

Representations of local people by practitioners of conservation and small scale timber harvesting in Papua-New-Guinea

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This paper looks at the language of “Integrated Conservation and Development” (ICAD) and its implicit and explicit values and assumptions about local people. It draws on a body of spoken data collected at the ICAD Practitioners’ Conference held on Motupore Island in Papua New Guinea in September 1997. This is placed in the context of the increasing corpus of publications on conservation as development in Papua New Guinea and elsewhere, including literature on “portable sawmilling” or small scale timber harvesting. The focus of the paper is on how local people in rural areas are depicted and represented in the speech and publications of conservation practitioners, for whom the rainforest has value as a global “resource”. In this analysis, ten recurrent themes about “Integrated Conservation and Development” are identified and discussed. Similarities are then highlighted between data from within the conservation movement and the language used by proponents of small scale timber harvesting. The analysis suggests that local knowledge is not valued on local terms in “conservation and development”.

This is a paper about how the practitioners who present “sustainable” options for “development” to local people speak and write about those people.¹ The data are presented primarily to raise questions and to make basic recommendations about the complex interface between people who live in forest areas and ICAD projects and other so called “community based” development initiatives on their land. It is hoped that this analysis

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¹ Due to restrictions of space in this volume, I do not touch upon attitudes of local people to externally generated initiatives in conservation and development here, though the original draft of this paper was written in a village in a forest area and has benefited from fieldwork there over a three year period.

will encourage us to think in terms of how conservation or portable sawmill projects fit into people's lives, rather than the other way round.

“Those people have no knowledge” : Conservation practitioners on local people

In this section I present a table of quotations by practitioners of conservation and development, all of whom were speaking about people who live in protected areas when their speech was noted. All of the comments cited were made in presentations and discussions at the conference on “Integrated Conservation and Development” on Motupore Island in 1997, in which I participated (Saulei and Ellis, 1998). Given the tone of the representations, denoting an absence of and a need for anthropological input in current developments in conservation methodology and language, I recorded the data by participant observation.² It is for this reason that the identity of people and organisations is not revealed and that the data are presented in an “objectified” form in a table. This is also a means of focusing specifically on the language used. In the table, and in my subsequent analysis, individuals and organisations are only identified where the source has been written and published and is already in the public domain. The aim of presenting these data is to raise some general questions concerning representations and perceptions of the place of local people in conservation and “sustainable development”, and to emphasise the need for anthropological analysis.

I have grouped the quotations into ten themes. This is intended to highlight some of the common strands which emerged when I came to analyse the data I had collected in the light of recent literature and my own fieldwork in a protected area in Papua New Guinea between 1996 and 1999. All quotations in the table are from staff of conservation Non-Governmental Organisations (NGOs) and focus on how they represent local people in forest areas. Some of the speech is written in Melanesian Tok Pisin and is translated into English. This reflects the use of language at the conference, and the fact that the quotations are by both Papua New Guineans and expatriates who have experience of working in the country. I give my own analysis of the data below, approaching each theme as an anthropological “problem” and raising questions for consideration.

Analysis

1. There is a perceived conflict between the “global” and the “local”

In the context of global conservation and biodiversity loss, the forests of

² See Ellen (1984) and Bernard (1996) on the methodology of participant observation. For more reflexive, critical and historical discussions of participant observation, see Clifford (1983) and Stocking (1983).

