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F. v. Stieglitz et al.

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Responsible:	Begleitprogramm Tropenökologie (TÖB) Michaela Hammer, Friederike von Stieglitz email: toeb@gtz.de
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Social Forestry and Community Based Forest Management: Impact Beyond Forests

FRIEDERIKE V. STIEGLITZ

In most countries with tropical forests, much of the naturally grown forest resources continue to be owned by the state. In order to achieve the objective of conserving forests and benefiting from them at the same time, however, forestry needs to be freed from its sectoral and institutional isolation and to be brought back into society as a factor for development.

This requires cooperation and partnership between governments and other stakeholders, with the people living in and around forests playing a pivotal role.

From this perspective, participatory types of forest management, that is "social forestry", community based forest management, co-management etc, stop being a mere counter-model to the classic state-oriented forestry and become a key element of change in the continuous challenge of building *pluralism* in forestry. They represent an important step towards extending the capacity of both the state and civil society to manage forests in a sustainable manner (thus conserving their ecological functions), towards increasing value-generation from goods and services from forest and towards sustainable (rural) development.

I The impact analysis

The basis of this analysis is an examination of experience gained in projects of German bilateral technical co-operation. The scope was consciously not regionally restricted and includes projects which aim to enhance the development of communal forestry and participatory management in Africa, Asia, Latin America and Oceania.

I would like to thank a number of projects for their support and their readiness to engage in discussions, for their comments and for providing access to

documents. Special thanks must go to the 'Gambian German Forestry Project' (GGFP) and the sister projects CRDFP[1] and URDFP[2] in The Gambia who made an in-depth empirical study possible.[3]

In order to grasp the specific significance and potential impact of participatory forest management and projects in support of it and furthermore to gain insights into how this potential can be put into practice, we need to consider the following questions:

- What constitute 'critical' conditions of success of participatory forest management? I.e. issues concerning economic viability, the political and legal framework, the degree of institutionalisation etc., that is, circumstances to which special attention must be given in the run up to projects in support of community based forest management, in their conception and implementation.
- Where do 'typical' problems and weaknesses in the approach and conception of such initiatives lie?
- What strategies are developed to deal with certain negative conditions (for example the absence of a beneficial political and legal framework)?
- What strategic insights can be gained for the specific problems of projects in support of participatory forest management?
- What consequences should be drawn for the design of *impact analysis* and '*monitoring and evaluation'* procedures?

Before some of the findings are presented, it seems useful to take another look at the conceptual framework within which the need for a change of roles in forest management is grounded.

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[1] Central River Division Forestry Project (Financial Cooperation /Technical Cooperation)

[2] Upper River Division Forestry Project (EU)

[3] All three projects are being carried out by the DFS Co. Ltd. in cooperation with the Europeen Volunteers Programme/German Development Service.

II The call for "social" forestry

The starting point for the endeavour to develop "social" forestry in countries with tropical forests is a given situation in which the state has a monopoly in the management and conservation of forest resources. Of twelve projects in twelve different countries, which were included in the study, the concept of 'the forest as the responsibility of the state' was the core policy principle for all of them with one exception, namely Fiji.

The roots of this concept of the forest as a state domain lie in feudal Europe. The term "forest" originally a *legal* term: it referred to a woodland area or to resources within it, which were reserved for the king's use. *Inforestation* was the action of restricting forest use to the king or those favoured with a royal charter (foris, forestare = Latin for 'outside', 'no access'')[4]. Control of the forest and the game living within it, and later also timber supplies, was thereby placed within the domain of the central governing authority.

The transfer of this concept to tropical forests is usually of colonial origin[5]. Enhanced by the prevailing political, administrative and economic conditions[6], it has resulted in the basic principle of a forest policy almost totally divorced from the social context of forest use and control by the adjoining farming population, i.e. the traditional users and owners of these resources.

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[4] A comprehensive account of forest legislative history on 'forest' and 'woods' from the Middle Ages until the turn of the century can be found in *Weber, H.* Handbuch der Forstwissenschaft, Bd. 4: Forstgeschichte, Forstliche Rechtskunde, Forstpolitik, Tübingen 1927.

[5] This transfer was characterised mainly by the repressive and authoritarian elements of European Forestry. The liberalisation of forestry from the turn of the century onwards was not passed on to the colonies.

[6] An important factor in the post-colonial retention and expansion of this system in well forested countries was the hope of economic growth fuelled by the export of tropical timber. See *Clément, J.*, The development of ideas and programmes for tropical forestry since 1946, in: Bois et Forets des Tropiques, 1997, Special Issue.

To this day, in spite of all changes in forest policy discourse, the state-controlled forest model has remained the predominate system in tropical forest countries. 'State crises' and 'forest crises' are thus intimately linked. The conflicts and problems inherent in the insufficient societal integration of the state manifest themselves particularly plainly in the forest sector: the chronic ailment is a deep rift between forest authorities and rural populations, the acute illness are the assaults upon state-controlled forests which constitute a "No!" to the system they represent; and the structural malaise in which forests become irrelevant through under-use, or are destroyed by wanton exploitation. Forest degradation is therefore connected to four principle problems of the classic statist forestry:

1. The causes of forest degradation extend far beyond the forest sector itself. Classic attempts at solving the problems remain within the sector and treat only the symptoms. Corresponding concepts of forest resource management and conservation consist primarily of sectoral responses, while the pressure on forests is usually of trans-sectoral origin.
2. State structures lack the capability to do justice to their claim to a monopoly over the management of forest resources. Their capacities do not suffice to guarantee monitoring and management, leading to the widespread phenomenon of the 'state forest' as an area *de facto* free of legal constraints and control.
3. By divorcing forest management from the established social structure of local users and traditional owners, a crucial stock of capital for sustainable forest use and management is lost: social control, commitment and the binding force of local institutions. State-controlled forests are the extreme case: as a 'social no-man's land', they become the preferred terrain for encroachment and illegal uses.
4. Forest output and value generation in forestry is mainly absorbed on the national and international levels and has only a minute local or regional impact. Regional development effects through forestry and concessions remain negligible. Nor is there any impetus for the development of functional management structures on site. Value generation also remains far short of its potential because it is based on a resource that is for the most part not

controlled and that is monetarily undervalued as a result of nearly total open access. The losers in this process are rural areas as producers, and the forests themselves, which remain unattractive as a form of land use.

III First steps for relinking the forest to civil society

The first attempts to re-integrate forestry and forest value generation back into (civil) society, i.e. to honour claims on forests and to mobilise management capacities beyond state administrations, date from the 1970s.

The focus of these efforts lay at first in drier zones and in areas that were ecologically particularly sensitive, the main goal being to secure the ecological base that sustains the rural population. The key activity area was comprised of afforestation measures bound up with an approach that placed "communality" and subsistence orientation (i.e. *village* afforestation programmes) at the fore. The issue of the management of *natural* forest resources, with some few exceptions, continued to be ignored. *Community forestry* (1970s/FAO), *social forestry* (1976/India) and finally *farm forestry*, which focused more particularly on the interests of individual enterprises, constituted important stages in terms of strategy.[7]

Widespread deficiencies of these early community oriented approaches to social forestry were:

- the presence of conflicting goals among the respective ecological, social and income-generation objectives, which affected implementation;
- that quantitative goals with their related incentive systems (e.g. food for work) ended up in becoming ends in themselves;
- that 'community' orientation was accompanied by underestimation of the potential for conflict among interest groups and by insufficient consideration of land and tree tenure issues;

[7] See FAO, Community forestry, ten years in review, CF Note 7, Rome 1992.

- over-emphasis was put on the 'subsistence' factor, which was accompanied by timidity in regard to dealing with the economic interests of rural resource users and in regard to developing commercial forest production by farmers, coupled with a tendency to underestimate market economy aspects;
- there was a tendency to create a dichotomy between classical 'forestry' – "bad" on the one hand and 'social forestry' – "good" on the other.

A noticeable reorientation with regard to the management of *existing, natural-growth forest resources* only began in the mid-80s in a climate of growing international debate over the issue of tropical forest depletion. This reorientation experienced a boost in the 1990s, which in turn received international support through UNCED and the process following in its wake.

In regard to strategy development, the new orientation of the 1980s was accompanied by a shift from a predominantly *sectoral* perspective to a *trans sectoral* perspective: management and conservation of forest resources came to be seen within the larger context of sustainable management of *natural resources* as a whole, and particularly, in view of the direct competition between agricultural and forestry interests for available land, the sustainable management of land resources.

And furthermore, the evolution of strategy was placed within the broader context of *rural development* and the *economic* and *social viability* of sustainable forest management, not only as a consequence of confronting the issue of poverty-induced overexploitation, but also in view of an increase in the value of the "standing forest" to those living near it – e.g. in terms of gaining sources of income from the nearby forest, which increases the attractiveness of sustainable forest management as an alternative form of land use.

- *'Integrated forestry', 'joint forest management', 'collaborative forest management'* and *'forestry for rural development'* are the cornerstones of this new orientation:

- *Integrated forestry*: In 'classical' forestry co-operation, attempts to cope with the failure of existing strategies for tropical forest conservation led to the concept of *'integrated'* forestry projects being developed in the 1980s[8]. Without going so far as to question the state monopoly over forests, integrated forest management aims to reduce the deficiencies of previous approaches by integrating the economic and social functions of forests, by placing greater emphasis on the significance of value added locally, and above all by employing a more trans-sectoral approach in order to confront the growing pressure on forest resources and forest land by adjoining resource users.

- The concepts of *'joint forest management'* and *'collaborative forest management'* are another matter. These became significant primarily in the 1990s. *Structural changes* in forest management are sought chiefly by means of changes on the level of the *actors*. The goal is management co-operation between the state and civil society, in which the rural population, user groups, NGOs and the private sector all act as responsible participants. This co-operation posits as a premise that all sides participate in the management and conservation of the forest resources and in the (economic) benefits as well as the burdens.

A key factor in this concept is the acknowledgement that important potential for the development, implementation and control of management agreements and thus for supervising the use and exploitation of forest resources and forestland lies with the users and adjoining populations themselves.

Other recent and relevant concrete implementation approaches are, for example, *contract management* and *nature conservation by agreement*, which are founded on multilateral agreements between, for example, the state or forestry administration on the one hand and rural communities or user groups on the

[8] First examples of this type of project can be found in the late 1970s, that is at a time when the World Forestry Conference on 'Forests and Peoples' initiated the international discussion calling forestry to contribute to *rural* development. Of more interest in this paper, however, is at what point a project type became more broadly 'established'.

other, or between a combination of the state or forestry administration, rural communities or user groups and the private sector.

The 1990s

If the paradigm shift in forestry gets bogged down in a dichotomy between classical forestry on the one hand and isolated instances of 'social' or participatory forestry on the other, it will remain insignificant as a foundation for the broader improvement of forest resource management.

A significant impact on management structures and institutions as well as on the forested area itself will only be possible if we succeed to move from isolated solutions to a pluralistic kind of forest management in which the supervisory and management potential existing outside of the public sector are brought into play effectively, comprehensively and on a permanent basis.
With the question of how much institutionalisation "social" forestry would need in order to significantly tap its performance potential, the focus is brought back to the framework for such a change in terms of forest policy, legislation (forestry law, land legislation, financial and administrative legislation...), economic conditions, etc., which prepare the ground for new actors to come into play.

In fact, the scope for implementing a participation-oriented or community based management of forest resources remains limited. Even where it is already a stated policy goal, a favourable environment remains to be developed for the blossoming of management capacities outside of the public sector. The dialogue among the participants concerning a redistribution of management tasks and rights in regard to forest resources and also concerning the creation of appropriate framework conditions is thus of great significance for both the present and the immediate future.

IV What does the 'social' in social forestry mean?

If one poses anew, with this background in mind, the question of what "social" forestry is, it is clear that it actually covers a number of "social" dimensions.

These ‘dimensions’ are relevant to all projects of this type, though to varying degrees and with differing challenges in their concrete implementation.

- "Social" forestry is "social" in the sense of seeking to achieve *local development effects* by generating value from forest resources, whilst at the same time addressing of the social viability issues raised in ecologically sustainable forest management:
  - through *direct participation* by the adjoining rural communities *in forest output*
  - through integration of the *resource use interests* of the adjoining population
  - through *expansion* of the adjoining population's scope (legal, economic) to engage in sustainable, forest-resource conserving forms of land use.
- Social forestry is ‘social’ in the sense of being socially-integrated: key functions in relation to forest resources and forest products such as
  - *control and decision-making authority*
  - *management and conservation services*
  - *know-how and service tasks*
  - *investment* and output

  are not concentrated in the hand of a state institution or a private concessionaire, but are in part or totally transferred (back) to civil society (e.g. to user-groups, communal resource management institutions, service NGOs etc.). Management potential and productivity dormant within civil society are thus mobilised.
- Social forestry is ‘social’ in the sense of being ‘*socially configured’*: that is, adaptable, dynamic, responsive to the context and social environment. “Social” forestry takes varying forms depending on the particular (political, economic, cultural, ecological) environment, and remains flexible because of the "social creativity" of the participating interest groups shaping it. Social viability and social integration as described above can, besides, only be

forthcoming when social forestry reacts flexibly to the development of new constellations of interests, to alterations in the pressure for exploitation and to changes in framework conditions.

