the last to get a share. Nevertheless the potential for such means for achieving group solidarity are limited and **stable** communities above a certain size are rare.

Good (1982a) has noted that the local decline of game may contribute to settlement relocation and even fission, once the meat supply becomes insufficient to allow the fulfillment of these norms. In 'artificially' enlarged villages, such as those which coalesce around missions, food-sharing patterns reveal that the villages are really little more than encampments of several different communities, each with their own relatively discrete food-sharing circuits. In general, game availability and food-sharing do seem to set upper limits to viable community size and stability; on average, however, fission due to socio-political factors seems to predominate and precede such causes for dispersal.

The main means by which community solidarity is achieved is through repeated exchanges of women between agnatic groups, so that descent groups are able to achieve a near identity of interests. Nevertheless the agnatic emphasis does not give way to a cognatic one, even though the structure of the community appears little different from one generated by a cognatic one. As soon as disputes occur, the structural difference reveals itself. In smaller villages, the community structure almost resembles villages with a dual organisation (Chagnon 1977:71), or the units may be even smaller so that communities become limited to a family extended along agnatic lines and including only such male affines as are carrying out bride-service (Ramos 1972; Colchester 1982; Chagnon 1977:72n). Larger communities, such as those among the Yanomami of the Upper Orinoco, usually contain several different descent groups. Chagnon emphasises how these larger communities are inherently unstable and usually divide after the population reaches 80-90 individuals (Chagnon 1968b:136).

Large villages - today made possible by steel tools, new crops and a corresponding intensification of agriculture - are beset by a number of problems: increasing competition for leadership between agnatic groups; a breakdown of food-sharing; violations of incest prohibitions; more opportunities for adulterous affairs; increasing levels of violence and homicide (Colchester 1983). The common result is for villages to break up into smaller units, in which the tensions within the community are more manageable.

It is worth contrasting the Yanomami's highly uncentralised and fluid socio-political system with that of their neighbours, the Yekuana. Arvelo-Jimenez (1971), has characterised the social order of the Yekuana as 'anarchic' where the village leader has no power (Ibid 1971:232) but is merely a *primus inter pares* (cf Chagnon 1968b:157; Henley 1982:137). Yet, while this is undoubtedly true in comparison with western societies, in comparison with

the Yanomami, and even in comparison with other neighbouring Carib societies like the Panare (Henley 1982) and the Pemon (Thomas 1982), the Yekuana system seems stable, hierarchical and formalised.

A Yekuana headman consolidates his office through the kinship network on a **cognatic** basis - recruiting support equally from kin and affines - and the extent of this network largely determines an individual's chances of becoming a leader: it constitutes what Arvelo calls the headman's 'natural following' (1971:233). Like the leader among the Piaroa (Kaplan 1975), the Yekuana headman seeks to strengthen his natural following by manipulating marriages so that the community is strengthened and stabilised: husbands for the village's women are thus sought within the community or marriages are by preference arranged with men from other villages who are not likely to have divided loyalties. Central to the Yekuana perception of social life is the concept of the village as an enduring, undivided and unitary entity that is essentially not connected to other communities (Arvelo-Jimenez 1971:377). Individuals identify with their community and consider themselves to have their 'roots' in it (Ibid:372). Threats to the village's stability are seen at just this level of abstraction, so that they talk about the 'death' of a village (Ibid:255).

The headman of a community is its leader and it is his duty to mediate all transactions with outsiders. It is also the village headman's role to mediate all trade exchanges between communities (Ibid:238). The headman is expected to appoint a deputy, a named and acknowledged role, who corresponds to his choice of successor. Formal meetings that are called to discuss 'political' issues are preceded by conferences between the headman and his deputy. Meetings are called by the headman and **not** at the demand of the community (Ibid:243-5). Community decisions are then achieved by consensus within a circle of elder males and junior males are expected to conform to these decisions. By these means a strong sense of common purpose and community solidarity is, ideally, achieved. But a corollary of this system is a strongly controlled personality that contrasts dramatically with the extrovert nature of the Yanomami.

Again in contrast to the Yanomami, the Yekuana do assert community rights to hunting zones and they regulate access to these zones on a rotational basis, thereby ensuring that game stocks replenish themselves (Hames 1980). Whereas the dispersion of Yanomami villages is maintained by warfare and great mobility, the Yekuana villages are spaced out by a more marked sense of village territoriality, as well as sorcery accusations.