Themes	What conservation practitioners said - direct speech
1. There is a perceived conflict of "global" versus "local"	"It is a dilemma that the highest biodiversity is found where the world's poorest people are".
2. People, culture and place are seen as constraints, obstacles or disturbance	<p>"In the long term, an increase in population in Wildlife Management Areas will lead to a management problem".</p> <p>"The project has achieved successes in spite of the following constraints :</p> <ul style="list-style-type: none"> - The area is big and inaccessible. - The people are poor peasants seeking out a living from gardening alone. - There is the minimum of government services and population is low".
3. People and culture are depicted as being inherently "lacking"	<p>"[The project has achieved successes in spite of the following constraints :]</p> <ul style="list-style-type: none"> - People had a lack of appreciation of what they were entering into. - There is not one member of the Management Committee who can read and write in English - there is no formal education. "<i>Save bilong ol man long hap em i nogat</i>" (People in the area have no knowledge). <p>"If you pound it through and really put it in their context, that helps tremendously".</p>
4. Planning is seen as a foreign concept for local people	<p>"Landowners don't give a damn about conservation. They don't think long-term ; they only think short-term".</p> <p>"People's attitude to running a trade store is that you put something in a house and look after it for a while and when it's gone it's gone".</p>
5. Cash is considered to be the main precondition for development	<p>"<i>Mipela laik inkrisim monetari inkom bilong ol</i>" (We want to increase their monetary income)</p>
6. There are perceived links between conservation and "cargoism"	<p>"The low cash economy leads to high expectations - people expect cargo and other benefits immediately, and expect services to come with it"</p> <p>"We have built rudimentary small huts for eco-tourism. We haven't sold the [conservation] area as a tourist destination as yet ; we are just sending a few people we know".</p> <p>"We are building them guest houses and research stations, but they say : "<i>Mipela wok na yupela mas peim mipela nau</i>" (We are working so you have to pay us now)".</p> <p>We say "What do you want ?" and they say "<i>Mipela laikim wanpela haidro pauwa na wara saplae</i>" (We want a hydro power station and water supply)</p>
7. There is a conflict of ownership and power in conservation projects	<p>"The X conservation area [i.e. people's land] is being run by the Y NGO".</p> <p>"<i>Projejt bilong mipela</i>" (Our project), [i.e. the NGO owns the project].</p> <p>"We have formed Management Committees in those four areas".</p> <p>"We went to one community and made a law against home made guns and went to another community and told them we made a law. We said we would make laws and would try to get them to enforce the laws. Enforcement is a real problem".</p>
8. There is a perceived hierarchy of actors and influences	"The approach of our project is not top-down, nor is it bottom-up. It is middle-in !"
9. There is a contradiction between "participation" and "intervention"	"NGOs will by profession always be pushing their own agenda. To say that people will come from their own initiative and say we want to conserve this piece of land is difficult"
10. ICAD is a social and ideological experiment	"Successes of the conservation project include : committees formed, laws formulated, guest houses built, artefacts shops and research stations established, people earning money, people's concepts changing".

Papua New Guinea are perceived increasingly to have value as a global “resource”. Witham writes :

“Papua New Guinea, one of the most biodiverse places on the planet, is of unquestionable global significance. However, the complexity of the landownership, with 97 per cent of the country under customary land tenure, limits the possibilities of the State to preserve this global interest,” (1997 : iii).

Many *in situ* conservation projects are located in terrain which is difficult to access from outside. Viewed from an exclusively global perspective, such places are “remote” and the people in these areas are “poor”. Yet the question can be posed : By whose standards ? Such a discourse of marginality tends to ignore or negate local history and knowledge and the significance of landscape.

2. People, culture and place are seen as constraints, obstacles or disturbance

McCallum and Sekhran write :

“The search for a workable conservation instrument is being frustrated ...by a range of social, economic and political factors” (1997 : 1).

The marginality of place and people in relation to centres of industrial influence and development is often represented as a constraint in discourses of conservation and development. This is in contrast to certain perspectives, mainly from anthropology and human ecology, which refer to the extent to which human activity enhances biodiversity (for a range of examples, see Rappaport, 1968 : 53, Sanderson and Redford, 1997, Kocher Schmid, 1998, and Posey, 1998). In both sociological and human ecological commentaries of development, it is argued that local knowledge of the environment should have a central place in rural development (Brokensha et al., 1980, Chambers, 1983, Hladik et al., 1993, Warren, Slikkerveer, and Brokensha, 1995). In the language of conservation, however, biodiversity tends to be represented as an object free of human influence which nevertheless has use value for humans. Local people are perceived as a threat in this equation. They are “involved” in biodiversity ; they cannot be separated out from it, so that the “resource” can be controlled.