- Finally, it is social in the sense of being by itself *'socially constructing'* and contributing itself to social change:
  - Participation-oriented forest management constitutes an important area for the concrete implementation of reform processes: decentralisation, institutional pluralism, etc., in the sense of a renegotiation of rights, mandates and responsibilities for both the state and civil society. The close links between forests and the structural problems of the state, in conjunction with the potential that forestry has to substantially restructure relationships between the state and civil society, make them a key sector for social processes of reform.
  - Social forestry projects thus always have a *political dimension.* They can be important impulses for effective, that is, substantive decentralisation, in that they introduce "decentralisation content" in a very concrete manner through the reconfiguration of resource management. Such projects can, besides, make important contributions to pragmatic, application-related policy development and then draw the benefits from the resulting policies themselves.

- It always includes a *conflict management* and *harmonising of interests* dimension (resource users <=> state or private sector; user groups among one another), since it grows out of the negotiation and agreement processes of various interest groups under changing conditions and provides an impetus for redistribution processes related to access and control over resources.

- It always has, besides, implications in regard to changes in *society's institutional landscape'*, that is, participation in resource management can only be effective ecologically if it goes hand in hand with the (further) development of appropriate management institutions and organisations.

- It always has an *economic dimension:* Participation in management of forest resources does not stop with the forest. In order to be ecologically relevant, it must be echoed in sales structures and product chains; that is, the new managers need to make a place for themselves as a new force in the management system as a whole.

Risks and 'side' effects

"Social" or pluralistic forestry contributes to a multiplication of the number of legal players involved in forest resource use. If it is not to increase the risk of contributing to non-sustainable forest use, it must also involve the development of conservation and exploitation agreements that include an element *of social commitment* by the participants, as well *as functional monitoring procedures and instruments.*

Photo 1:
Conventional logging in this forest in Malaysia damages the forest ecosystem irretrievably

A key requirement for the emergence of this kind of binding character is that the *mandate* for the management of forest resources does not only come
* from the *top down*, that is from the state to civil society, but also
* from the bottom up
that is, from the resource users to "their" management organisation.

If this mandate "from the bottom up" is not forthcoming, these institutions will not be in a position to fulfil their role and will remain for their part ineffective as regulating and monitoring instances for resource use.

This "issuing of the mandate" by resource users is not necessarily based on the legitimisation patterns usual in western culture, such asthe "democratic election" of a "management committee" or a “village forest committee”. It will rather draw its effectiveness from whatever variety of legitimacy is integral to the culture of the resource users. Two aspects deserve particular attention in this respect:

- Firstly, the *potential of the informal legal system and institutions* in resource utilisation. Depending on the cultural context, *informal legal systems* such as traditional tenure can constitute an important foundation for the legitimacy and social acceptance of management institutions (this impact analysis would suggest that this is particularly significant for Africa).
- Secondly, well-known key terms such as *participation, process orientation, impact monitoring* take on their own particular meaning during the formation of social commitment, legal accountability and of control mechanisms for management agreements.

V The projects

An overview of the projects in the impact analysis shows that all of them have flanking activities related to nearly all of the dimensions mentioned above, i.e. activities

- related to framework conditions
- related to social and economic viability

- and related to the fields of conflict management and institution building.

At the same time, they cover a wide spectrum regarding objectives, approaches and ecological location, being situated in Africa, Asia, Latin America and Oceania.

According to their *objectives*, the projects may be roughly divided into two separate categories:

1. Projects that have *forest conservation itself* (and/or sustainable management) as their primary goal and which promote participation-oriented management primarily as an *instrument* employed for the development of sustainable management

2. Projects that do not promote forest conservation and sustainable management of forest resources by the population as an independent goal, but rather as a *contribution to the improvement of livelihood* and to *stabilise the ecological situation* of rural areas.

The line between the two categories is fluid to the extent that participation-oriented management is and must be directly linked to the interests of the actors: As an "instrument" for developing sustainable forest management, participation-oriented management can only be effective if investments in sustainable use and management are attractive and at least viable economically for the participants in terms of their various benefits. One important prerequisite for "attractiveness" are for instance long-term guaranties in access to rights and benefits.

Differences among the projects in both categories emerge along methodological lines, that is, with regard to the importance attributed to trans sectoral issues or the role ascribed to the promotion of non-forest sources of income.

In the project approaches, furthermore, a series of *impact assumptions* come to apply - explicitly or implicitly. As working hypotheses, they play a key role with regard to the success of the respective approach.

For example:

Assumptions about *interest in sustainable use*, e.g.:

- "If access and rights of the local population over natural resources are secured in the long term, people will be motivated to use these resources on a sustainable basis and to apply forest-conserving land-use methods."
- "A return of state forests to the hands of the population raises their interest and engagement in forest conservation and sustainable management."
- "Active participation of the population in the management of public forests increases the sustainability of utilisation."

Assumptions made on *conservation and management capacity*.

- "If the adjoining population is involved in the use and management of forests it contributes actively to their conservation."
- "Conservation and management capacity will be improved by including non-governmental players (adjoining population)."

Assumptions made on the *sustainability of afforestation measures*, e.g.:

- "Privatisation increases the sustainability of afforestation measures."

Assumptions made on the *reduction of pressure for exploitation*, e.g.:

- "Increase of income from other sectors leads to a reduction of income generation based on illegal or unsustainable forest use."

The step of addressing such (implicit) impact assumptions of "social" forestry and community based forest management by means of indicators and/or by systematically documenting the experience and observations made with it is not yet a matter of course in all projects. However, a clear shift to critical monitoring is becoming apparent. Projects are increasingly implementing systematic impact observation with regard to ecological and economic effects, and are applying concrete managerial indicators whilst doing so.

The following three areas were notable as *frequently recurring problem areas* for projects in support of "social" forestry and community based forest management:

Challenge I
Dealing with detrimental political and legal framework conditions

The political will of partner countries to permit and implement a redistribution of power and legal entitlements is a key question for participation-oriented projects.

Until now, most projects have operated under state forest policies and legislation where no conclusive answer to this question has emerged. Wherever state regulations have already been reformed, implementation is mostly nascent, and runs counter to classic distributions of roles among the administration and the population. Often it does not converge with the interest of individual decision-makers. Over-regulation and other bureaucratic hurdles as well as the lack of appropriate financial facilities create important additional barriers.

It is essential to take this into consideration when designing the project. Overly ambitious targets and tight schedules are poor starting points for a realistic support strategy. The same applies to the criteria for discontinuing a project when the political will for implementation is really absent. If these criteria are formulated in a strictly formal fashion (“amended legislation”, “granting of pilot status”, …), they can easily lead projects into a conceptual dead end in their function as a back up for the process of reform.

Widespread deficits are:

- Too little light is cast on the issue of political and legislative framework conditions, and the issue is not really addressed.
- The forest administration's acceptance and readiness to implement are optimistically overestimated in their relevance for new participatory approaches.
- Consequently, too ambitious objectives are set
- Conditionalities for donor support are often defined on a strictly formal basis ("granting of pilot status for the project", "change of legal framework"), whereas "softer" process indicators which could guide successful co-operation are left out (i.e. indicators documenting

institutional change in terms of increasing commitment and reliability of relevant co-operation partners, e.g. on the basis of functioning agreements on co-ordination and co-operation on different and increasing levels of technical and administrative competence).

Nonetheless, examples in which projects have successfully helped to shape enabling framework conditions do exist in Africa as well as in Latin America and in Asia. These, too, were examined in the impact analysis.

Several factors for success emerged. Of course they do not constitute a blue print of elements that can simply be extracted from their respective context and applied elsewhere at will. They do give, however, an idea of which kinds of strategy orientation the projects adopted and what consequences this can have for the planning and monitoring of "framework-relevant" projects. Success factors worth mentioning in this context are, e.g.:

- the very close linking of lessons learnt from the field (field experiences) to the substance of policy advising (micro-macro-continuum)
- good communication work by using existing forums and committees and integrating wider policy processes, e.g. the implementation of international conventions on the national level or the framework of national forest programmes (NFP) or poverty reduction strategies
- a facilitator strategy that is suited to integrate relevant stakeholders and to encourage them to become active players in the search for solutions (in a process-supporting rather than a pre-programmed way)
- a diversification of partners in implementation (NGO co-operation, etc.) - not in order to oppose the government partner, but rather to support that partner, that is, consistently integrating and calling upon and referring to the state mandate and responsibility
- a consistent attempt to make sure project agreements and bilateral governmental agreements are actually kept

- co-operation along the lines of "soft" and "multiple" process indicators: that is, by means of indicators that allow a constructive approach to assessing co-operation progress that goes beyond the strictly formal level of legally based changes, etc., and in which multiple security is strived for. Multiple security with binding, multilateral agreements on various vertical and horizontal levels - that is, for example, various levels of hierarchy, various levels of centralised or decentralised / local authority, various levels of technical responsibility and services, partners from various sectors (private, NGO, GO), etc.
- and finally, taking into account the observation that community based forest management needs an “initial success” - e.g., that *pilot* approaches be concentrated in locations with a relatively high probability of success, linked to corresponding impact monitoring, or by addressing particularly sensitive issues (e.g. participatory management of state forests) after initial successes in less critical areas have been jointly experienced by the actors involved.

Challenge II
Participation under uncertainty

Participation of local people in the management of forest resources is not a simple top-down transfer of rights and management tasks. Just as important is the nature of the process by means of which this transfer takes place: it enables the local actors to make competent use of the new scope for action. It also enables government services to redefine and embrace their role in the altered management constellation. And, finally, it permits the private sector and non-governmental organisations to enter the process with their specific inputs.

Projects often find that their scope for qualified support to such a process is not clearly defined. They often lack a clear mandate to negotiate avenues and solutions which depart from given government stipulations.

The impact analysis revealed three basic types of strategy by which projects deal with such situations: 1. An ‘avoidance strategy’, 2. a ‘risk strategy’ and 3. a ‘negotiation strategy in small steps’.

The main characteristic of the ‘avoidance strategy’ is that projects restrict themselves in their approach to the formal aspects of participation while politically sensitive issues are circumnavigated. ‘True’ participation of resource users in planning and decision-making is postponed to some later date when decisions are implemented. Dialogue and negotiation are substituted by a socio-economic study. Instead of working together with stakeholders to elaborate goals and contents, which prepare the ground for designing the most suitable management organisation, the establishment of numerous ‘forest committees’ is initiated. (Function follows form.) Classical inventory and forest planning is implemented in place of a dialogue-oriented development of management agreements.

The advantage of this strategy is that, even under difficult circumstances, it rapidly produces presentable results. The main disadvantage is that the associated problems emerge later: The so established “forest committees” lack a true mandate and social acceptance, the forest management rules thus stipulated have no effect. Important stages of the process then need to be reworked. Rapid initial results notwithstanding, the ‘avoidance strategy’ can entail major losses of time and impact.

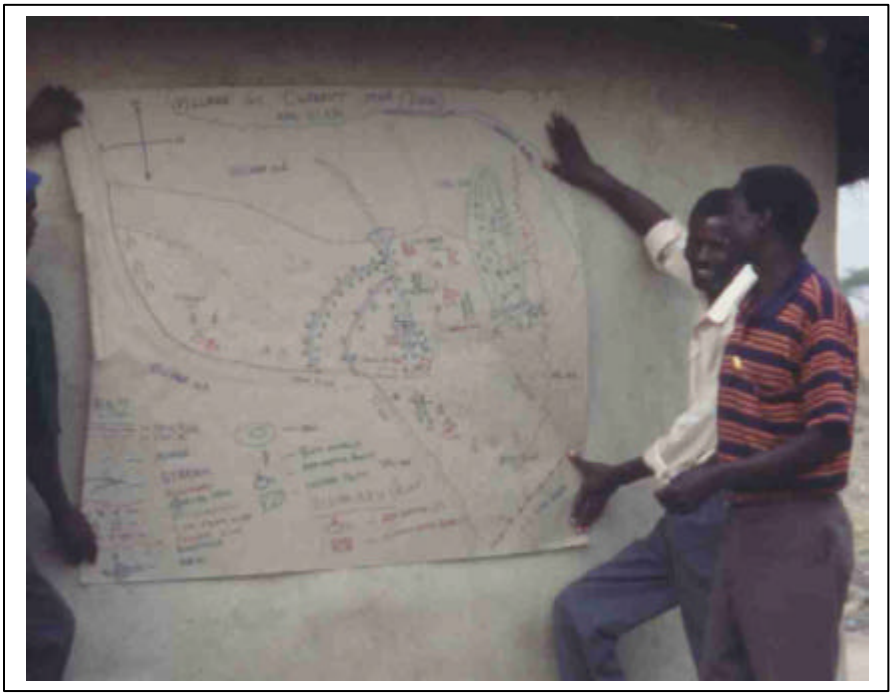

Photo 2: Designing the future: Participatory land use planning

The *risk strategy* tends to first ‘establish facts’ - for example by supporting investments by adjoining residents in forest management activities (conservation activities, enrichment plantings, ...) *despite* the lack of secured rights – with a view of an accompanying or subsequent positive influence on the relative framework conditions.

Advantages: a few success stories exist.

Major disadvantages are the real risk this involves to the concerned farmers and the danger of knock-on problems at various levels of co-operation with governmental and other partners.

In contrast, the ‘negotiation strategy in small steps’ has the important advantage that it promotes the commitment to agreements and changes and their sustainability. Emphasis is laid on supporting dialogue, reciprocal compromise and guarantees among the participants, with the project assuming the role of a facilitator.