The contrast can usefully be displayed schematically:

Yekuana	Yanomami
cognatic	agnatic
community conscious	descent group conscious
centralised	un-centralised
community headman	descent group headman
consensus decisions	tolerance of dissent
introvert	extrovert
village hunting zones	overlapping hunting areas

Changing patterns of residence and leadership

It seems probable that the Pre-Colombian Yanomami lived in the uppermost headwaters of the Orinoco in very small agnatic bands principally from hunting, foraging and the very limited cultivation of certain tree and root crops (Colchester 1984a). The introduction of steel tools, beginning in the mid-19th century, led to an intensification of agriculture, the adoption of new crops, such as bananas and plantains and manioc, and rising populations. These changes triggered the emergence of larger, more sedentary villages, and may have contributed to an intensification of warfare (Colchester 1983c). This in itself may have pronounced a tendency for war-leaders to take a large number of wives and aggressively assert their authority (Clastres 1977). Both in order to escape the raiding and in order to gain access to trade goods, Yanomami villages fanned out into the surrounding forests penetrating south and west as far as the Rio Negro, north to lower Caura and east to the Ajarani.

These migrations and the Yanomami's new dependency on trade for industrial products brought them into contact with both other Indian groups as well as non-Indian societies. As a result the Yanomami have been forced to mediate with peoples of different cultural traditions and in some instances this has had noticeable effect on Yanomami patterns of residence and leadership.

In the north, the Sanema aggressively invaded the territory of the Yekuana Indians forcing them to abandon their communities on the Upper Ocamo and Merevari. After a period of flight the Yekuana rallied under the unusually effective leadership of a single '*kajichana*'. The Yekuana turned on their pursuers and their shotguns easily outclassed the Sanema's bows. Many Sanema died in the subsequent battles and they later had to accept an inferior status when trading with the Yekuana.

Two quite contrasting influences of this one sided relationship can be noted among the Sanema. On the one hand, many Sanema communities seek to evade the authority that Yekuana villages attempt to impose on them by exaggerating their lack of centralisation and accountability. To the Yekuana, therefore, the Sanema often appear leaderless, shiftless and ungovernable, which is exactly what the Sanema intend as they thereby avoid the exactions of their goods and labour. On the other hand, in the north of the Sanema area, where the communities have longest had contact with the Yekuana and have now established themselves as autonomous villages freed from Yekuana control, they have adopted some Yekuana institutions such as named headmen and deputies, consensus decision-making and a council of elders which seeks to impose its authority on the community.

Yanomami villages have also noticeably enlarged and congregated about missionary settlements, with a variety of consequences. One alarming effect are rising levels of tension and violence in these areas as the Yanomami seek to coexist in settlements that are larger than they traditionally cope with (CCPY 1982; Good 1982b; Colchester 1983a). Typically, also, in mission settlements leaders tend to be younger more acculturated individuals, conversant in Spanish and able to read and write, who can be relied on to negotiate beneficial trading arrangements between the Indians and outsiders. Missionaries sometimes purposefully seek to manipulate leadership patterns to secure their influence (Jank 1977; Colchester and Wanapanai 1983; Ales and Chiappino 1985).

Novel leadership patterns have been particularly marked in those Yanomami communities

which have embarked on community development programmes oriented towards producing a surplus for sale in the markets on the lower rivers (Colchester and Wanapanai 1983; Saffirio and Hames 1983). None of these communities have found entry into the market easy: in all cases, the coordination of productive activities, the sale of produce, the choice of goods to acquire with earned cash and the distribution of these goods have all, at one time or another, been the source of exaggerated tensions, jealousies and disputes. Nevertheless, despite these problems and setbacks, nearly all these communities have persisted in their attempts to formalise their relations to outsiders through the creation of novel institutions.

The salient lesson of these experiences is that community development projects have encountered most problems where decision-making structures have been imposed on the Yanomami by outside 'advisers'. Attempts to create centralised village leadership while failing to ensure the representation of the main descent groups in decision-making has led to serious problems (Colchester and Wanapanai 1983; Colchester 1983a).

As the Yanomami become increasingly engaged in trade, corporate decision-making bodies, that regulate the production, sale and distribution of goods, have begun to emerge more clearly. In some areas, these institutions have been modelled on Yekuana community enterprises, which has required an attenuation of the factional demands of descent groups. In other areas, especially where Yekuana influences have been less marked, the descent groups themselves have emerged as stronger corporate bodies. Both options strain the inherent tension in Yanomami political life between descent groups and the village as organising principles.

Today, however, Yanomami face a far greater challenge as Government institutions seek to impose direct control over their territories.

The State intervenes

Outside contacts with the Yanomami commenced in 1760, when Apolinar Diez de la Fuente reached the Raudal de los Guaharibos during the Real Expedición des Límites (Perez 1946) and sporadic and very gradually intensifying contacts with outsiders continued from this date. However, neither the Portuguese and later Brazilian States nor those of Spain and later Venezuela, made any real attempt to exercise jurisdiction over the Yanomami area until the 20th century (see Migliazza 1972 and Colchester 1982a for historical summaries).