3. People and culture are depicted as being inherently “lacking”

In the speech and publications of conservation practitioners, local people and knowledge are often depicted as being “lacking”. A hegemony of western education (McGovern, 1999) is promoted by Papua New Guinean and expatriate alike. It is a commonly encountered statement, made by both conservationists, local people and others in Papua New Guinea, that education levels are low or non-existent in rural areas. In 1998, I heard a staff member of a conservation NGO say “*Ol i gat planti save*” (They have

loads of knowledge) in relation to people's understanding of the forest world. This counterbalances the quotations presented in the table. Perspectives from anthropology and human ecology indicate that local knowledge must be considered as having value, both for conservation and development and in its own right.

4. Planning is seen as a foreign concept for local people

To fill the gap in knowledge and power created by representations of the inadequacy of local knowledge and culture, "management" is deemed necessary in conservation and development. It is generally promoted without engagement with local structures for decision making (Chambers 1983), or recognition that literacy and numeracy alone may be new conceptual domains for local people. NGOs often issue statements such as, "Local people are putting together a Management Plan". Local people are expected to deal with foreign structures of accountability, and then have these structures credited to them in a language of "participatory development". It is perhaps inappropriate, nevertheless, to suggest that subsistence farmers, gatherers and hunters often living in relatively harsh conditions, who rarely if ever experience a breakdown in their self-generated food production, are incapable of planning.

5. Cash is considered to be the major precondition for development

The methodology of "Integrated Conservation and Development" tests the hypothesis that monetary gain can provide a realistic incentive for local people to support conservation (Wells, Brandon and Hannah, 1992 ; Sekhran 1996 : 6). In this sense, ICAD redefines "development" primarily as cash, ignoring other types of value. This exercises power and judgement over local people and their subsistence and custom.

Conservation NGOs espousing the ICAD principle promote activities such as eco-tourism and the sale of local artefacts in order to raise people's income. Although the introduction of such schemes is said to be "participatory", it involves the preconception that cash is a precondition for "conservation and development". If asked whether they would like to have more cash, local people are most likely to say yes. Without an extensive and unbiased exchange of information between the personnel of such organisations and local people, this is a problematic change to engender. There are risks that "hypotheses" promoted by donor agencies are introduced in forest communities without close attention being paid to local history, subsistence, or even problems of cash dependency in capitalist systems. A reliance on cash also promotes an industrial and potentially non-self-sustaining path to "development". In rural societies, this can precipitate complete upheaval, in terms of both culture and subsistence.

6. There are perceived links between conservation and “cargoism”

One of the themes which emerges from the quotations in the table is the perception that attitudes of local people to “cargo”, or industrial goods, can be detrimental to the smooth procedure of development and conservation activities. A “cargo” mentality is often referred or alluded to in publications about conservation and development in Papua New Guinea (Grant, 1996 : 7-8 ; McCallum and Sekhran, 1997 : 53, 54-5 ; Ellis, 1997 : ix). Yet the quotations also raise issues of conduct of conservation workers and their attitudes towards and involvement in local development. To what extent does one precipitate the other ? What kind of understandings of the history of “cargoism” do conservation practitioners have ?

Burridge writes :

“Typically, participants in a cargo cult engage in a number of strange and exotic rites and ceremonies the purpose of which is, apparently, to gain possession of European manufactured goods... Large decorated houses, or “aeroplanes” or “ships” made of wood, bark and palm thatch bound together with vines, may be built to receive the goods, and participants may whirl, shake, chant, dance, foam at the mouth, or couple promiscuously in agitated attempts to obtain the cargo they want, not from a shop or trade store, but directly from the mystical source supposedly responsible for manufacture and distribution” (1960 : xix-xx ; see also Lawrence 1964, Worsley 1968, Morauta 1974).