Contradictory to widespread criticism, this process-oriented strategy is in fact particularly efficient. If 'well done’, it is possible to keep external interventions to a minimum, by making maximum use of the dynamics and inherent energy of the process of change. A key advantage is the encouragement of viability and thereby of lasting agreements and changes.
Disadvantages: The fact that ‘presentable results’ are more ‘strenuous’ and ostensibly take longer to achieve, combined with the uncertainty involved in when and what outcomes will materialise, means that projects are often put under severe pressure to justify their approach. If done amateurishly, there is also the risk that flexible steering is substituted by a black box approach of spontaneous reaction.

Challenge III
Economic viability

Issues of economic viability and of finding a balance between ecological goals and the improvement of living conditions are a further conceptual challenge for

projects, especially whenever the economic potential of forest resources is small or only takes hold in the long term. The latter is the case for a large percentage of projects, the majority of which operate in locations:

- that suffer from severe degradation
- that have depleted stocks because of previous concessions
- where state management or development co-operation activities have already visibly failed.

Farmers wishing to make use of the new forest management possibilities, thus frequently find themselves in a situation in which, instead of managing forest resources, it is necessary to restore them first. Even breaking even is often a distant goal. Closely bound up with this is the problem of the conflicting goals of poverty reduction and forest conservation. Only in particularly favourable sites is it possible for participation-oriented forest resource management to make a significant contribution to the improvement of income. More often, investments in sustainable forest management, on the one hand, and individual income needs and/or investments in "development" on the other compete with one another

A serious *structural* handicap to the achievement of economic viability is the problem of a systematic and global under-valuation of goods and services from forests. It severely undermines a successful anchoring of sustainable management in the economic setting. Without effective answers to this problem on local, national and global levels, rural areas will not be able to draw substantial benefits from their outstanding role in providing environmental goods and services.

Participation-oriented management can be only effective as a tool of sustainable forest management if investments yield commensurate benefits to participants and are at least economically viable. However, and this is illustrated in the example of The Gambia (see below), such benefits are not restricted to direct income gains: Immaterial and indirect social, political and cultural effects, such as regaining control and decision-making authority over resources or achieving long-term security in the access to rights and goods play an equally important role in the overall calculations of the participants.

In a number of regions the management of forest resources is not the concern of the "poorest" or the "landless" anyway. Often (as, for example, in a number of places in Africa) this concern may be based on a mandate derived from traditional ownership of land. In these cases, participatory forest resource management does not assign the key role in the establishment of sustainable management to the landless or immigrant settlers but rather to the old-established land-owning families. Furthermore, value generation and benefits accruing from 'social' forestry do not have a generalised local impact, but rather relate to specific groups. The integration of differing and often conflicting group interests (e.g. use interests of immigrants) and also the issue of the balance between interests of particular groups and the 'public' interest thus constitute an important factor within the broader issue of socio-economic viability. Again, different strategies have been developed by the projects to deal with this, including the 'advocate strategy', the 'reliance on local arbitration mechanisms' or even the conscious acceptance that a certain degree of conflict potential and social differentiation is simply inevitable.

In those approaches that focus in the first instance on the improvement of the standard of living in rural areas, there is a further tendency to view the objectives of resource management and development as *separate objectives*. In practice, this can lead to a concept similar to a 'hawkers tray', which puts forestry activities side by side with socially oriented activities, without any causal connection between them. This dual orientation in the allocation of project resources is a hindrance for

- the full utilisation of the potential within participatory forestry for development and value generation
- a realistic assessment of the limits to this potential.

In the latter case, this increases the risk that local investments in a sustainable management of forest resources are only made as long as additional subsidises to non-forestry activities are provided.

These are some of the recurrent challenges faced by projects which support participatory forest management. The potential *impact* of such a project can be seen in the example of The Gambia.

VI Impact of forest management by communities in The Gambia[9]

The small West African state The Gambia lies in the ecological 'buffer zone' on the edge to the Sahel. Its own remaining dry forest resources are themselves threatened with severe degradation. As a consequence of the lack of success of previous approaches, the concept of community-based management of natural resources has come to be a key element of national policy ('Gambian Forest Management Concept'). This step was accompanied by comprehensive changes in forest policy and legislative and institutional frame conditions.

The concept and its implementation is now integrated at a national level. Due to initial positive results from the concept, and in order to overcome a geographically island-like solution, the potential for an expansion of the concept for the whole Sahel sub-region is being discussed.

The 'Gambian German Forestry Project', was in its 19th year when the impact assessment was carried out and was actively involved in this process of change. It influenced it firstly as a field project and later with an additional mandate for policy advice. It is now in its final phase. Financial assistance (EU, FC funds) was found for the nationwide implementation of the concept developed in this project and the development of community forestry is now supported throughout The Gambia.

The exceptionally broad impact of the project and the duration of the experiences gathered in implementing community forest management, made it interesting to have a closer look into effects achieved.

[9] See the contribution by the project in this booklet

The analysis concentrated on the following issues:

1. Interaction and synergy between the field project and national policy
2. Evolution of project approach, concept, advisory services, target groups, communication and co-operation links
3. Management co-operation between public sector and resource users
4. Ecological, socio-economic and institutional effects.

The analysis was based on conversations with participants in the partner agencies and in concerned villages, a series of local studies covering specific social and ecological effects of community forest management, other relevant local and national documents, 'participatory observation' of on-going activities and finally, on an aerial survey of the forest area. The outcome is a qualitative impact analysis that combines a retrospective bird's-eye-view with the viewpoint of actors and outsiders. It shows the various impact levels and the main impact tendencies. Instead of being the result of systematic monitoring itself, it suggests potential focal points for an effective mid- and long-term impact monitoring and locates issues which would need further cross-checking in the future.

VI.1 Impact trends

Given the size of The Gambia -11,295 km^2 - even small additional areas of forest land (in absolute figures) placed under effective community management exert a significant degree of influence on overall forest management, with effects on the price structure of forest products, marketing structures, behaviour patterns of users and consumers, etc. At the same time, the specific conditions of The Gambia contribute in several respects to a favourable environment for the development and institutionalisation of community based forest management, and they foster the comparatively rapid evolution of verifiable effects: The administrative apparatus is quite small and comprehensible, and the conditions characterising communication density and decision-making channels would under most circumstances be described as a "well-decentralised environment". Ecological conditions in locations across the country are comparatively

homogenous. The same can be said for the cultural environment surrounding forest and land use. A powerful commercial logging lobby is lacking. The repeated security problems in neighbouring Senegal (Casamance) not only seal off a potentially important and competitive (because open-access) source of forest products but also increase the readiness of commercial users to enter into negotiations with local forest-owning communities in The Gambia and to pay the higher price of a controlled and sustainably managed product.

Effects and impact tendencies

1. The framework for forest resource management

- The Gambia is relatively advanced in the development of favourable conditions for community forest management (forest policy and implementing instruments). This is due to a particularly close interaction between experience gained 'in the field' and policy design. The starting point, after a long phase of state-oriented co-operation, was successful pilot cases of community forest management. This then led to the expansion of the project mandate to include policy advisory services.

2. National conservation and management capacity

- Since 1991, an additional 16,000 ha of forest area[10] has been placed under management or conservation by means of 'management agreements with communities' ('*Preliminary Community Forest Management Agreement'*, PCFMA, and *'Community Forest Management Agreement',* CFMA). In the beginning, the most important silvicultural instrument was forest rehabilitation by effective fire protection. For the communities, the main incentive was that they regain long-term control over the forest resources in their area, vis-à-vis the state as well as vis-à-vis external users.

[10] Compared to 12,000 ha under effective state management.

- In addition to the direct local conservation effects on the community forests themselves, an indirect conservation impact on neighbouring forest and bush areas can be noted. These so-called state forest reserves were previously neither under an active forest management nor under any kind of conservation measures. With the development of community forests, they also benefited significantly from a sharp drop in the frequency and scale of forest fires since 1995.
- Transfer of management responsibilities to local communities has set in motion a diversification of management institutions. It activates hitherto dormant local control and management potentials in resource use (e.g. via the traditional land-owning lineage networks) and develops them further. With the formation of two Community Forest Associations, development has begun of secondary organisations with medium-term potential to play a part in monitoring, conflict management and advisory services.
- On the level of the forestry administration itself, an expansion of its range of services also took place in the wake of the redefinition of its roles and functions. Besides territorial and monitoring tasks, advisory services in community forest management constitute a new key function for forestry authorities. Supported by the project, non-forestry advisory services are performed here in co-operation with non-governmental organisations.
- Within the context of the development of the *Gambian Forest Management Concept* with community forestry as the key instrument, the role of classified state forests (*forest parks*) has been redefined. Instead of the previous definition as a 'state forest reserve', they are now used as a centre for practice-oriented silvicultural training and research (e.g. for community forestry organisations in villages).

3. Impact on the forest resources

Fire protection not only acts as a conservation measure in the direct sense, but is also an important instrument for forest rehabilitation by activating the capacity for natural regeneration of the dry forest. By safeguarding and encouraging the natural

regeneration of important tree species (bombax costatum, pterocarpus erinaceus, khaya senegalensis, borassus aetiopium, ...), this can lead to a visible improvement in the condition of the forest and can reduce fire risk.

4. Economic impact - Macro-level

- As the portion of forest resources coming under effective control grows, the economic value of those resources increases. Formerly, the dealers' costs in marketing forest products, especially firewood, were essentially limited to exploitation and transportation costs and fees or "taxes", so that access to the resource itself was *de facto* free of cost. Here a change has taken place, and in regions relatively close to urban centres (Banjul and Serrakunda) and with a high density of community forests, dealers marketing dead wood must now, for the first time, address themselves to villages with community forests and pay for access to this resource[11].
- With the reduction of the economic undervaluing of the resource and the correspondingly higher local output, an initial contribution is made to revalorising the role of the rural areas in the production of forest resources and products and to reducing the de facto structural subsidising of the town by the countryside.
- Reduction of losses caused by fire makes an enhanced economic exploitation of the productivity and output potential of existing forest resources possible. This is particularly so in the case of fuel wood and forest pasture (year-round forest pasturage, brushwood use).
- In the long-term, a higher resource value in conjunction with access to long-term security of usage rights and benefits (ownership) provides an important incentive for the readiness to invest in the management of forest resources and the production of forest products.

[11] On the consumer side, the higher fuelwood prices are compensated by switching to cheaper branchwood, which has only become available since the improved fire control.

Micro-level

- At a local and regional level (because of indirect conservation effects), community forests play an important part in the stabilisation of the resource base for various livelihood activities: year-round forest pasture; use of branch wood as fuel both for household needs and, in favourable locations, increasingly as a new income source for women. The latter have begun successfully to tap urban fuel wood markets, a domain formerly dominated by men.
- Community forests have stimulated the development of new income sources in upstream sectors (e.g. the establishment of private nurseries)
- Impulses have been created for the development of new marketing structures and for gaining access to new sources of income by new interest groups (particularly women, see above)

5. Resource utilisation

- Forestry as a form of land use is for the first time offering the rural population a monetary return and can thus compete with other forms of land use.
- On the part of the resource users, an increased readiness for investment-based management rather than purely extractive forest use was observed; hand in hand with increased readiness for investment in the protection of resources (controlled burn-off, mobilisation for fire-fighting).
- Hand in hand with a developing sense of ownership over the forest, the users also developed an awareness of the value of this resource.

Other social effects

Of course, there are also impact trends with possible negative effects:

- A renegotiation of rights and regulations has begun in regard to access and monitoring of forest resources as well as a renegotiation of ownership structures. Conflict potential and conflicts are both increasing in the process.

Besides, questions of medium-term access of individual groups to benefits and yields have not for the most part been clarified to date.

- A process of marginalisation of certain user groups has begun (e.g. of immigrant Fulbe, for whom fuel wood trade was an important source of income). It is leading to a shift of exploitation pressure to areas free from effective management.
- The workload of certain groups has increased, in connection with a growing seasonal competition between agriculture and forest management for manpower.

Outlook

The vast majority of positive effects in the example set out above were only made possible upon successful accomplishment of the first step from the project stage ('intensive care stage') of participatory forest management to its institutionalisation: In The Gambia, participation-oriented forestry has become a core element of national forest policy.

If, in contrast, the new management approaches get stuck in a setting polarised between classic forestry on the one side and islands of community based forest management on the other, no significant effects can be expected either in the forest or outside it. In the dialogue on pluralistic, sustainable forest management, challenges will thus remain. These concern not only the design of an enabling national environment and issues of partnership and co-operation with the private sector, but also include regional and supra-national perspectives. The current approaches on the certification of sustainable forest management show that if pluralistic forest management is embedded in an appropriate supra-national if not global context, new avenues to effectively link social, economic and ecological sustainability open up.

Social Forestry in Concession Areas
A Contradiction in Terms, or an Under-utilised Potential? Experiences from Indonesia

SONDRA WENTZEL
WITH AN UPDATE BY *GOTTFRIED VON GEMMINGEN*

Social Forestry in Concession Areas – The Issues

Social forestry (a term often used interchangeably with community forestry) emerged as a concept in the late 1960s out of an increasing concern with deforestation and forest degradation, and with the displacement and impoverishment of forest-dependent people in the tropics. These phenomena started to be blamed, at least in part, on the apparent failure of the ”industrial forestry model” propagated by the FAO and other agencies to achieve sustainable natural forest management in its broad sense, i.e. forest management that not only yields profits but is environmentally acceptable and ensures an equitable distribution of benefits. A ”paradigm shift” set in, leading to the currently often espoused ideal of ”community-based forest management” which conjures up the image of closely-knit communities managing their forests sustainably, based on indigenous knowledge.