Under the 1911 Ley de Misiones (still unrepealed), the Salesian mission was granted jurisdiction over the Indians of the Venezuelan Amazonas Territory and in the 1940s, this branch of the Catholic Church gradually began to assert its authority over the Yanomami of the Upper Orinoco (Cocco 1972). Initially extremely conservative and paternalistic in its relations to the Indians, and strongly criticised by resident anthropologists (Lizot 1976a; Chagnon 1994), under the influence of the Second Vatican Council and the Medellín Congress, the mission has more recently profoundly changed its way of working with the Yanomami. An adequate study of the political relations between the Salesian missions and Yanomami communities with which they have interacted has not been published.

In the early 1960s the Yanomami on the Brazilian side of the border began to suffer the persistent invasion of their lands by miners and in 1973, the Brazilian State began to directly intervene in the Yanomami's territories by constructing the Perimetral Norte highway through

their southern marches. The mining and road-construction, have caused massive mortalities and a long campaign has been fought, led by non-Governmental organisations, to have the Yanomami's lands demarcated and protected (Ramos and Taylor 1979; Survival International 1990). The result has been the legal recognition of some 94,000 square kilometres as an 'indigenous park'- a term which refers, in Brazil, to a very large indigenous reserve under State ownership set aside for the exclusive use of a number of ethnic groups. However, owing to the inability of both the State and the Yanomami to prevent incursions, the Yanomami's lands continue to be occupied by a fluctuating number of illegal miners some of whom cross the frontier into Venezuela.

The Yanomami's situation in Venezuela has been quite different from that in Brazil. In the early 1970s, State policy towards what was then the Amazon Territory consisted of a 'developmentalist' programme that copied the Brazilian military model of road-building and colonization, under a programme rudely titled 'La Conquista del Sur' (CODESUR). However, since real pressure to open up the interior of Venezuela was slight - both population and capital being drawn to the oil-rich coast - the CODESUR programme was never more than a political foible and soon lapsed. The lack of real pressure to develop the interior resulting from the oil boom and the growing awareness of the problems caused by the model of development in Brazilian Amazonia, provided room for the emergence of a different policy emphasising environmental concerns and scientific research.

The result was that by the mid-1980s the Ministry of the Environment (MARNR) had become the strongest Ministry in the Amazon Territory (Colchester 1982c). This situation, however, is changing. On the one hand, MARNR has gradually strengthened its presence by defining some 55% of Amazonas as '*Áreas Bajo Régimen de Administración Especial*' (ABRAE). On the other hand, the worsening economic condition of Venezuela's poor, has seen the resurgence of populist policies that promise a rapid opening up of the interior to development. Road-building, mining and plantation schemes are now once again being advocated by parastatals and politicians, a process sharpened since 1991 when the Territory was opened to local electoral politics as it was redefined as a State. The previous Governor of the State openly supported illegal enterprises such as mining in National Parks and tourism in indigenous areas.

Efforts to protect the Yanomami in Venezuela commenced in 1978 with an idea of creating a binational Yanomami Park on the Venezuelan-Brazilian watershed (Colchester 1982c). Given the lack of an effective precedent for State recognition of indigenous land rights, a Biosphere Reserve enclosing some 88,000 square kilometres was then proposed in Venezuela, in 1979, which would have divided the Yanomami area into a core zone made up of three existing and uninhabited national parks, a protected area enclosing the majority of Yanomami villages and a buffer zone including both Yanomami and Yekuana Indians where controlled development would be permitted (Colchester 1980).

By 1982, owing to increasing support for the proposal from the Agrarian Reform Institute which wanted to establish a legal precedent of titling large indigenous areas, a revised proposal was circulated for an indigenous reserve. The proposal very nearly gained Presidential approval (Colchester and Fuentes 1983), but the process was confused by the emergence of a second biosphere reserve proposal that same year (Arvelo-Jimenez 1983). A resurgence of anti-Indian rhetoric in 1984, after a violent conflict between Piaroa Indians and

ranchers, buried both proposals (Colchester 1984b; Arvelo-Jimenez and Cousins 1992) and the idea lapsed until repeated invasions of the Upper Orinoco by Brazilian miners caused a revival of interest in protecting the area in some way in 1989.