Conservation practitioners advocate the building of “eco-tourism” lodges or guesthouses and they encourage the importation of large quantities of supplies for scientists. Local people sometimes speak of waiting for many tourists and scientists to come. Rather than depicting local people as being cargoistic or materialistic, conservation practitioners might like to take a reflexive look at how materialism is promoted by the ICAD hypothesis, and what impact this might have on local thinking.

7. There is a conflict of ownership and power in conservation projects

Conservation organisations are required by national law in Papua New Guinea to establish “Management Committees” and local “conservation laws” with local people who own the land of “Wildlife Management Areas” (Independent State of Papua New Guinea 1976). NGO staff have the task of setting up such committees and these then become a focal point for the conservation project at the “community” level. These are imported structures which supersede local forms of decision making and political organisation. This raises questions such as : Who is in control ? and : To whom does the project belong ? There is a tension between customary tenure and imposed structure. A review of the language and premises of the ICAD model is perhaps necessary to move towards an integration of

the institutional with the local, whilst at the same time valuing local knowledge and conceptions of relations with land (Sanderson and Redford, 1997).

8. There is a perceived hierarchy of actors and influences

Constant references to “top-down” and “bottom-up” approaches in development reveal a hierarchical view of society in which institutions and national and global policy makers are somehow in a position of superiority with regards to local people (Chambers, 1983). The speech and publications of conservation practitioners highlight a need to move away from this paradigm of thinking. In forest conservation, communities and peoples must be considered as equal if the projects are to be “community based”.

9. There is a contradiction between “participation” and “intervention”

“Intervention” is a received idiom in development and conservation. Discourses of conservation and development NGOs make this explicit. It is usually justified in terms of the urgency of the need to act to save biodiversity. McCallum and Sekhran, for example, write :

“Lacking a protected area system that is representative of its diverse habitats, PNG urgently requires specific conservation interventions” (1997 : 1).

Yet this still constitutes a moral intervention in the lives of local people, which would be difficult to argue for in the West.

“Participation” is also a recurring symbol in the language of development. “Community-based conservation” is a common term for current practices (Western and Strum 1994), emphasising the goal of community participation. There is clearly a fine line between what is presented as participation and the imposition of values and objectives from outside. How can intervention and participation be reconciled ? What underpins a language which advocates intervention in people’s lives without full analysis or accountability ?

10. “ICAD” is a social and ideological experiment

The level of “intervention” in people’s lives through ICAD projects, previously unprecedented in most cases, constitutes a major experiment on people and culture in the history of development. Indeed, it seems to be widely assumed that what has been occurring within the movement of “Integrated Conservation and Development” is an experiment : Filer (1998) refers to the, “ICAD experiment” (p.250, also x.) and, “experiments in conservation area management” (p.257). McCallum and Sekhran (1997), quoting Brown and Wyckoff-Baird (1992), also refer to ICAD projects as “experiments”. Even the title of their volume evaluating the Lak ICAD project in Papua New Guinea makes reference to “experimentation” : “*Race*

for the Rainforest : Evaluating Lessons from an Integrated Conservation and Development "Experiment" in New Ireland, Papua New Guinea (McCallum and Sekhran, 1997).

As the quotations suggest, the "community based" element of ICAD projects is founded upon a drive to bring about social and economic change which may or may not benefit conservation of biological diversity. In terms of priorities, real human needs and concerns are so low on the agenda that it appears to be acceptable to "experiment" with them.

"To participate under the terms": portable sawmilling and local people

In this section I outline some perceived links between small scale timber extraction and conservation of biodiversity, and then I consider how local people are represented in a model procedure for setting up a community sawmilling operation (Salafsky, 1997).