In countries like the Philippines, where the ”industrial forestry model” is now obsolete because of the virtual disappearance of natural old-growth forests, this new approach requires profound changes in land use and forestry policies as well as an overhaul of the forest bureaucracy and its relationship to other relevant actors like local government and community development NGOs. However, what does this trend mean for countries like Indonesia and Malaysia, which still have large areas of primary or valuable logged-over forests – forests which, despite being at least in part inhabited and used by local people, have been declared state forests and parcelled out to state-owned or private concessionaires which generate much-needed foreign exchange? Given the inherent conflicts of interest

in such situations, can there really be a "socially acceptable industrial forestry" in the tropics producing timber worthy of certification according to international standards?[12] Or do we – as some cynics say - have to wait for tropical forests to be degraded and forest agencies and timber companies to have lost interest in them before local people get reinvolved in forestry, as cheap labour for forest rehabilitation and reforestation?

SFMP (Promotion of Sustainable Forest Management Systems), a project focusing on improving natural forest management by concessionaires in East Kalimantan, Indonesia, has been struggling with these questions since its beginning in late 1993. This brief article is meant to share some of our concerns and experiences.

The Situation

Under President Suharto's 'New Order' Regime (1966-1998), Indonesia pursued a growth-oriented development model in which natural resources were vigorously exploited. An increasingly complex bureaucratic-authoritarian state maintained centralised control over its people and the development process. The 1967 Forest Law led to a situation in which 75% of the country (in East Kalimantan, even 82% of the province's over 210,000 km²) were declared state forest areas and came under the mandate of the Ministry of Forestry. The Ministry then handed them out as concessions to some state-owned but mainly private companies, without much concern for their inhabitants. Figures vary, but at their peak in the 1980s there were over 550 timber concessions, covering an area of more than the 64 million ha declared as permanent production forest.

Over the years, a multitude of regulations were issued on forest management in these concession areas, but enforcement by the Ministry and its two forest

[12] The GTZ-supported Forest Management Unit (FMU) in Sandakan, Sabah, Malaysia – one of the first certified forest enterprises in Malaysia and Indonesia – is exceptional in the region in that it does not include settlements.

agencies at Province level (*Kanwil* and *Dinas Kehutanan)* was low with wide-spread corruption. With the ITTO Target 2000 in mind and in the context of growing international but also domestic criticism, especially by NGOs, there were more serious attempts to improve Indonesia's forest management under the Minister of Forestry Djamaludin (1993-1998). This included first and still rather cautious discussions about community-based natural forest management in state forest areas outside of timber concessions. The GTZ-supported Social Forestry Development Project in West Kalimantan has both benefited from and contributed to this trend. However, the bottom line of Indonesian forestry is still ensuring cheap raw material for the plywood and other export-oriented wood-based industries. The only policy dealing with the local people in concession areas is the 1991 *Bina Desa* (since 1995 also in timber plantations), which obliges concessionaires to provide basic services and community-development projects.

In East Kalimantan, which is still the most important province for timber extraction in Indonesia, most of the 12 million ha of concessions include or border on local people's settlements and overlap with their forest-dependent land use systems and territories claimed under customary law. "Local people" include a variety of groups among East Kalimantan's two million inhabitants (half of them urban residents, the rest living in over 1100 administrative villages), ranging from indigenous Punan ex-hunters and gatherers and Dayak swidden cultivators to both long-established and more recent spontaneous settlers from the coastal areas and other islands.[13] Industrial forestry began immediately after the handing out of the first concessions in the late 1960s in the lowlands and has been moving upriver ever since. It has caused the well-known negative environmental and social impacts, but did not face massive protests by indigenous people like the roadblocks in neighbouring Sarawak. Nevertheless, especially due to the increase of both timber plantations (in state forest areas) and oil-palm plantations (in areas

[13] Only government-sponsored so-called transmigrants have land-tenure security, since their settlement areas were taken out of the state forest.

released from the state forest), local people and their extensive land use systems are increasingly being ”squeezed”, and conflicts are on the rise.

The SFMP Approach

SFMP is a project run by the Directorate General of Forest Utilisation of the Ministry of Forestry (since March 1998 Ministry of Forestry and Estate Crops) and supported by the GTZ.. SFMP’s strategy is to develop sustainable forest management under ”real-life management conditions” in East Kalimantan by directly providing advisory services to both state-owned and private partner concessionaires. Experiences and results are evaluated together with all relevant partners and are fed back to the Ministry in the form of policy recommendations.

For the purpose of SFMP, we defined Social Forestry broadly as the active involvement of local people in sustainable forest management to their benefit, well realising that under the circumstances this was a long-term objective which will require fundamental changes in the relationship between the Ministry of Forestry, the companies, and local people. Since in 1993, the concept of social forestry in Indonesia was at an early stage, the first project phase was used as a kind of ”orientation phase”. We started with a review of relevant legislation and literature and conducted a study in three initial partner concessions to assess problems and potentials in the relationship between each concession and the local people. This study was conducted by mixed teams, consisting of representatives of the forest administration, the companies, a local NGO and the SFMP-advisors who had all been trained in PRA (participatory rural appraisal) methods. This assessment led to the main conclusion that local people had been actively excluded from forest management, losing access to valuable resources for their livelihood. The following five main areas of field and policy work during the first phase were identified:

- Land tenure issues: While there were no outright conflicts between local people and the companies in the three concessions, overlapping claims did not provide the tenure security needed by both local people and the companies to

develop sustainable land use and/or forest management systems. Local people had no legal documents on their land rights nor was there official recognition of village boundaries.

- Appropriate land use systems: Forestry officials and timber companies in Indonesia still (often without differentiation) put the major blame for forest destruction on shifting cultivators, propagating irrigated rice (*sawah*) as a land-intensive but often locally unsuited alternative. Only a few researchers and NGOs have started to document indigenous land use systems. Local people in the three concession areas needed advice on how to make better use of their (limited and decreasing) land base.

- *Bina Desa*:[14] Based on detailed 20-year work plans resulting from an obligatory *Studi Diagnostik* conducted without systematic local participation, the concessionaires were conducting activities mainly geared at local infrastructure improvements (*proyek fisik)* and the introduction of paddy rice with a rather paternalistic approach, spending, bylocal standards, considerable amounts of money.[15] No attempt was made to involve local people in forest management (social forestry), and there was little co-ordination with local government agencies (the presence of which declines with increasing distance from the coast).

- Economic relationships between concessions and local people: NGOs and local government in Indonesia usually voice complaints that local people receive insufficient immediate economic benefits from company presence in their area. However, in one partner concession, quite a number of local people were working for the company even in managerial positions, and in another, a local marketing co-operative had been supported by the company in their sales

[14] The official terms is now *Pembinaan Masyarakat Desa Hutan* (PMDH), i.e. guidance of forest villagers.

[15] The 1994/95 average of reported expenditures for East Kalimantan was Rp. 20 million (US $ 13,333), about four times as much as the annual government fund for village development, and the same amount as the special government subsidy for poor villages (*Inpres Desa Tertinggal,* IDT).

of vegetables and fruit at the camp. Given the problems with *Bina Desa*, it seemed useful to assess the pros and cons of these more straightforward relationships between companies and local people and develop recommendations on if and how they could be enhanced in other areas.

- Non-timber forest products (NTFPs): East Kalimantan is known for its boom-and-bust cycles of NTFP extraction for *damar* resin, rattan or, most recently, *gaharu* incense. Historically, once a resource became attractive, local people were often deprived of the benefits through new tenure and marketing arrangements. In none of the three concessions did local people at present derive much income from NTFPs. Nevertheless, given the international debate about NTFPs, it seemed appropriate to assess their potential, distinguishing clearly between those from natural forests and from local people's gardens (relevant especially in the case of rattan, the NTFP with the highest marketing potential).

The strategy planned during the May 1995 ZOPP IV workshop was to

- develop trial field activities in each of the five subject areas in a participatory and gender-sensitive way together with the three partner concessions and the villages in their surroundings, involving relevant government agencies at different levels, NGOs, and short-term consultants, according to need and

- based on a joint evaluation of these experiences, develop recommendations to the Ministry by the end of the first project phase. (For details on the study results and planning, see Wentzel 1995)

Experiences during the First Project Phase (1993-1998)

Implementing this rather ambitious operation plan during the next three years turned out to be much more difficult than expected. The major challenges for the expatriate and Indonesian GTZ advisors (the forest agency counterparts and also the partner companies did not take the lead in this part of SFMP's work) were to

- constantly mediate between in part very conflicting views (government, private sector, NGOs, local people) on the situation and role of local people in concession areas;
- maintain sufficient presence at different levels (village, concession, district, province, national level) to maintain momentum and ensure planned outputs;
- at the same time remain flexible enough to react to "windows of opportunity" and give inputs to the increasingly dynamic national level discussions on social forestry in general;
- ensure quality of work in a situation where critical thinking and in-depth analysis were not favoured by the scientific and social environment, and where both forest agency and company staff at all levels had basically no background in social sciences and community development.

Nevertheless, the following results could be achieved during the first project phase, providing the basis for more in-depth work in the Forest Management Unit and policy advisory services during the second phase. (For details, including a list of relevant project documents, see Wentzel/Haury 1998.)

Land tenure: An in-depth assessment of the complicated legal framework and its interpretation among government agencies in East Kalimantan showed that while in principle a case could be made for the legal recognition of indigenous communal (*Adat*) territories especially in the hinterland of East Kalimantan, government agencies were openly hostile to the idea. However, promising experience could be made in a UK-supported forestry project, the growing NGO network promoting participatory mapping and an SFMP trial in a new timber concession area. Following the Indonesian Criteria & Indicators for sustainable forest management (LEI Catalogue) which acknowledge customary land tenure, the SFMP could then work within the framework of MoF regulations on state forest and concession boundaries and develop and test a procedure for participatory boundary demarcation between forest areas claimed by the local people and those which will be part of the Permanent Forest Estate managed by the company. Local people's areas will either have to be released from the state forest or be

given a special status within it which does not forfeit customary claims. It remains to be seen which legal option is feasible in the short term, taking into consideration the possible risk of alienation of land released from state forest for example by oil palm plantations.

Land use: Due to the lack of suitable technical recommendations for upland areas with poor soils and far from markets, and also of training courses in participatory technology development for field staff, it turned out to be impossible to start the envisaged participatory agroforestry system development process in the partner concessions. SFMP supported several studies on indigenous land use systems and/or the dissemination of their results and participated in a Task Force of four GTZ-supported agricultural and forestry projects on upland farming systems, mainly in Kalimantan. However, we had to accept that it exceeded our capacity to overcome the serious deficiencies of the current agricultural and (virtually non-existent) forestry extension services for upland farmers in the hinterland. The institutionalisation of appropriate and integrated agricultural and forestry extension services for these people remains an unresolved problem.

Bina Desa: Since this program received much attention from Minister Djamaludin[16] but also well-deserved criticism from local government and NGOs, and for both reasons caused considerable headaches for province level forestry officials and especially the companies, it was taken as the SFMP "entry point" to work towards "real" social forestry in concession areas. Based on an in-depth study which documented that *Bina Desa*'s two core problems are the lack of participation by local people in the entire process, and poor co-ordination with ongoing government services and projects, trial participatory village development planning workshops were conducted, utilising a method which the Ministry of Home Affairs had prescribed in early 1996.[17] Parallel to this, SFMP gave inputs

[16] He insisted on direct implementation through the companies to make them "socially responsible", instead of for example subcontracting *Bina Desa* management to more qualified NGOs.

[17] This method, called P3MD (*Perencanaan Partisipatif Pembangunan Masyarakat Desa*, Participatory Village Development Planning), was developed on the basis of experience made in several GTZ-supported projects but "scaled up" and spread in a way that seriously jeopardized the

to the MoF to improve the *Bina Desa* regulations which made a participatory, process-oriented approach virtually impossible, and collaborated with other projects in the development of training courses for company field staff and forestry officials involved in *Bina Desa*. While some of our recommendations were taken up in revisions of the legislation (though often more their terminology than their institutional implications), the *Bina Desa* reform is still insufficient, and the lack of qualified, experienced and motivated company field staff remains a major constraint.

Economic relationships: The positive experiences in the two partner concessions were documented and a simple method developed for assessing the possibility to increase sales of agricultural products from local villages to the camps. A further analysis of the "labour issue" was impossible due to the lack of a qualified consultant. Since the percentage of local people employed by timber companies is an indicator in most Criteria & Indicator catalogues, with often unrealistically high figures and without much consideration of limiting factors like low population density in upriver areas, the need for mutual adjustments in seasonal work schedules between companies and villagers, and little desire on both sides (companies can control "imported" workers better, local people often refrain from working for timber companies as long as there are more attractive alternatives), this topic will need further attention. In the end, stable economic relationships between companies and local people hinge on the overall transition from the current mobile timber exploitation camps towards sustainable forest management by resident forest enterprises.

NTFPs: An in-depth study on the role of NTFPs from natural forests for local people in the area of one partner concession documented that currently, none contribute much to household income, and the prospects for sustainable

quality of implementation (see Wentzel 1997). Nevertheless, in the context of *Bina* Desa, where qualified facilitators could be financed by the companies, it provides a framework for involving a broad range of villagers in the design of a mid-term (5 years) and one-year village development plan which distinguish between activities to be conducted in self-help, with government and with company support.

commercially oriented extraction are slim (see Grossmann 1998). Among several Dayak groups in other areas of East Kalimantan, rattan is sustainably produced in people's agroforestry systems; however, these are often classified as low-potential state forests and under threat of conversion into timber and oil palm plantations. SFMP has contributed to national-level discussions and first changes in regulations undermining smallholder rattan cultivation and trade have been made. However, this area of work was discontinued in the second project phase since it has little impact on improving natural forest management.