That year, North American anthropologist Napoleon Chagnon and ex-Minister of youth Charles Brewer-Carias, proposed a national park or anthropological preserve for the most isolated Upper Siapa region. This triggered a flurry of counter-proposals, as well as an international conference on the 'Culture and Habitat of the Yanomami' (Caballero 1991; Colchester 1991a,b), and led eventually to the Ministry of the Environment pushing through the Presidential decree of 1991 creating the 83,000 km² Upper Orinoco-Casiquiare Biosphere Reserve and the Parima-Tapirapeco National Park within it.

The Biosphere Reserve is placed under the control of MARNR; is to be administered by its special autonomous secretariat for development of the Amazon State, and directed by an interministerial commission that will include seven ministries, three parastatals, academic institutions and Catholic missionaries, as well as indigenous representatives. Although the legislation setting up the Biosphere Reserve indirectly acknowledges Indian rights to own land, explicitly recognises their right to continue their 'traditional livelihoods' and prohibits colonisation or development by outside interests, it is not at all clear by what means the Indians will in fact have a say on what happens in the area.

The decree, which was issued in July 1991 established a period of two years for the elaboration of a management plan for the reserve. This has been slow in coming. Funds of US\$ 8 million for a project to begin the elaboration of such a plan have recently been approved by the European Commission. The project plans activities relating to remote sensing and mapping, physical boundary demarcation and the establishment of an improved communications network throughout the reserve. It also plans a detailed assistance programme in community economic development, tourism, education, health and nutrition and environmental education. The Yanomami have yet to be consulted about these projects.

The main challenge for the EC project and for the management of the Biosphere Reserve, is the effective involvement of local people in decision-making. The proposed management structure of the project does not yet provide any clear indications on how local level needs and interests are to be taken into account in decision-making. The Biosphere Reserve is thus a long way from offering the indigenous people the decisive voice that sustainability demands. It is this deficiency which has provided the rationale for this article, which constitutes an attempt to set out some of the institutional dilemmas in the way of community resource management within the reserve.

Imperfect though it is, the Biosphere Reserve and its associated EC-funded project have the potential to benefit the Yanomami and Yekuana, not least because they strengthen the hand of MARNR against the 'developmentalist' pressures from the north of the country. Legalised land rights and indigenous control of the Upper Orinoco appear not to be politically achievable in Venezuela at the moment and the reality is that the Yanomami are not politically coordinated enough to effectively defend and control their lands against outside pressures, without State support.

From Territory to State : 'municipalización'.

One serious threat to the integrity of the indigenous peoples of the Upper Orinoco derives from the fact that the Territory was accorded the status of a State in 1992. This has already introduced the problem of political divisions along party lines within the capital, Puerto Ayacucho, although at the first election, in December 1992, the electorate returned the same Governor to office, as had been previously appointed by the Presidency. Under a decree that was passed in December 1993, the new State of Amazonas will be divided up into 'municipios', each with elected 'alcaldes', and each in turn divided into a number of 'paroquias' with their respective elected heads. These institutions correspond neither with Yanomami nor Yekuana traditional systems for decision-making and their imposition on the Upper Orinoco poses a number of problems, notable of which are:

1. Many of the indigenous people, particularly women and remote groups, lack identity cards and, thereby, are disenfranchised.
2. Party politics will be introduced into the communities causing divisions.
3. Clientelistic relations will be established and reinforced throughout the territory.
4. Urban domination of rural communities will be reinforced.
5. Dominant communities and ethnic groups will secure their authority over smaller and politically marginal ones. In particular, 'criollos' will dominate indigenous peoples, while organised Indian groups like the Yekuana are likely to strengthen their authority over others like the Yanomami.
6. Salaries and positions of power for office holders will hasten the emergence of an indigenous elite and accelerate the trend towards individualist profit seeking.
7. The boundaries of the 'municipios' and 'paroquias' will not conform to indigenous politics or ethnic boundaries. This will lead to further divisions.

Aware of some of these risks, MARNR has argued strongly for the creation of a single 'municipio' coterminous with the Biosphere Reserve. However, the community of Rio Negro has been seeking to include in its 'municipio' the Yanomami area between the Siapa and the Brazilian frontier, with the aim of securing access to the area for tourism and mining. Some Yekuana elements from La Esmeralda have apparently supported this proposal, which would effectively divide the Yanomami of Amazonas State into two parts (with a third part in the Upper Ventuari). The Yanomami have roundly denounced the proposal in an open letter to the State legislature, dated 8 July 1994, in which they insist on being assured their own administrative region and not subjected to the orders of either 'criollo' or Yekuana 'alcaldes'.

'We Yanomami have our own customs and language, and we wish to organise ourselves, little by little, in our own way. So, please, do not put us in a 'municipio' with those from Esmeralda because we don't agree with it and haven't been asked if we wish to be or not' (my translation).