"Portable sawmills" have been promoted as an option in conservation and sustainable development in Papua New Guinea for local people, especially in the 1990s (Martin, 1997). It is often implied that "small scale timber harvesting", using portable sawmilling equipment, is an alternative to large scale logging for landholders whose forests are under threat of destruction. The portable sawmill is also presented in most contexts as a non-destructive practice ; language used by proponents of small scale sawmilling suggests credentials of environmental "friendliness". Timber becomes "eco-timber" and forest management becomes "eco-forestry". Portable sawmilling, therefore, seems to be situated half way between conservation and large scale logging as a development option for landholders. It would seem that it is tolerated within both of these two opposing camps, and it can be actively endorsed and promoted by forestry officials and conservation practitioners alike.

Martin defines "ecotimber" as, "timber extracted from natural forest with one goal being the maintenance of the ecological integrity of the forest" (1997 : 269). Louman states that over 500 portable sawmills were sold in Papua New Guinea between 1986 and 1996 (1996 : 16, 23). Martin draws on available literature to estimate the number of small sawmills "introduced to the forests of PNG" to be between 700 and 2 000 (ibid. : 270). According to his assessment, fewer than half of these are producing intermittently at any one time, and most of them are not individually owned but are the property of church organisations or local groups.

In cases where portable sawmilling creates some income for local communities without decimating the forest, it would appear to be in keeping with the ICAD linkage of conservation with development.

Language and methodologies of implementing conservation and small scale sawmilling projects also bear similarities, not least of which the common description “community based” which is used frequently to refer to the two practices.

The presentation of methodologies applied to encourage and assist landholders to undertake small scale timber harvesting “enterprise” (Salafsky, 1997) suggests a structure and procedure which are predetermined and imported from outside, in similar ways to those suggested above with respect to conservation. This is exemplified in the apparently benign aim : “Have Landowners Write a Formal Letter of Intent” (Salafsky, 1997 : 5). Written culture and formality are imports from outside, and the language is clearly phrased in terms of “get people to do something”, rather than people deciding what to do for themselves, and how to do it.

An approach widely favoured is to hold “community meetings”. The questions can be asked : Are these truly participatory, or is it a matter of introducing planning and “management” structures from outside ? Is the outcome of the meeting decided in offices before the meeting with the landholders takes place ? Are the wishes of the landholders the focus, or is there a strong element of western bureaucracy ? Salafsky writes :

“Following the meeting, we give the landowners some time to discuss the idea among themselves and then draft a formal letter to us that spells out their desire to move forward with setting up the enterprise. This letter needs to be signed by all the clan leaders and the headman of the village. It also needs to be witnessed by the government representative in the village - either the councillor or magistrate. ... This letter provides written confirmation of the landowner’s interest in the project. It provides us with documentation of their agreement to participate under the terms that we described” (ibid. : 5).

“To participate under the terms” is a revealing phrase. Salafsky continues :

“Local people don’t always know the size of their land in standard units and measurement and our quick survey enables us to determine the land boundaries. ... If it is a big village (800 people), however, then we are suspicious if a letter comes too soon because this means that not all clans have been consulted - letters from these villages can take up to four weeks to arrive. In either case, because we have spent time in the village we know who the key players are in each clan and can be sure that the right people have signed the letter” (ibid. : 5).

This quotation highlights many of the issues discussed in relation to conservation – for example the perception that people have no formal knowledge and that western education and science can remedy this. It also displays a sense of self certainty in “understanding” how local systems work. Such an understanding may take longer to achieve than say, a brief visit to a village, or a cash transaction, and it is more than

likely that it will vary radically from place to place. It is perhaps inappropriate to suggest that a brief encounter can establish a clear picture of customary politics.

The presentation of “small scale timber harvesting” as a “sustainable development” option is clearly problematic.³ The fact that logging and mining companies, conservation or human rights NGOs, churches and even local people can draw upon the same language of “sustainable development” is a phenomenon worthy of attention. “Sustainable development” is a term used by a variety of apparently opposing camps, just as “portable sawmilling” seems to be accepted and sometimes advocated by competing camps.