Conclusions

At the end of the first project phase in March 1998, SFMP could not pretend to have developed a model for social forestry in concession areas, but we had gained valuable experiences which allowed us to conclude that it was worth continuing the difficult and often frustrating task of constant mediation and negotiation between conflicting world views and interests. While many of the currently operating timber companies will certainly phase out in the near future (here, minimising environmental and social damage has highest priority), those determined to stay in the sector will have to avoid conflicts with local people in their areas at least, or, if they want to export their timber, fulfil the increasingly demanding C&I criteria. Some are actually quite open to improve their relationships with local people, but they are usually insufficiently qualified to do so. For local people, this kind of partnership could mean regaining access to forest areas and tapping forest enterprises as employers, markets, and sources of technical and financial support for productive activities in areas where government services are notoriously weak.

For these partnerships to emerge, however, changes are needed in the legal framework regulating concession management and in the way forestry officials deal with both timber companies and local people. First, land tenure conflicts need to be solved as outlined above. Then, instead of obligatory and overregulated *Bina Desa* programmes, it would seem more appropriate to assess in each concession area if there are possible joint activities of mutual benefit

between companies and local people. It would be best to start with simple activities of immediate benefit like selling agricultural products at the camps and removing obstacles to the involvement of local people as workers and employees.

For the emergence of ”real social forestry” in concession areas, however, the possibilities of local people’s participation in the concessionaires’ forest management (the LEI catalogue for example foresees their involvement in activities like area security) and of the development of community-based forest management should be assessed. Based on the experiences of local people with illegal logging along the rivers or roads in many areas of East Kalimantan and elsewhere in Indonesia, and SFDP’s emerging lessons on appropriate support systems for commercial community timber and NTFP extraction, small-scale pilot activities could be developed in clearly defined forest areas (either community forests or joint use zones within the concession). For this, however, the division of labour and especially the sharing of costs and benefits between company and local people will need to be negotiated in a transparent fashion from the very beginning. And all these possibilities, of course, ultimately depend on the economic viability of sustainable natural forest management and its competitiveness vis-à-vis other land uses.

We are very interested to learn about other experiences in the collaboration between concessionaires and local people in other parts of the world, especially its institutional and economic aspects.

New Challenges – Current Trends in the Indonesian Forestry Sector (Update 1999)

Since President Suharto stepped down in May 1998, a process of political and institutional reforms has set in in Indonesia which provides new opportunities and challenges. For the first time in over 30 years, there is open discussion about alternative development models. However, eradicating *Kolusi, Korupsi* and *Nepotisme* (KKN) and overhauling the entrenched political-administrative system will be difficult, especially given the severe economic crisis the country has been facing since late 1997.

According to CIFOR, the economic crisis will increase pressures on Indonesia's natural forests. However, the 1997/98 forest fires sharpened public awareness of the problems, and after the change in government approximately 70 NGOs formed a Coalition for the Democratisation of Natural Resources (KUDETA). The new Minister of Forestry and Estate Crops M. Nasution has started a reform process in the Ministry, emphasising social responsibility and striving towards more equitable access to forest resources. He launched the slogan "the forest for the people." Suddenly, it has become acceptable to talk about *Adat* (customary) rights to forest areas, and addressing land conflicts is on the agenda. Co-operatives are to become the core tool to strengthen the role of local people in forest management.

A new government regulation (PP 6/1999) limits the sizes of new or renewed concessions, one company and group only being allowed to operate 100,000 ha in one province and 400,000 ha in the whole of Indonesia (before, the three largest concessionaires controlled over 2 million ha each). Concessionaires will be assessed concerning their contribution to local peoples' "empowerment" before being extended. Finally, the basic law on forestry and many other important regulations are under review, and some restructuring of the ministry has begun.

There is thus quite some momentum for change, but the implications are still far from clear. On the one hand, considerable expectations have been raised which already led to deliberate gazetting of community forests within existing concession areas, on the other hand, the position of the government and with it, the Minister of Forestry and Estate Crops, is gradually weakened because of the continuing political crisis. The forest administration and the private sector are increasingly blocking reform moves, with the hope of outliving the present government without too many changes.

Within this difficult political setting, SFMP aims to be flexible and promote pragmatic approaches together with its partner companies and forestry officials to strengthen local people's role in forest management. In a gradual process of discussion and joint experimentation, the partners can get acquainted with new ideas and become creative, e.g. sourcing out nursery or rafting activities or

rehabilitating burned over forest areas with and for local people. SFMP also supports them in working towards more integrated land use planning in concession areas through a process of participatory zoning conducted by mixed teams. The resulting zonation becomes an input to the forest function map of the forest management unit. In areas where real conflicts occur between different parties' land claims and land uses, negotiations have to be carried out to reach a focused land use agreement.

The companies' motives to get involved in all this may be more strategic than philanthropic, i.e. they may be trying to maintain at least indirect access to forest areas which increasingly are being returned to local people. However, in situations of conflicting interests, outcomes which are satisfactory to the weakest party may be more important than the principles and motivations of those in power.

References

GROSSMANN, Carol 1998. Förderung der Bewirtschaftung forstlicher Nichtholzprodukte (FNHP), ein Beitrag zur Tropenwalderhaltung und Regionalentwicklung? WALD-INFO 23: 5-10.

WENTZEL, Sondra 1995. Main results of the SFMP Social Forestry Field Study in the Area of the Three Partner Forest Enterprises. Samarinda, Indonesia: SFMP Document No. 2 (1995).

WENTZEL, Sondra 1998. How to facilitate institutional change? Experiences with the Institutionalisation of Participatory Approaches Developed in the Context of GTZ-Supported Projects in Indonesia. P. 159-171 in: C. Scherler et al., ed. Beyond the Tool Kit. Experiences with Institutionalising Participatory Approaches of GTZ Supported Projects in Rural Areas. Eschborn: GTZ.

WENTZEL, Sondra and Dieter HAURY 1998. SFMP Phase I Social Forestry Handing Over Report. Samarinda, Indonesia: SFMP Working Paper, March 1998.

Community Based Forest Management as a Model to Support Sustainable Forest Management in Indonesia

DEPARTMENT OF FORESTRY AND CROP ESTATE/
DEUTSCHE GESELLSCHAFT FÜR TECHNISCHE ZUSAMMENARBEIT
SOCIAL FORESTRY DEVELOPMENT PROJECT (SFDP)

Introduction

Under the Memorandum of Understanding between The Federal Republic of Germany and Indonesia (April 9, 1984), the GTZ has, among many other programmes, committed technical and financial aid to supporting the Government of Indonesia's policy of introducing sustainable management practices for the natural and plantation forest resources by the year 2001.

This initiative is currently being developed in both the commercial and social sectors and implies that the forestry sector, among others, has to develop appropriate strategies and methods to improve management practices and increase the participation of the rural communities in the utilisation of Indonesia's forest resource base. The Indonesian Government has therefore embarked on facilitating the development of a more balanced distribution of the income realised from forest utilisation.

It is the latter which has become the focus of much attention and the subsequent initiation of a social forest programme. The principle of this programme is the development of a system which, with government participation, allows management over the remaining natural forest by the local communities.

Background

It is important to note that the role of Community Based Forest Management (CBFM) is to manage and sustain the smaller, often more remote "islands" of remaining natural forest within and outside the officially allocated government

forest area. CBFM is to be implemented in approximately 40 - 10,000 ha of forest. CBFM is therefore not competing with large-scale forest operations allocated to private and government concessionaires. The social forestry programme is therefore regarded as being complimentary to the private sector initiatives currently being undertaken to sustain the remaining natural forest. Such initiatives are also regarded as a means to stabilise the community by creating employment and to return more of the forest revenue to the local communities through legalising what are currently considered illegal activities.

Local communities living in the forest area have limited access to the forest for utilisng non-timber forest products. The harvesting of commercial trees for profit, however, is not yet permitted. A lack of understanding between government and traditional law has therefore resulted in considerable misunderstanding and conflict. The success of CBFM is therefore dependant on a participative approach in developing an appropriate model that is acceptable to the principal stakeholders by minimising misunderstanding and the opportunity for conflict.

While sustaining the natural forest resource is a priority, such a model should not be restricted to the management of the forest land alone but integrated with the adjoining non forested land which ultimately has an influence over the natural forest. By optimising the potential economic benefits through the development of alternative incomes, encroachment into natural forest by the communities for slash and burn subsistence farming will be minimised. Diversification of the use of natural resources is therefore a basic requirement in the development of a CBFM model.

At the community level the CBFM model therefore has to:

- Recognise and incorporate traditional laws and values
- Recognise and respect traditional land tenure rights
- Recognise representation and empowerment of the communities
- Encourage alternative and appropriate income generation

To address these issues the communities have to have some recognised forum through which local representation is ensured.

For the community to be able to confidently take charge of and manage its own natural resources, the CBFM model has to be:

- appropriate
- simple
- low cost
- low technology
- highly labour intensive

In terms of government acceptability, revenue from CBFM must be higher than the cost of monitoring and control and the resulting model needs to be integrated into the government's management structure. In terms of the community, returns must be equal to or higher than the benefits of illegal logging. These two criteria are regarded as the biggest challenge to ensuring the successful implementation of CBFM.

SFDP Experience

The project has already identified and established a pilot area within West Kalimantan called the Participatory Forest Management Area or PFMA in which the land use and traditional tenure has been identified through the process of village micro land-use assessment.

With its government counterparts, the SFDP is now developing a model which attempts to address the issues mentioned above. In particular the project is endeavouring to determine the cost to establish a CBFM model for replication elsewhere in Indonesia. Without government intervention in the form of bank guarantees, loans or subsidies, CBFM as a method for sustaining the natural forest resource is probably not a realistic option. Funding for replication is therefore essential.

To support CBFM replication elsewhere in Indonesia, SFDP is currently developing a series of guidelines based on field experience, for use by government and communities to assist in its establishment and management.

A community association (*lembaga*), based on traditional and local government representation, has already been established which is in the process of being restructured to be principally responsible for the external affairs (e.g. promotion of the community land use system, links with government and private institutions, other investment opportunities, security) and internal affairs (conflict resolution, traditional rights, community representation) of the land area under the PFMA.

The proposed silvicultural system for harvesting the remaining natural forest under CBFM conditions has been dramatically simplified without compromising sustainability. Yield is determined by tree number alone and therefore makes its calculation and harvesting simple and easy to implement, monitor and control both internally and externally.

The management and business component of the CBFM model (the timber and non timber products from the PFMA) is to be conducted by a community co-operative which is directly accountable to its members in terms of business activities and to the *lembaga* in terms of its own activities within the PFMA. It must be noted that while the co-operative is directly accountable to the *lembaga* it remains autonomous in terms of its policy, function, management and associated activities.
The co-operative should also manage the purchase and marketing of other natural resource products from the adjoining non forest areas such as rubber, resin, weaving etc.

The project has secured a 500 ha "test area" within the PFMAs' remaining natural forest for the development of the proposed silvicultural and harvesting system and results will be available before the middle of July 1999. Given favourable results and acceptability of the model to the government, it is anticipated that the remaining 15,000 ha of natural forest within the PFMA will be allocated to the community for commercial harvesting over a 40-year period.

Information from the SFDP experience that is useful for the revision of forest policy, law and land use is continuously being presented to the Department of Forestry and Plantations in an effort to ensure that the remaining forest areas considered compatible for CBFM are protected and not converted to other land uses.

To establish a balanced perspective with respect to establishing CBFM in Indonesia, a table outlining the objectives and potential problems of implementing this model is outlined below:

Objective
1. Sustainable forest management over the remaining natural forest 2. Legalise the illegal logging of the natural forest 3. An increase in Government revenue which can be more equitably shared between the stakeholders 4. Stabilisation & security through ownership & empowerment of the local communities 5. Creating jobs (CBFM is a labour intensive activity)
Potential Problems
1. A possible uncontrolled increase in forest utilisation 2. Increased financial & human resources are needed from the government to - monitor, control & train its staff in CBFM - establish & manage a CBFM enterprise by the communities 3. An Institutional management structure has not yet been established 4. The number of stakeholders participating will increase (more bureaucracy and time & potential for conflict)

Within the current government system there are constraints which can delay the implementation of CBFM. They are:

- Overlapping & inappropriate land use prevent bringing the remaining natural forest resource under SFM. In many cases, much of the remaining natural forest is allocated for alternative land use.
- Different perceptions of the objective and function of CBFM amongst institutions and stakeholders.
- Many current rules and regulations are in conflict with the objective of SFM and CBFM.
- The high expectations of the government that SFDP will produce all the answers for the development and implementation of CBFM.

In summary, the implementation of CBFM will require significant resources from the government in the form of training, and of loans/guarantees for communities to establish and manage CBFM. In addition, the current government rules and regulations will have to be simplified without losing their capacity to effectively monitor and control forest operations. If the system is not changed and there is no real sense of ownership and security, the communities will possibly revert to illegal logging practices, despite the obvious advantages to all stakeholders of SFM supported by CBFM.