Future Options

The express purpose of the Upper Orinoco-Casiquiare Biosphere Reserve is to secure and develop Yanomami society as well as ensure the conservation of the region's rich natural resources. It is generally recognised that these two objectives can only be effectively achieved by involving the Yanomami in the management of the area. The extremely uncentralised nature of traditional Yanomami communities makes this a daunting challenge to outsiders and would-be managers.

As we have seen, not only do Yanomami leaders exercise very limited authority, but Yanomami communities are often internally divided and sections of the communities have allegiances to widely dispersed kin. There are, as a result, no readily identifiable individuals or institutions with which conservation officials can negotiate and share decision-making even at the community level. There is even less cohesion at the regional or ethnic level. On top of this, Yanomami communities do not assert exclusive rights to identifiable territories. Yet the Biosphere Reserve encloses some one hundred and forty Yanomami villages (Sanema and Yanomami), as well as about twenty Yekuana settlements.

On the other hand, the situation in the Upper Orinoco provides unique opportunities for the development of novel community-based conservation strategies. In the first place, in marked contrast to previous ABRAE in Venezuela, the legislation establishing the Reserve explicitly recognises indigenous rights and establishes a basis for community participation. In the second place, actual pressure on natural resources is very slight and there is little actual degradation of biological diversity (Colchester 1981). Effective management can, thus, be achieved without much meddling in community activities, since the principal needs are to prohibit illegal access by outside miners and settlers and protect the Yanomami against introduced diseases.

It is important to emphasise, too, the extent to which Yanomami communities have begun to make rapid adjustments in order to interact with the outside world. In the Upper Orinoco, with the long-term assistance of sympathetic Salesian missionaries, sections of a few Yanomami communities have incorporated as a trading collective - SUYAO (*Los Shapunos Unidos Yanomami del Alto Orinoco*) - in order to sell their modest surplus of agricultural produce and basketry in local '*criollo*' markets. This novel experiment may provide a model for other community development initiatives and emphasises the extent to which Yanomami society is adapting, according to its own logic and at its own pace, to external conditions and opportunities.

This point needs highlighting. Experience from many other parts of the Amazon and elsewhere in the indigenous world shows how many indigenous peoples have overcome the apparent limitations in their social organisations and developed novel institutions and systems of decision-making to accommodate State systems and market economies (Colchester 1982d; Jennings 1984). Outsiders should be very cautious of predicting the course of social change. Not many would have dared predict fifty years ago that the Inuit of Canada would be entrusted by the Canadian State with administration of Nunavut, the largest area of its dominions.

The main obstacle that indigenous people face in successfully reordering their lives to accommodate to new circumstances is the imposition of inappropriate political systems that run

counter to their social institutions and this should therefore be the principal concern of those charged with the administration of the new Reserve.

There are a number of measures which need to be introduced urgently to prevent the situation worsening:

- the first priority is the provision of an emergency programme of medical assistance in the form of prophylactic immunisations and primary health care provided by culturally trained mobile health clinics, particularly for the remoter Yanomami communities not reached by the State's '*medicina simplificada*' programme and voluntary health projects (Colchester 1985; Ales and Chiappino 1985).
- the second is to reverse the government's ill conceived policy of imposing the culturally inappropriate, political and administrative structures of '*municipios*' on the Yanomami area, which can only lead to cultural dislocations and the creation of serious obstacles to community development.
- the third is to re-assert the present prohibition on mining and logging in the State. Recent rumours that the Government plans to open Amazonas to gold mining are extremely worrying (*El Pais* 30 August 1994). It is unarguable that mining would be a catastrophic for the Indian peoples both of the Reserve and the State as a whole.

In the longer term, the Biosphere Reserve programme needs to develop effective mechanisms for the involvement of Yanomami in decision-making regarding the Reserve. These mechanisms must not be pre-determined by outsiders, neither conservationists nor anthropologists, but need to be flexible and responsive to Yanomami demands. To achieve this there will be a long term need for extensive consultation and means must be found to disseminate widely information about the reserve and any plans for it in the Yanomami languages. In this way, the Reserve's management mechanisms can evolve to suit Yanomami interests and changing political processes.

Training of personnel, both Yanomami and outside administrators, should be a high priority: the aim being to inform the Yanomami of the intentions and mechanisms of State administration of the area and instruct outsiders in the realities of Yanomami society.

In developing the effective management of the Reserve, the existing tensions within Yanomami society must be borne in mind. A paramount consideration must be to avoid provoking greater competition between the communities and to avoid undue centralization around existing mission centres.