Conclusion

Chambers and Richards (1995 : xiii) suggest that development practitioners have learnt to use a language of participation, while their interactions with local people remain “top-down”. This paper supports this suggestion for the case of conservation and development in Papua New Guinea through an analysis of language employed by conservation practitioners, both in social interaction and in scholarly presentation and publication. It would appear, however, that even the language of participation has not been fully embraced.

There are similarities in the current methodologies for introducing and executing “conservation” and “small scale timber harvesting enterprise”. Both place considerable emphasis on the generation of cash and appear to import organisational procedures from western free market economics. Such an approach sets itself up in opposition to local knowledge.

As practitioners of development and conservation, we would do well to take a holistic look at human development and history over time, and learn about local circumstance before introducing structures and concepts which are incongruent with local experience and can thus cause confusion. There is indeed an aspect of “imposition” to current conservation practices, where so much is imported from outside. This is reinforced by a widely used and accepted language of “intervention”.

It must be asked to what extent it is ethical to “test a hypothesis” or to experiment with conservation methods on rainforest people. The data presented in this paper suggest that an extensive review is required, both of the effects of this approach and of the planning stage of each conservation project. This is evident in the “community entry” approach adopted in projects recently begun (Grant, 1996). This involves a large amount of discussion with people about local conditions and concerns for a long time before conservation is even mentioned.

³ This was acknowledged in the concluding stages of the Symposium on Practical Experiences in Small Scale Sawmilling in Goroka, Papua New Guinea, in February 1998.

In no way am I suggesting that forest peoples should be denied opportunities to earn cash or to “develop” their lands in the way they wish. People and cultures are not static and unchangeable, and it does rainforest people no favours at all to think of them as such. What I am suggesting is that people in rainforest areas have little or no access to the kind of information which might be considered “national” or “global” : the world of money, bank accounts, industrial capitalism, commerce, law, multinational industry and even “Non-Governmental Organisations”. If NGO staff working in rainforest areas are setting up truly “community based” projects, then they have an obligation to people who live there to supply information in an accessible way.

Conservation practitioners working in rainforests often stress that the work of contemporary conservation must be a viable alternative to logging. However off course the premises of certain ICAD principles may be in relation to local people, such an approach is still a comparatively desirable way forward when faced with industrial logging. Yet conservation is still violating people’s rights by representing people without adequate consultation and understanding, and by making too many assumptions. “Testing a hypothesis” on people is largely unethical, especially if they are unaware that they are the subjects of a test.

As one participant in the Motupore Island conference stated, even to say, “We’d like to help you set up a protected area” is an imposition. More emphasis must be placed on questions of local significance and on anthropological methods. Attention should be paid to general and specific concerns relating to land use and history and questions such as what has happened to natural resources and populations in the past, and what happens when resources are scarce.

Recommendations

- There is grave misassumption about forest peoples at the institutional level. There is a general need for better communication and flow of information between forest people and staff of conservation NGOs. This could be in both directions in the form of an exchange : through a gradual learning process about local custom and subsistence by NGO staff, and the making available of predominantly visual materials about the industrial world to local people in return.

- NGOs could be made more accountable for their actions. This might be achieved if donor and NGO agencies were required to produce a “Social Impact Assessment” of any activities they wish to fund and promote on the lands of forest peoples. Such considerations would be made ideally at the stage of design and planning of policy and projects rather than retrospectively.

“Social monitoring”, once “experiments” have been carried out, is inadequate and anachronistic.

- Experienced and trained anthropologists who have worked in rainforest areas in the fields of social and ecological anthropology could monitor such processes, preferably through a framework which is separate from NGO activities.