Aspects of Social Forestry in Bhutan

REINHARD WOLF

Background

The Buddhist Kingdom of Bhutan lies in the Eastern Himalayas between China (Tibet) and India. The country covers about 40.000 sq. km rising steeply from the Siwalik deposits bordering the Brahmaputra plain to a height of almost 8.000 m in the Himalayas. The forest resource in Bhutan is unique in the entire Himalayan area. It has enormous variety, changing with altitude over a relatively short distance from sub-tropical forest through temperate broad-leaved and coniferous woodland to high alpine meadows.

The Bhutanese economy, which has been of an early medieval form probably comparable with those found in montane Europe at the start of the millennium, has developed drastically over the last 30 years. The forestry department was established in 1969 with a mandate to protect and manage the forests and to develop an export industry. All land, which is not explicitly registered as private land, has been declared government reserved forest. The total forest area is estimated at 29.000 sq. km (corresponding to 72.5 % of the total area) out of which about 55 % is broad-leaved forest and 45 % conifer. With a population of only about 600.000, the ratio of people to forest is still very favourable (almost 5 ha per person) and the forests are still largely intact. Free and uncontrolled cattle grazing is presently posing the biggest threat to the maintenance of the present forest ecosystems. About 29 % of the total land area is under protected area management (mainly National Parks).

The concept of “Social Forestry” was introduced in Bhutan by a Royal decree in 1979. During the initial stage, “social forestry” was confined to the distribution of cost-free tree seedlings. However, the programme could not take off due to the legal framework of tree tenure. Trees planted on private land were still considered as Government property; this proved to be a big disincentive to plant trees.

For commercial purposes (logging), forest management is practiced on less than 5 % of the total forest area in so called Forest Management Units (FMU) with well developed forest management plans. The export of unprocessed wood was banned in January 1999. Until then, most of the exported timber was sold to India.

Rationale of the Participatory Rural Appraisal (PRA)

A participatory rural appraisal (PRA) of forest resources and local forest management was conducted in December 1998 in the villages of a clearly confined watershed called Lingmutey Chhu. The main purpose of the PRA was to investigate the perceptions of the communities concerning the present forest management system of the forestry department (FD) and their interest in working as partners with FD staff to develop a more participatory forest management system.

The PRA area: Lingmutey Chhu watershed

The watershed spans the boundaries of three districts (Punakha, Thimphu and Wangdue) in Western Bhutan, ranges from 1200 to 3000 m.a.s.l, covers an area of 3400 ha and contains 6 villages with 175 households (see Table 1).

Forest covers approximately 3000 ha (i.e. 88 % of the watershed area) and forest resources range from severely degraded Chir pine (*Pinus roxburghii*) in the lowest part of the watershed (around Wonjokha) to closed canopy deciduous forest on the northwestern ridge (near Limbukha and Nabche).

Table 1: Lingmutey Chhu watershed village characteristics

Village	Altit.	House holds	Crops	Availability of forest products
Dompola	1800	35	Rice-Wheat	Moderate
Limbukha	2000	35	Rice-Potato/ Wheat	Good
Mat.Chhu	1500	20	Rice-Wheat/ Mustard	Scarce
Nabchhe	1800	20	Maize	Moderate
Omtekha	1600	28	Rice-Wheat/ Mustard	Scarce
Wonjokha	1200	37	Rice-Wheat/ Mustard	Scarce

The present forest management system

For private rural households a quota system is applied: the main wood products (green firewood, building timber, poles) are issued against payment of royalties. Households submit their application through the headman of the sub-district to the district administration and then to the local district forest officer. Trees can be harvested from any permissible area in the country and the selected and markable trees are marked by the local forest guard. The trees are then felled and transported by the household.

Forest guards are posted throughout Bhutan to supervise wood extraction, to patrol their forest area to prevent illegal felling, forest fires etc, and to fine those responsible for any illegal acts.

Apart from these activities, and some control in the selection of trees, there is no strong management planning of the forest resources used by the local communities.

The implementation of the PRA and some comments on PRA tools

The PRA went well and villagers expressed appreciation that they were being consulted on forest resources and management. The villagers requested that only 1 day be spent on the PRA. This reduced the amount of information collected, and the extent of cross checking (triangulation).

Village household participation was good (approx 70%) and both men and women were present. Gender related forest resource use differences were considered by discussing key issues separately with women and with men. Plenary sessions with all the village participants at the end or the beginning of the daily PRA allowed for some cross checking of information, as did the plenary meeting with representatives from all villages on the final day of the PRA.

Other than the participatory mapping of forest resources, visualisation techniques (e.g. participatory construction of seasonal calendars) were only used occasionally. The villagers found it easier and less time consuming to report

verbally on the different months and responsibilities for produce collection, and their priority species and products; than to produce seasonal calendars or matrices.

The PRA findings were compiled and verified in a plenary meeting at which the headman of the sub-district and 5-6 representatives of each village attended.

Results of the PRA

Forest resources

In general, the villagers agree that forest cover is increasing but that the quality is declining, that collection distances for fuelwood, timber and shingles have increased and that there is over-extraction from certain areas. Villagers collect some products from beyond the watershed, and from areas belonging to neighbouring sub-districts.

Forest products

With the exception of one village, the watershed forest products used (firewood, timber, shingles, leaf litter, grazing, edible plants) are similar across villages. Only Nabchhe village reported the sale of forest products (mushrooms and ferns).

Water

The priority problem in all six villages is shortage of water for irrigation and/or for drinking. Wonjokha, in the lower watershed and at the tail end of the watershed irrigation and drinking water systems, is worst affected.

Firewood

The problem of firewood is seen in relation to availability, collection distance and preferred species. All villages prefer firewood from hard wood species. For their preferred hardwood species they all indicate an increase in collection distances or a tendency to replace it with Chir pine.

Timber

Procuring timber for construction is considered a problem in most of the villages. Over the years timber resources have declined and big trees are no longer available nearby.

Shingles

Except Nabchhe, all villages reported shingle production as a problem. The use of CGI (corrugated galvanised iron) roofing is beginning to reduce the pressure on tree species used for shingle production.

Priority forest products

Overall, the six villages regard firewood as the top priority forest product that would require increased production. Women were unanimous in this view but some men ranked timber or grazing higher. The second and third priorities varied.

Traditional forest management

Villagers reported the former traditional system as one of free and unrestricted harvest within the village forest and strong protection of their own forest areas against illegal use by outsiders. Villagers predicted that the traditional system would have led to severe forest depletion near the villages and continuing inter-village conflicts over forest resources.

Village institutions

All villages reported effective community institutions for religious festivals and/or for management or harvesting of common natural resources (e.g. irrigation water; shingle collection). Water management and community forest management organisations are usually the most formal ones with rules, sanctions and formalised leadership. Reciprocal agreements exist between communities inside and outside the watershed for joint use of natural resources

Villagers perceptions of the forest management system

All villages expressed considerable satisfaction with the positive impact of the present system (of the forestry department) (1) on natural forest regeneration near the villages, (2) on the reduction of inter-village conflicts over wood products, (3) on the improved equity in forest resources access and (4) on forestry staff being responsible for forest conservation and protection.

However, villagers are concerned that the system gives them no right to protect resources in sensitive areas, e.g. water sources, and that wild animal damage to

crops and livestock has increased. They find travelling to the forest office for all permits and permit renewal inconvenient; and the timber quota of 30 trees per household for new construction and the firewood quota of 200 head loads per year (when their consumption needs are around 720 head loads) insufficient.

Preferred forest management systems

For most villagers, their first preference for an improved forest management system was village protection of an area of forest near the village for their own use, primarily for firewood. Villagers developed some interest in a watershed system (with restricted access for outsiders), to ensure village access to all its forest products. Opinions on the preferred forest management systems remained divided, with the older men and women doubting whether a modified system could resolve conflicts of interest, unequal sharing of forest resources and resource depletion.

Equity of access

All of the villages reported that access to forest resources was equal for all households, but that use of forest resources was greater for resource rich households (more labour, more cattle and more cash for buying permits).

Gender

With regard to forest products, women consistently placed greatest emphasis on firewood while men also prioritised timber and grazing: only women prioritised leaf litter, which is collected as bedding for cattle and then used as important organic fertlizer for farming. Women regard forest product harvesting as mainly the responsibility of men, who would have a more detailed knowledge of the forest. Nonetheless, women are frequently the lead decision makers with regard to the household need for forest product supply (firewood, shingles, building timber). In return, men were better placed than women to suggest potential ways and modalities for a participatory management of the watershed forest resources.

Women's and men's opinions and priorities did differ, but the presence of only one male "observer" to a women's sub-group silenced the women and usually only one or two would express themselves in a fully mixed village group.

Community decision on "participatory forest management"

The headman of the sub-district and the various spokespeople for the different villages were consistent in their preference for retaining the present system of forest management. The main reasons they expressed were: (1) the improvements that they had seen in tree cover near the villages, (2) their fear of community conflict, and (3) their uncertainty whether they would see the benefits of the extra work load for participatory forest management. Some suggestions were made to improve the present forest management system and some participants expressed interest in reconsidering the "participatory forest management" option. A schedule for future action was drawn up.

Research topics

Two research areas were identified which would contribute to sustainable forest management in Bhutan: (1) To investigate the extent to which farmers' criteria for forest quality assessment could replace classical resource intensive methods of forest inventory and assessment, (2) to analyse in more detail the traditional forest management system of communities and the extent to which it could serve as a basis for participatory forest management.

Points to ponder

A number of issues that emerged from the Lingmutey Chhu PRA are of wider relevance to sustainable forest management in Bhutan:

Tree selection

When villagers fell trees they naturally take the "best" trees for their purpose, leaving behind the "worst" trees. Consequently, although forest regeneration is occurring, it is likely to be of increasingly poorer genetic quality and of less valuable species. Some amendment is needed in the rules guiding tree selection for felling, in order to maintain adequate quality in the breeding stock.

Cutting of firewood

For firewood allotted on a head load basis, trees are not marked but the applicant must indicate the area from which s/he will collect the wood. The Range Officers

issuing the permit cannot be expected to always know whether the indicated area is suitable or sensitive for wood collection. Once issued, the permit is legal and local inhabitants have no possibility to protect areas which they consider as sensitive. Local communities and their forest guard should jointly identify a list of critical areas and inform the Range Offices who should avoid issuing permits for these areas.

Villagers go on their own to the area indicated in their permit, and collect as many head loads as possible of their preferred species (e.g. the hardwood saplings in a Chir pine dominated area), very often cutting the best trees that are of markable size. This system called 'seyshing' is very destructive to forest regeneration and the issue of seyshing permits should be restricted or stopped.

The role of the local forester

As long as no trees are cut down without a permit, the local forest guard is doing a fine job. S/He could do more because of his/her detailed knowledge of the local community and local forest. Given some decision making powers on local forest management, the local forest guard could be an important resource for working towards sustainably managed community forests. A number of changes in his/her responsibilities are suggested. These would require refresher training, initially on participatory extension methods and later on skills for local forest management.

Towards participatory forest management

Community participation in the village PRA's was good. Even in the absence of more substantial moves towards participatory forest management, this process of consultation with the community (and where possible acting on the issues raised) could be adopted more widely as a first step towards community involvement in sustainable forest management.

The outcome of the Lingmutey Chhu watershed PRA was not in favour of participatory forest management. This may reflect a dependency mentality or may be a rational response of the community, who prefer to maintain a system which they see working to their advantage rather than to pilot a new system in which they perceive that their responsibility would obviously increase without an

obvious and equal increase in benefits. Community interest in participatory forest management will be greater if the benefits to the community are clear. Protection of the watershed forest from use by outsiders can be guaranteed by supportive Forest Range Offices and this is a clear benefit. A major disincentive under the present forestry rules is the uncertainty of future control and ownership by the villagers of the trees and tree products.

Multiple forest management systems

An appropriate approach towards participatory forest management is neither "the Forest Department management system" nor "the participatory forest management system". Instead there is a need for many different systems graded to suit the confidence of the community, from those in which the communities have relatively less responsibilities to those in which the communities largely manage their own forests, while respecting sustainable production and conservation principles.

Institutional development for participatory forest management

In all villages of the watershed, effective community institutions exist for managing religious events and common natural resources. However, many villagers were not confident that they could develop new institutions to effectively implement a participatory forest management system. This suggests the need for a period of institution building and reaching agreement within and between the different villages communities, requiring consistent support from appropriately skilled staff.

Gender and the involvement of women

The priorities of men and women for forest products and species did differ and women frequently initiated decisions to harvest forest products. Women thus influence the demand for wood products. Any forest management plans developed in Bhutan will need to involve and to satisfy both women and men.

Literature

BG-SRDP, 1999: Participatory Forest Management for Local Use: Report of a Participatory Rural Appraisal of Forest Resources and Forest Management in the Lingmutey Chhu watershed (Project Report)

DHITAL, D.B.; 1998: Forest Management in Bhutan (Unpublished)

SARGENT, C; 1985: The Forests of Bhutan (in: AMBIO VOL. 14 NO. 2)

Social Forestry in Latin America – A First Overview of the Issues

SONDRA WENTZEL

I Introduction

During the late 1980s and early 1990s, there was quite some enthusiasm in Latin America for participatory protected area management, so-called Integrated Conservation and Development Projects or ICDPs, and for social forestry, especially community-based forest management or community forestry. Social forestry was promoted as a sustainable development model for rural, particularly indigenous people in forest areas. High hopes were set in non-timber forest products (NTFP) because their extraction was assumed to have a limited impact on the forest (concept of "extractive reserves"). Small-scale commercial timber extraction also received increasing attention.