Extreme care needs to be exercised in the promotion of community development initiatives. Experience in Venezuelan Amazonia and elsewhere has taught us that imposed ideas, structures and initiatives rarely endure and frequently have serious unforeseen consequences (Colchester 1982d). These experiences have also demonstrated the valuable role that outsiders can play when they confine their role to being advisers to indigenous decision-makers as opposed to managers of an indigenous labour force. Such advisers cannot hope to contribute usefully unless they are able to achieve a truly cross-cultural perspective and have the patience and endurance to maintain a long term commitment to the community (Dieter-

Heinen 1979).

There will be a strong temptation for outside conservationists to rapidly develop the Biosphere Reserve - for example through the promotion of eco-tourism and the sale of non-timber forest products - in order to defray the recurrent costs of management. This should be resisted. Long term sustainability of the Biosphere Reserve as a viable social and biological unit will depend more on keeping costs down than burdening it with expensive and inappropriate overheads. The Yanomami have made it quite plain that until their critical health situation is improved, their territorial security assured and their political authority recognised eco-tourism is not welcome.

References

- Adams, Jonathan S. and Thomas O. McShane
 1992 **The Myth of Wild Africa: Conservation without Illusion.** W.W. Norton and Co., New York, London.
- Alcorn, Janis B.
 1993 Indigenous Peoples and Conservation. **Conservation Biology**, 7(2):424-426.
 1994 Noble Savage or Noble State? Northern Myths and Southern Realities in Biodiversity Conservation, submitted to **Etnoecologica**.
- Ales, Catherine and Jean Chiappino
 1985 Medical Aid, Shamanism and Acculturation among the Yanomami of Venezuela. In: Colchester (ed.) **The Health and Survival of the Venezuelan Yanomama.** ARC/IWGIA/Survival International, Document 53, Copenhagen:73-90.
- Amend, Stephan and Thora Amend (eds.)
 1992 **Espacios sin Habitantes? Parques nacionales de America del Sur.** IUCN, Gland, Switzerland.
- Arvelo-Jimenez, N.
 1971 **Political relations in a tribal society. A study of the Yecuana Indians of Venezuela.** Latin American Studies Programme, Document 31, Cornell University.
- Arvelo-Jimenez, N. (ed.)
 1983 **La Reserva Biosfera Yanomami: una autentica estrategia para el ecodesarrollo nacional.** IVIC, Caracas.
- Arvelo-Jimenez, Nelly and Andrew L. Cousins
 1992 False Promises. Venezuela appears to have protected the Yanomami, but appearances can be deceiving. **Cultural Survival Quarterly**, Winter 1992.
- Caballero, Hortensia (ed.)
 1991 Conferencia Internacional sobre el Habitat y la Cultura Yanomami: I Parte. **La Iglesia en Amazonas.** XII (52).
- CCPY
 1982 Relatorio Yanomami 82: situacao de contato e saude. Mimeo, Sao Paulo.
- Chagnon, N.
 1968a **The Yanomamo: the Fierce People.** Holt, Rhinehart and Winston, New York.
 1968b Yanomamo Social Organisation and Warfare. In: Fried, M., M. Harris and R. Murphy (eds.) **War: the Anthropology of Armed Conflict and Aggression.** The Natural History Press, New York:109-159.

- 1974 **Studying the Yanomamo.** Holt, Rhinehart and Winston, New York.
- 1975 Genealogy, Solidarity and Relatedness: limits to local group size and patterns of fissioning in an expanding population. **Yearbook of Physical Anthropology** 19:95-110.
- 1977 **Yanomamo: the Fierce People.** Holt, Rhinehart and Winston, New York (2nd Edition).
- 1979 Male Competition, Favoring Close Kin and Village Fissioning among the Yanomamo Indians. In: Chagnon, N., W. Irons (eds.) **Evolutionary Biology and Human Social Behavior.** Duxbury Press, North Scituate: 374-401.
- 1994 **Yanomamo: the Fierce People.** Harcourt Brace, New York (4th Edition).

Clastres, Pierre

- 1977 **Society against the State.** Basil Blackwell, Oxford.

Cocco, Padre L.

- 1972 **Iyeweteri: Quince Anos entre los Yanomamos.** Escuela Tecnica Don Bosco, Caracas.