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BIBLIOGRAPHY

- BERNARD H. R., 1994. *Research Methods in Anthropology : Qualitative and Quantitative Approaches*, Sage Publications, 585p.
- BROKENSHA D., WARREN D. M. and WERNER O., eds. 1980. *Indigenous knowledge systems and development*, University Press of America, Washington, D.C., 460p.
- BROWN M. & WYCKOFF-BAIRD B., 1992. *Designing Integrated Conservation and Development Projects*. Biodiversity Support Program/United States Agency for International Development (USAID), Washington DC, 62p.
- BURRIDGE K. 1960, 1995 : *Mambu : A Melanesian Millennium*, Princeton University Press, 296p.
- CHAMBERS R., 1983. *Rural Development : Putting the Last First*, Longman, Harlow, 246p.
- CHAMBERS, R. and RICHARDS, P., 1995. Preface, in Warren, D. M., Slikkerveer, L.J. and Brokensha, D. *The Cultural Dimension of Development : Indigenous Knowledge Systems*, Intermediate Technology Publications, London, 582p.
- CLIFFORD J., 1983. On Ethnographic Authority, *Representations* 1 : 2, Spring 1983, The Regents of the University of California, 118-146.
- ELLIS J-A., 1997. *Race for the Rainforest II. Applying Lessons Learned from Lak to the Bismarck-Ramu Integrated Conservation and Development Initiative in Papua New Guinea*, PNG Biodiversity Conservation and Resource Management Programme, 90p.
- FILER F. with SEKHRAN N., 1998. *Loggers, donors and resource owners. Policy that works for forests and people series no.2 : Papua New Guinea*. National Research Institute, Port Moresby, and International Institute for Environment and Development, London, 416p.
- GRANT N., 1996. *Community Entry for ICAD Projects – The Participatory Way*, PNG Biodiversity Conservation and Resource Management Programme, 77p.

- HLADIK C. M., HLADIK A., LINARES O. F, PAGEZY H., SEMPLE A. & HADLEY M., eds., 1993. *Tropical Forests, People and Food : Biocultural Interactions and Applications to Development*, UNESCO (Man and the Biosphere series)
- INDEPENDENT STATE OF PAPUA NEW GUINEA, 1976 (1966, 1974) : *Fauna (Protection and Control) Act*
- KOCHER SCHMID C., 1998. The Cultural Importance of Floristic Diversity : A Case Study from Nokopo village, Madang and Morobe Provinces, Papua New Guinea. *Worldviews : Environment, Culture, Religion* 2 (1998) : 107-22
- LAWRENCE P., 1964. *Road belong cargo. A Study of the Cargo Movement in the Southern Madang District, New Guinea*, University of Manchester, 293p.
- LOUMAN B., 1996. *The Use of Small Portable Sawmills in Forest Management in Papua New Guinea*, Rural Development Forestry Network Paper 19d, Overseas Development Administration, 16-24
- MARTIN R., 1997. Small-Scale Community-Based Forestry : Issues in the Conservation of Papua New Guinea's Biodiversity, in : Filer C., ed., 1997. *The Political Economy of Forest Management in Papua New Guinea*. The National Research Institute, Papua New Guinea, and The International Institute for Environment and Development, London, 269-292
- McCALLUM R., SEKHRAN N., 1997. *Race for the Rainforest : Evaluating Lessons from an Integrated Conservation and Development "Experiment" in New Ireland, Papua New Guinea*. PNG Biodiversity Conservation and Resource Management Programme, 82p
- McGOVERN S., 1999. *Education, Modern Development, and Indigenous Knowledge : An Analysis of Academic Knowledge Production*, Garland Publishing, New York and London, 213p.
- MORAUTA L., 1974. *Beyond the village : Local politics in Madang, Papua New Guinea*, The Athlone Press, University of London, 194p.
- POSEY D. A., 1998. The "Balance Sheet" and the "Sacred Balance" : Valuing the Knowledge of Indigenous and Traditional Peoples. *Worldviews : Environment, Culture, Religion* 2 (1998) : 91-106
- RAPPAPORT R. A., 1968/1984. *Pigs for the Ancestors : Ritual in the Ecology of a New Guinea people*, Yale University Press, 501p.
- SALAFSKY N., 1997. *Eleven Steps for Setting up Community-Based Timber Harvesting Enterprises*, Islands Region Environmental and Community Development Programme, Papua New Guinea
- SANDERSON S. E. and REDFORD, K., 1997. Biodiversity Politics and the Contest for Ownership of the World's Biota, in Kramer, R., van Schaik, C., and Johnson, J., eds. *Last Stand. Protected Areas and the Defense of Tropical Biodiversity*, Oxford University Press, Oxford & New York, p. 115-132
- SAULEI S. M. & ELLIS J.-A., eds. 1998 : *The Motupore Conference : ICAD practitioners' views from the field : A Report of the Presentations of the Second ICAD Conference, Motupore Island (UPNG), Papua New Guinea, 1-5 September 1997*, Department of Environment and Conservation, Papua New Guinea, 224p.
- SEKHRAN N., 1996. *Pursuing the "D" in Integrated Conservation and Development Projects (ICADP's) : Issues and Challenges for Papua New Guinea*, Rural Development Forestry Network Paper 19b, Overseas Development Administration, 25p.
- STOCKING G. W., ed. 1983. *Observers Observed : Essays on Ethnographic Fieldwork*, History of Anthropology Volume 1, University of Wisconsin Press, 242p.
- WARREN D. M., SLIKKERVEER L.J. and BROKENSHEA D., 1995. *The Cultural Dimension of Development : Indigenous Knowledge Systems*, Intermediate Technology Publications, London, 582p.
- WELLS M. and BRANDON K. with HANNAH L., 1992. *People and Parks, Linking Protected Area Management with Local Communities*. Washington D.C. : The World Bank, 98p.
- WESTERN D. and STRUM S., eds. 1994. *Natural Connections : Perspectives in Community-based Conservation*, Washington : Island Press
- WITHAM P., 1997. Foreword to McCALLUM R., SEKHRAN N., 1997. *Race for the Rainforest : Evaluating Lessons from an Integrated Conservation and Development "Experiment" in New Ireland, Papua New Guinea*. PNG Biodiversity Conservation and Resource Management Programme, 82p.
- WORSLEY P., 1957, 1968. *The Trumpet Shall Sound. A Study of "Cargo" cults in Melanesia*, Paladin, UK, 389p.