By the end of the 1990s, a more realistic assessment was being taken and there has been increasing recognition of the difficulties and limitations of these approaches – but also the conviction that participation of local people in conservation and forest management is a *sine qua non*. The Latin American experiences, gained in a context of increasing democratisation and in some countries profound legal and institutional reforms towards decentralisation, people's participation and recognition of indigenous rights are therefore worth careful assessment.

This article presents some results of a 4.5 months study tour on the state-of-the-art of social forestry in Middle and South America.[18] The focus was on

[18] Between late July and mid December 1998, I visited (not only GTZ-supported) forestry and conservation organizations and projects in the USA, Mexico, Guatemala, Honduras, Nicaragua, Costa Rica, Colombia, Ecuador, Peru, Bolivia, and Brazil (see Appendix 1; some information on the countries visited in Appendix 2). The study tour was preceded and accompanied by an extensive literature review. I would like to take this opportunity to thank everybody I met once again for sharing their precious time and information with me. Notes on each country including bibliographies of relevant documents are available upon request via e-mail (SWen642491 @aol.com).

community or smallholder management of natural humid (sub-) tropical forests for commercial timber extraction. The idea for the study arose from first-hand experiences in the rather difficult circumstances of South East Asia, especially Indonesia.[19] The study tour was conducted to contribute to our understanding of social forestry and provide a basis for improving GTZ services in this field. The three broad questions pursued were:

1. Is sustainable management of these forests economically viable in Latin America, given that the density of commercial timber species is even less than in South East Asia? The success of social forestry obviously hinges on the feasibility of sustainable forest management in general.
2. Which experiences have been made with different types of social forestry, especially with regard to institutional arrangements (relationships between the forest administration, private enterprises, NGOs and communities; suitability of different types of local organisations for – different aspects of – social forestry)? Although these arrangements obviously need to be country- and culture-specific, it was intended to identify some general lessons or principles.
3. On this basis, what conclusions can be drawn on desirable or even necessary adjustments in project management instruments and procedures?

Given the amount of information gathered, this article is only a first step in what will hopefully become a joint process of learning from experiences in social forestry in the GTZ and beyond.

II The Economic Viability of Sustainable Forest Management in Latin America

There are major differences in the size and state of (sub-)tropical broadleaf forests in Central America (including Mexico) and South America (focus here on the Amazon basin). The pressures from timber extraction and, in its suit,

[19] See article in this issue.

conversion to other land uses have so far affected a higher proportion of the (initially much smaller) forests in Central America than in the vast Amazon basin.

In Latin America, especially in the Amazon, forests under sustainable forest management (SFM) are rare. Nevertheless, a still limited but increasing number of certified forest enterprises document that SFM is technically possible.

However, the economic viability of SFM is still being debated. So far, timber extraction in Central and South America has focused on high-value mahogany, which has already been included in CITES Appendix III as an endangered species. In all countries visited, un- or underdeveloped markets or unattractive prices for lesser known or secondary timber species were mentioned as a major problem for SFM. Exceptions are those regions where deforestation has already advanced to such a degree that construction timber, for example, is getting scarce. The key economic issues are the failure of markets to internalise costs & benefits of SFM and to fully value future benefits of forests, and the volatility of markets for certain extracted luxury goods (Freese 1997).

For Central America, a recent study confirms that expectations for immediate economic returns from certification (the costs of which are so far usually covered by outside sponsors) are too high. In some cases there was no price impact at all (Camino/Alfaro 1998). Finally, it is predicted that ”projected increases in global round wood prices will not be large enough to make a significant improvement in the commercial prospects of sustainable tropical forestry” (Southgate 1998:60).

In this situation, there is a need for more discussion about how to finance SFM in high-diversity broadleaf forests. The question arises as to which parts of the SFM management cycle can and should be self-financing for the forest enterprise (be it run by a private company, a community or a smallholder), and which costs need to be covered by which combination of public and private, in-country and international sources? In this context it is argued that since the benefits of forest conservation and management are highest at the national and international levels, while the costs are usually highest for local people, special support for communities or smallholders is warranted (Richards 1996).

So far, Costa Rica is the only country that has established a system of "payments for environmental services" (*Pagos para Servicios Ambientales* such as CO_2 sinks, water, biodiversity and natural beauty). These payments are not only for reforestation, but also for natural forest management and forest protection by smallholders.[20] In Honduras, the FINNIDA-supported MAFOR project has experimented with a *Fondo de Manejo Forestal* at municipal level (MAFOR 1996). The CIDA-supported Broadleaf Forest Development Project (PDBL) has done the same at regional level on the Atlantic coast (contributions from the forest agency, municipalities, producer groups, and the private sector) for those forest management costs which producer groups are unable to cover (PDBL 1995, Poirier 1998).

III Key Issues in Social Forestry

III.1 Land Tenure

In Latin American forest areas, as in all the tropics, addressing land tenure conflicts is a major issue in SFM and a precondition for developing social forestry. In most countries these problems remain unsolved. An exception is Mexico, where, since the Revolution, indigenous communities have had their land ownership – at least in theory – recognised, and settler communities in frontier areas like Yucatán were given large forest areas as *ejidos* in common property. However, contrary to Africa and Asia, the Amazon has seen an impressive process of indigenous mobilisation since the 1960s that has concentrated on recognition of *territorios indígenas.* For indigenous people, this includes rights to land, water and mineral resources. During the 1980s and 1990s, often in the context of profound constitutional reforms, especially in South America, but also in Nicaragua, indigenous people have received different types of government recognition over extended – usually forested – areas (Reconocimiento 1993). In the Amazon, these areas comprise more than 100 million hectares (Smith forthcoming). Indigenous peoples are now facing the challenge to consolidate, demarcate, defend and manage these areas.

[20] For details of the system, see Heindrichs 1997 and Watson et al. 1998.

For this, "the alternative with the best track record is demarcation of community lands and award of community titles, leases, or special status ... accompanied by recognition of traditional authority to resolve resource rights disputes. This option does not require the state to understand the complexities of the communities' tenurial system. Community-based tenure offers a protective and enabling shell ... that allows locally derived management institutions to flourish and adapt to their ecological and social environment" (Alcorn 1996:246). The GTZ and KfW-supported indigenous land protection project (PPTAL) at the Brazilian Indian Agency FUNAI, a part of the PP-G7 (*Programa Piloto para a Protecao das Florestas Tropicais do Brasil*), has gained valuable experience with this difficult task.[21] In Nicaragua, The Nature Conservancy and the GTZ-supported BOSAWAS protected area management project have supported the demarcation of and participatory management planning in five indigenous territories which constitute the core of the reserve.[22]

In countries like Honduras and Guatemala most forest areas are still classified as state forests.[23] Here, arrangements like "usufruct contracts" (Honduras) or "community forestry concessions" in the multiple use zone or buffer zone of the Maya Biosphere Reserve (Petén, Guatemala) provide local people with some tenure security (albeit no recognition of land rights). In Honduras, under the *Sistema Social Forestal*[24] from the mid 1970s onwards, co-operatives and community groups could obtain annually renewable harvest rights to pine resin and timber (later in the context of 40-year contracts). In 1993, this system covered an area of 548,000 ha mainly of pine forests, managed by 311 groups (Ochoa 1995). In Guatemala, since 1994 communities in the Maya Biosphere Re-

[21] This is currently being compiled in a publication. Check the PPTAL website at: http://www.funai.gov.br/ pptal

[22] For an example, see Kipla Sait Tasbaika 1997.

[23] In Honduras, until 1992, even trees on private land were defined as state property and subject to stumpage fees.

[24] See article by Killmann et al. in this issue.

serve – the oldest of which were founded around the turn of the century by *chicleros* (latex gatherers) – have been given the possibility to apply for concessions for the commercial use of timber and non-timber forest products.[25]

Another interesting type of forest management unit in both countries are municipal forests (*bosques ejidales)*, which may gain more importance elsewhere in Latin America in the process of decentralisation. These forests are managed as an income source for local government and/or local people. They are the focus of the FINNIDA-supported MAFOR project in Honduras (pine forest areas) and of the GTZ-supported PMS in Guatemala (Carrillo/Ordonez 1998). In Bolivia, the new forest law (1996), besides handing over 25% of the royalties from timber concessions to municipal governments, foresees the establishment of municipal forest reserves (up to 20% of state forests in their area) to be managed by groups of local people (*Agrupaciones Sociales del Lugar, ASL)* (Kaimowitz et al. 1998). The BOLFOR-project (USAID) is supporting the newly created Forest Superintendency in the implementation of these innovative regulations.

Nevertheless, a recent comparative assessment of different tenurial arrangements cautions that the prospects for common property management regimes (CPMR) – or rather a ”continuum of open-access, CPMR and private tenure land-use arrangements along which communities are continually evolving in one direction or another” (Richards 1997a:1) - are an open question:

- Longer established indigenous CPMRs are affected by increasing market integration and centralised tenure legislation, although this does not necessarily lead to their demise;
- More recently created CPMRs, both among indigenous and non-indigenous people, may face even more social, legal, institutional, economic, and technical problems.

[25] Contracts cover a period of 25 years (in some cases 50), and the communities have to pay a one-time fee, a performance bond and standard production-based taxes (Gretzinger 1998).

In Costa Rica, most forests, apart from a few small indigenous areas, are in private hands. This creates a different type of challenge for social forestry which also applies for smallholder settlements and co-operatives in many Latin American forest frontier areas. The experiences gained in GTZ-supported projects in Costa Rica, Guatemala and Ecuador, and recent developments in Brazil indicate that smallholder forest management for commercial purposes can be viable from about 40 ha onwards (Brazil), 20-30 ha (Costa Rica) or even under 20 ha (Ecuador) if administrative and technical requirements are simplified. In the GTZ-supported PROFORS-project in Sucumbíos, Ecuador, the focus is on enrichment planting on individual plots (farmers receive support for a max. 4 ha). Timber harvest has not started yet, but predictions of future profits are quite high.

Forest management plans have also been established for smallholder co-operatives consisting of individually owned or operated plots, but there is much variation in labour organisation, i.e. in what is done individually and what collectively. No systematic comparison and assessment of the different organisational options seems to exist yet. In one Guatemalan case, for example, standing timber is sold individually by all co-operative members to the same trader at a jointly negotiated price. In other cases, attempts are made to add value through co-operative-run timber extraction and processing (see III.2.2. below).

III.2 Forest Management

III.2.1 Non-Timber Forest Products

After the murder of rubber tapper leader Chico Mendes in Brazil in late 1988, ”extractive reserves” (an official land-use category in Brazil, but also relevant as community concessions in state forest areas elsewhere) received much scientific and public attention. By now, however, major ecological and economic limitations of a dependence on non-timber forest product (NTFP) extraction have been recognised: threats of over-harvesting in boom periods, price decline due to oversupply, substitution by other products, all ultimately result in the poverty of extractors.

There seem to be inherent limitations in NTFP-based social forestry since in natural forests these resources are either of high commercial value but low abundance or visa versa. This makes it difficult to establish socially, economically and ecologically sustainable enterprises (Salafsky 1997/98). A Brazilian author argued some time ago that ”extractive reserves have importance as a means of slowing down the expansion of the agricultural frontier for the short and middle term. In the long term, however, the disappearance of extraction is inevitable” (Homma 1992:31).

As a result, ”the typical venture aimed at promoting commercially viable harvesting of NTFPs is a small-scale one, aimed at taking advantage of a limited niche characterised by an existing and accessible market as well as favourable growing conditions. There is not room in Latin America for many such projects” (Southgate 1998:57).

Nevertheless, relevant and – on a local scale – encouraging experiences have been gained in Latin America with regard to the management of selected NTFPs as potential components of broader social forestry schemes, e.g. game in the Amazon (Bodmer et al. 1997, Fang et al. 1997) or in Mexico (*Plan Piloto Forestal*, see under 3.2.2.), or high-value medicinal plants (see Müller 1998 on *raicilla* in Costa Rica). In most cases, however, NTFP management means plant population enhancement or cultivation within or even outside natural forest, not just maintaining the extraction of a natural product at a sustainable level. An example for this are the *tagua* palm patches in Ecuador and Colombia, site of the Conservation International’s highly publicised initiative to promote ”vegetable ivory” buttons and carvings for ”tropical rain forest conservation” (Southgate 1998). Especially in the case of *ex situ* management, the contribution to natural forest maintenance - if any - is limited to decreasing harvest pressures. In the worst case, NTFP cultivation can even compete for land with natural forests.

III.2.2 Timber Extraction, Processing and Marketing

The usual argument for community-based or smallholder timber production is that, since timber is currently the most valuable product extracted in large

quantities from tropical forests, local people need to have their share if they are to have a stake in forest maintenance. The general characteristics of community timber production (CTP) are that

- resource rights are either owned by or assigned to local community members
- people harvesting the timber live near the site (timber is part of a larger land-use framework)
- harvesting is smaller in scale and less capital intensive than in industrial timber harvesting
- CTP enterprises seek to add value to raw materials on or close to the harvesting site
- capital is reinvested locally (incentive for sustainability) (Salafsky 1997/98:5/6).

Community timber production may have ”inherent limitations where large-scale industrial wood production or preservation of fragile ecosystems are of primary concern” (Cabarle 1991:8), but in principle it seems an interesting option for many forest areas.