Colchester, Marcus

- 1980 The Yanoama Biosphere Reserve: proposal and justification. m.s.
- 1981 Ecological Modelling and Indigenous Systems of Resource Use: some examples from the Amazon of South Venezuela. **Antropologica** 55:51-72.
- 1982a The Economy, Ecology and Ethnobiology of the Sanema Indians of South Venezuela. Doctoral Dissertation, University of Oxford.
- 1982b The cosmovision of the Venezuelan Sanema. **Antropologica** 58:97-122.
- 1982c The Struggle for Yanoama Land: The Venezuelan Case. **Survival International Review** 40:18-19.
- 1982d Amerindian Development: The Search for a Viable Means of Surplus Production in Amazonia. **Survival International Review** 41/42:5-16.
- 1983a La Situacion Actual de los Sanema en Venezuela. Informe preparado para la Fundacion la Salle y la CVG, Caracas.
- 1983b Notas Breves sobre Los Sanema de la Isla Titi, Alto Ventuari. Informe preparado para la CVG, Caracas.
- 1983c The Yanoama at War: subsistence, sovereignty and social change in an Amazonian Society. ms.
- 1984a Rethinking Stone Age Economics: some speculations concerning the Pre-Colombian Yanoama Economy. **Human Ecology** 12(3):291-314.
- 1984b Piaranoia: Venezuelan Indigenism in Crisis. **Survival International Review** 44:94-104.
- 1991a Yanomami demand their land. **Third World Resurgence**, No. 6 (February):31-32.
- 1991b Economias y patrones de uso de la tierra en los Yanomami. **La Iglesia en Amazonas** XII(53):10-17
- 1994a Sustaining the Forests: the community-based approach in south and south-east Asia. **Development and Change** 25(1):69-100.
- 1994b **Salvaging Nature: Indigenous Peoples, Protected Areas and Biodiversity**

Conservation. UNRISD/World Rainforest Movement, Geneva.

Colchester, Marcus (ed.)

- 1985 **The Health and Survival of the Venezuelan Yanomama.** ARC/SI/IWGIA Document 53, Copenhagen.

Colchester, M. and E. Fuentes (eds)

- 1983 **Los Yanomami Venezolanos. Propuesta para la Creacion de la Reserva Indigena Yanomami.** Edicanpa, Caracas.

Colchester, M and Uli Wanapanai

- 1983 Breve Estudio Diagnostico del Proyecto Apicola de los Sanema dea Alto Paru (SANEMAP). Informe preparado para la CVG, Caracas.

Davey, Sheila

- 1993 Creative Communities: Planning and Comanaging Protected Areas. In: **Indigenous Peoples and Protected Areas. The Law of Mother Earth.** Elizabeth Kemf (ed.). Earthscan, London:197-204.

Dieter-Heinen, H.

- 1979 Experimental Production Units and the Assimilation of New Technological Inputs in Indigenous Areas of South-eastern Venezuela. IVIC, Caracas.

Dumont, L.

- 1953 The Dravidian kinship terminology as an expression of marriage. **Man** 54:34-39.

Good, K.

- 1982a Limiting factors in Amazon Ecology. Paper presented to the 81st Annual Meeting of the American Anthropological Association, Washington DC.
1982b Cuatro anos de convivencia con los Yanomamis de Venezuela. **Geomundo** 82:49-61.

Hames, R.

- 1980 Game Depletion and Hunting Zone Rotation among the Yekuana and Yanomamo of Amazonas, Venezuela. In: Hames, R. (ed.) **Studies in Hunting and Fishing in the Neotropics. Working Papers on South American Indians** 2:31-66.

Hannah, Lee

- 1992 **African People, African Parks. An Evaluation of Development Initiatives as a Means of Improving Protected Area Conservation in Africa.** Conservation International, Washington DC.

Henley, Paul

- 1982 **The Panare: tradition and change on the Amazonian Frontier.** Yale University Press.

- Hitchcock, Robert K.
 1990 **Wildlife Conservation and Development among Rural Populations in Southern Africa.** *International Third World Studies Journal and Review* 2(1): 225-232.
- ITTO
 1989 **ITTO Guidelines for Sustainable Management of Tropical Forests.** technical Series 5, Yokohama.
- IUCN
 1989 **Guidelines for the Management of Tropical Forests.** IUCN, Gland.
- Jank, Margaret
 1977 **Culture Shock.** Moody Press, Chicago.
- Jennings, Francis
 1984 **The Ambiguous Iroquois Empire: the covenant chain confederation of Indian tribes with English colonies.** W.W. Norton and Co., New York.
- Kaplan, J.
 1973 **Cognition, Endogamy and Teknonymy: the Piaroa example.** *Southwestern Journal of Anthropology* 28:282-297.
 1975 **The Piaroa.** Clarendon Press, Oxford.
- Kemf, Elizabeth
 1993 **In Search of a Home: People Living in or near Protected Areas.** In: **Indigenous Peoples and Protected Areas. The Law of Mother Earth.** Elizabeth Kemf (ed.) Earthscan, London:3-11.
- Kloos, P.
 1971 **The Maroni River Caribs of Surinam.** Van Gorcum, Assen.
- Ledec, George and Robert Goodland
 1988 **Wildlands: their protection and management in economic development.** World Bank, Washington DC.
- Lizot, J.
 1971 **Remarques sur le vocabulaire de parente Yanomami.** *L'Homme* XI(2): 25-38.
 1976a **The Yanomami in the Face of Ethnocide.** International Work Group on Indigenous Affairs, Document 22, Copenhagen.
 1976b **Desendance et Affinite chez les Yanomami: antinomie et complementarite.** **42nd International Congress of Americanists, Paris, Vol. II: 55-70.**
 1976c **Le cerle des feux.** Editions de Seuil, Paris.
- Marks, Stuart A.
 1984 **The Imperial Lion: Human Dimensions of Wildlife Management in Central Africa.** Westview Press, Boulder, Colo.