Résumé

Représentations des peuples des forêts tropicales dans le cadre de la protection de l'environnement et de l'exploitation forestière sur une petite échelle en Papouasie Nouvelle Guinée

Cet article étudie le langage utilisé dans les mouvements de préservation de la nature en Papouasie Nouvelle Guinée, par rapport aux habitants de la forêt tropicale. Il aborde la question de savoir comment les gens qui habitent les zones de forêt en Papouasie Nouvelle Guinée sont perçus et représentés par les protecteurs de l'environnement. Deux types de données sont présentés : celles issues d'une série de discours des protecteurs de l'environnement pendant un colloque qui a eu lieu à l'île de Motupore en 1997 ; celles qui proviennent d'une évaluation du langage employé dans la littérature sur la protection de la nature et le mouvement de "scieries portables" ou des exploitations forestières à petite échelle en Papouasie Nouvelle Guinée. Dix thèmes sont identifiés en rapport avec ces données. On notera surtout que les discours privilégient les liens hypothétiques entre l'augmentation des revenus des populations locales et la protection de la nature. En conclusion, nous proposons des recommandations pour la protection de la nature en général. Pour éviter une mauvaise compréhension sur les peuples en forêt tropicale, il faut qu'il n'y ait plus de comptabilité dans les projets de protection de l'environnement.

Pour réussir cet objectif, il faut appliquer les méthodes des sciences sociales dans les projets pour évaluer l'efficacité des méthodologies de la protection de l'environnement du point de vue social. Nous pensons, en définitive, que le savoir local des populations et l'approche des sciences sociales devraient être privilégiés dans la méthodologie de protection de la nature.

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