- Migliazza, E.
1972 Yanomama Grammar and Intelligibility. Doctoral Dissertation, University of Indiana.
- Pearce, David, Anil Markandya and Edward Barbier
1989 **Blueprint for a Green Economy**. Earthscan, London.
- Peluso, Nancy Lee
1992 Coercing Conservation: The Politics of State Resource Control. **Coercing Conservation** :46-68.
- Perez, D.
1946 **El Tratado de Limites de 1750 y la Expedicion de Iturriaga al Orinoco**. Consejo Superior de Investigaciones Cientificas, Madrid.
- Price, D.
1982 Nambiquara leadership. **American Ethnologist** 8(4):686-708.
- Ramos, Alcida
1972 The Social System of the Sanuma Indians of North Brazil. Doctoral Dissertation, University of Wisconsin.
- Ramos, A. and B. Albert
1977 Yanoama descent and affinity: the Sanuma/Yanomam contrast. **42nd International Congress of Americanists** Paris, Vol II:71-90.
- Ramos, A. and K. Taylor
1979 **The Yanoama of Brazil 1979**. ARC/IWGIA/Survival International, Document 37, Copenhagen.
- Riviere, Peter
1969 **Marriage among the Trio**. Clarendon Press, Oxford.
- Roy, Sanjoy Deb and Peter Jackson
1993 Mayhem in Manas: The Threats to India's Wildlife Reserves. In: **Indigenous Peoples and Protected Areas. The Law of Mother Earth**. Elizabeth Kempf (ed.). Earthscan, London:156-161.
- Saffirio, J. and R. Hames
1983 The Forest and the Highway. In: Kensinger K.M. (ed.) **The Impact of Contact: two Yanomama case studies**. Working Papers on South American Indians. Bennington College and Cultural Survival, Harvard.
- Sayer, Jeffrey
1991 **Rainforest Buffer Zones. Guidelines for Protected Area Managers**. IUCN Forest Conservation Programme, Cambridge, UK.

- Shapiro, J.
1974 Alliance or descent? Some Amazonian contrasts. **Man** 9:305-306.
- Survival International
1990 **Yanomami**. London.
- Taylor, K.
1974 **Sanuma Fauna: prohibitions and classifications**. Fundacion la Salle, Caracas.
1976 Body and Spirit among the Sanuma of North Brazil. In: Grollig, F. and H.B. Haley (eds.) **Medical Anthropology**. World Anthropology Series, Mouton Press, The Hague.
1977 Raiding, Duelling and Descent Group Membership among the Sanuma. **42nd International Congress of Americanists**, Paris, Vol. II: 91-104.
1979 Sanuma Food Prohibitions and Para-Totemic Classification. **Antropologica** 51: 63-92.
- Thomas, D.
1982 **Order without Government: the society of the Pemon Indians of Venezuela**. University of Illinois Press, Urbana.
- Turton, Andrew
1987 **Production, Power and Participation in Rural Thailand: experiences of poor farmers' groups**. UNRISD, Geneva.
- UNEP
1989 United Nations Environment Programme Statement on Sustainable Development. Governing Council, Fifteenth Session (23 May). UNEP, Nairobi.
- WCED
1987 **Our Common Future**. Oxford University Press, Oxford.
- Wells, Michael
1993 Neglect of Biological Riches: The Economics of Nature Tourism in Nepal. **Biodiversity and Conservation**, Vol.2, No.4, 1993.
- Wells, Michael and Katrina Brandon
1992 **People and Parks: Linking Protected Area Management with Local Communities**. World Bank/WWF/ USAID, Washington DC.
- West, Patrick C.
1991 Introduction. In: **Resident Peoples and National Parks**. Patrick C. West and Steven R Brechin (eds). University of Arizona Press, Tucson. pp.xv.
- World Bank
1991 **Forest Policy Paper**. World Bank, Washington DC.