In Southeast Asia, the still limited ”evidence is at best mixed” (Salafsky 1997/98:23) as to whether these enterprises can be ecologically, technically, economically, institutionally, and socially sustainable. In Latin America, the experiences of several well-documented projects in Quintano Roo, Mexico (*Plan Piloto Forestal*), lowland Peru (COFYAL) and lowland Bolivia (CICOL), and cursory information on other initiatives also show that establishing viable community-based forest management and timber processing and marketing enterprises in (sub)tropical broadleaf forest areas is difficult.[26]

[26] See Richards 1993, LTC 1995; more references in Appendix 3. The experience of indigenous communities in the more homogeneous and accessible pine forests of Oaxaca, Mexico, who without much outside support have developed impressive forest enterprises, is more encouraging (see LTC 1995, Merino 1997).

One basic issue that has already been mentioned is the questionable economic viability of sustainable forest management in general (see section II) which seriously affects fledgling community enterprises. Another is the fact that most forests now managed by communities or smallholders have already been "creamed off" by previous logging and thus form a resource base in need of rehabilitation. In fact, although all community enterprises visited or documented have received substantial free-of-charge technical and often also financial support, they have difficulties making profit. There is also the issue of economies of scale: in Quintana Roo, Mexico, for example, approx. 9000 ha of production forest are considered necessary for a viable community enterprise, and in *ejidos* with smaller forest areas community members are said to loose interest in forest management due to limited immediate benefits.

Technically, no major problems are reported with regard to timber extraction by local people, neither by selective logging based on inventories and management plans, nor under the strip-cutting system developed by the Tropical Science Center in Costa Rica and applied in Peru. Both systems are implemented with no or minimal post-harvest treatments.[27] With adequate training and support, local people were able to conduct all necessary field-based tasks with regard to inventories, management planning, timber extraction and processing. In several cases young foresters of community origin are taking over the technical services previously provided by outsiders. In many countries, organisations and projects, technical guidelines, manuals and training courses for simplified inventories and management plans have been developed which can be used by new initiatives.

Serious difficulties often occur with regard to the business management of community sawmills or timber marketing enterprises, but these may be due as much to social pressures on the individuals in charge than to insufficient skills (more on this under III.3.).

[27] The technical details are described at length in the literature and will not be dealt with here.

III.2.3 Multiple-Use Management of Forest Resources

Multiple-use management of forest resources is being promoted as a means to reduce the dependence on a single or a limited number of products and to ensure a more steady flow of benefits.[28] In the countries visited, there are attempts to combine the extraction of an increasing number of timber species with locally-specific NTFP or with eco-tourism. However, in practice this is often complicated by the trade-offs involved in many combinations of forest products.

In Honduras, for example, where GTZ-supported projects promote multiple use forest management in - comparatively simple - pine forests (Uebelhör 1998), there may be conflicts between resin tapping and timber harvesting concerning use rights, harvesting schedules, and physical impact. The *Plan Piloto Forestal* in Mexico (broadleaf forest) concluded that the issue is not the maximisation of the number of forest products used (i.e. increase in total yields), but rather their optimal combination to achieve synergies enhancing forest area maintenance (Janka 1998). Eco-tourism in at least one case in Mexico and another in Costa Rica made the communities cancel previously established logging plans since tourists prefer to see undisturbed forest. It remains to be seen which benefits will be higher and more stable in the long run.

III.3 Community Organisation

Establishing a viable business is a challenge for entrepreneurs all over the world, even more so for communities or smallholders with limited experiences in market economy. First of all, the terms ”community” and ”community-based” are often being used without much analysis of the social units in question. They provoke images of small, homogeneous groups with shared norms and common interests and a tradition of collective action, which is often not warranted (Agrawal 1997). An in-depth five-country study on Amazonian indigenous ”communities” and their economic projects shows that even among these relatively isolated,

[28] See Ford Foundation,1998, on experiences in Asia.

”traditional” people, ”the modern community, *resguardo* or *comuna*, as a property-owning unit, ... is quite likely not the same kind of kinfolk grouping that traditionally practised resource management. As a result, each community needs both new mechanisms to develop and put into practice a plan, and new social norms to ensure group compliance to the plan.” (Smith 1996:213; see also Smith forthcoming). They "need to balance the interests of individuals, domestic units and the collectivity that owns the territory” (ibid. 214). ”Community” can therefore not be taken for granted as a basis for organising social forestry.

”Community forestry will be more successful where local institutions have a tradition of co-ordination, and there are established rules for managing common property resources” (Cabarle 1991:8). The organisational challenges throughout the process are:

- First Phase: Leadership to secure or obtain a forest area
- Second Phase: Managerial capacities; here, grassroots support organisations (NGOs) are often important
- Third Phase: Transparency and fairness (not necessarily equity) in the distribution of benefits
- Ongoing: Negotiating effective outside support while maintaining internal consensus (e.g. on land use decisions)
- Ongoing: Sound fiscal management, e.g. avoiding over-subsidising community projects from the profits made at the expense of reinvestment in the community forestry enterprise (ibid. 6/7).

A more fundamental issue is that ”the contradiction of values between the indigenous Amazonian economy and the market economy has led to a confusion within the moral order of indigenous societies” (Smith 1996:214). This puts the managers of community enterprises under much social pressure to share their apparent wealth (i.e. community funds). There is also a constant conflict between immediate redistribution of benefits for either community or individual needs and reinvestment in the enterprise needed e.g. for maintenance of equipment. The

study concludes that, ”in general, collective enterprises have not been viable among indigenous Amazonians” (ibid. 205) and that ”production is an activity best left to the domestic unit” (ibid. 208). Others argue that in view of the unavoidably increasing market integration of remote areas, it is necessary to anticipate its potential negative effects and strengthen grassroots organisations in processing and marketing, focusing on already individualised areas of the indigenous economy (Richards 1998). In any case, the more isolated and less market-integrated the people among whom a forest enterprise will be established are, the more problems can be expected and need to be anticipated with regard to business management.

Another issue is the user group approach pursued or at least permitted in several countries. In Asian countries like Nepal or India, it has proven to be more practical to work with the immediate traditional users of forest resources instead of government-imposed territorial units. In Latin American countries like Honduras or Bolivia, in contrast, where the formation of groups is promoted to gain access to new forest areas, the distribution of benefits from forest management among all inhabitants of a certain forest area and municipality becomes an issue. If the process of group formation is not guided by certain criteria and monitored, it can lead to the exclusion of a large part of the population. This may be desirable for business management purposes, but its social acceptability should at least be discussed in each particular case. User groups can then be requested to contribute to municipal or community funds.

Research on supra-community organisations like associations or federations in Latin America shows that they are usually more suitable for political purposes (pressure groups for land and resource rights, access to markets, etc.) than for managing economic projects, and that they hardly ever become self-financing (Bebbington 1996). Nevertheless, there are now associations of community forestry enterprises, like JUNAFORCA (*Junta Nacional Forestal Campesina*) in Costa Rica (founded in 1991) or UNOFOC (*Unión Nacional de Organizaciones de Forestería Comunal*) in Mexico (founded in 1992), and CICAFOC (*Comisión Centroamericana de Forestería Comunitaria*) at a Central American level

(founded 1994 and a major partner for the FAO-supported "Forest, Trees and People Program" (FTPP) activities in the region).[29] These associations, like many of their member organisations, provide technical services which were formerly a government monopoly or non-existent. In addition, they strive to participate in national discussions about policies affecting them.

III.4 Institutional Change

All recent overviews on social forestry agree on the need for policy and institutional changes within government forest agencies (and beyond) and the development of a new division of labour and collaborative relationships with the private sector and NGOs (pluralistic approach). While major - and sometimes conflicting - political and economic reform processes (redemocratisation, decentralisation, deconcentration & deregulation, structural adjustment programs, *neoliberalismo*) have been underway in most Latin American countries, forestry has not always been at the core of these reforms. Other sector policies - as in the case of export crop or livestock development - often have negative impacts on forest maintenance. Also, forest policy reform processes have not always been well documented and analysed.

Nevertheless, several recent more theoretical considerations, comparative studies on natural resource management and forest policy reform processes, as well as country studies on Costa Rica and Bolivia document the serious conflicts of interests between different stakeholders, but also potential strategies for reform towards a more appropriate division of labour and framework for collaboration.[30] These issues cannot be discussed in detail here, but the preliminary conclusions of a comparative study by IIED indicate the overall direction:

[29] So far, there seem to be no equivalents in South America.

[30] See Uphoff 1998, Carney/Farrington 1998, Morrell/Paveri 1994, Richards 1996, Bass et al. 1997; Watson et al. 1998 on Costa Rica and Pávez/Bojanic, 1998, on Bolivia.

- "'Policies that work for forests and people' will derive from processes that generate *local multi-stakeholder understanding and commitment,* that *link policy-making with its actual outcomes,* and that are able to *deal with change."* (Bass et al. 1997:189) The "10 elements that work" are:
- Opening up the policy process to civil society through forest forums at national and sub-national levels.
- Information, monitoring and research which actively feeds into policy and management processes.
- Capabilities to address extra-sectoral influences on forests.
- Agreed national goals for forests – focusing on people and their needs for forest goods and services.
- Policy instruments better geared to stakeholders and national goals for forests.
- Decentralisation, devolution and strengthening capacity as appropriate.
- Standards and codes of practice for improved accountability.
- Development and spread of resource-conserving technology.
- Democracy of knowledge.
- Framework for continuous policy improvement (ibid. 189-190).

The role of the state – and therefore also of central-level forest agencies – ideally gets reduced from direct involvement in implementation to creating a conducive policy environment, setting norms, monitoring compliance, and mediating conflicts between different stakeholders (Richards 1996). This situation leads to the paradoxical situation that commitment is needed from those who are losing power through reform, and that a minimalist state is expected to deal with the complex new task of facilitating its own reform (Carney/Farrington 1998). Therefore, during the reorganisation of forest agencies, especially with regard to social forestry, the previous gap in extension and other services for local people can hardly and should not be filled by central or regional government agencies. However, the development of alternative approaches is still in process.

As already mentioned, local governments are increasingly important actors in Latin America: new laws in Brazil (1988), Guatemala (1988), Honduras (1993), and Bolivia (1994), for example, permit or even require greater municipal involvement in forest management and conservation. However, besides often still lacking the technical and managerial capacity for providing the foreseen forestry extension services to community or smallholder associations, local governments may also be under pressure by local business elites not to use their new opportunities in the common interest.

In such situations, local peoples' organisations can and need to demand accountability. In addition, as the Mexican and Costa Rican cases show, producer associations can establish their own forest extension services. In contrast, there is so far surprisingly little NGO involvement in social forestry that goes beyond small pilot projects. It seems that many NGOs in Latin America are still in a process of reassessing their position vis-à-vis the state (Bebbington 1997) and timber extraction. In contrast, there is much more NGO involvement in nature conservation. There is also little information on successful partnerships in social forestry between local people and large private companies in Latin America, which, given the situation of ongoing direct competition for and conflict over resources may not be surprising.

Photo 3: Members of an extension service of a Mexican producer association discussing a community's management plan

Obviously, there are no blueprints for ”multi-agency partnerships”. Nevertheless, it is clear that the institutional change process requires a profound reorientation of government officials and their new partners at all levels, focusing on social skills. One contribution to this is the development and spread of participatory methodologies. As in other parts of the world, PRA (participatory rural appraisal), integrated human development, *sistematización* (process documentation and analysis), self-evaluation etc. have been applied, tested and adjusted in many social forestry projects in Latin America.

A major challenge in the endeavour of institutional change is usually the process of ”scaling-up” from intensively supported and monitored pilot projects focusing on a small area and a limited number of communities to a regional or even national level. In the countries visited, the *Plan Piloto Forestal* in Mexico is certainly the project with the broadest impact, having covered in its 15 years of work (1983-1998) approx. 400,000 ha of forest managed by 50 *ejidos* in several associations which provide their own technical services, operate their own sawmills and marketing, and have some influence on forest policy through their regional and national federations (Janka 1998). Although this area is half of the federal state’s remaining production forest, in comparison to the situation in ”mega-forest” countries like Brazil, it is not very large. Due to sheer distances and the number of administrative layers, institutions and persons involved, scaling-up will be much more difficult in a country like Brazil than in Costa Rica, a factor so far insufficiently taken into consideration in development co-operation, not only in forestry (see e.g. number of GTZ-supported projects and staff in Table 1).

IV Challenges for Project Management

The challenges involved in developing and institutionalising SFM and especially social forestry have consequences for development co-operation. The ODI review on institutional aspects of natural resource management concludes that donors should be ”strengthening ... democratic pluralism” (Carney/Farrington 1998:92). Apparently, there is little hope for success in authoritarian settings. For forestry, there is agreement that international technical assistance is best provided

via "a programme approach that supports governments at every step of the structural modernisation and implementation process" (Morrell/Paveri 1994:37). Continued support is needed for managing reforms and establishing innovative partnerships. Also, there should be a more systematic selection of countries, and more control over quality of aid interventions, donor co-ordination and "increased funding of autonomous or semi-autonomous development funds" instead of single government agencies (Carney/Farrington 1998:104).

The recent DfID (at that time ODA) evaluation of experiences with "shared forest management" focuses more on consequences for the donor agency itself and concludes that the principle of participation implies "a challenge to development agencies' self-perception" (Bird 1997:179). "Shared forest management initiatives require time. This means changes in project management procedures to match longer timeframes to budgetary cycles, and in monitoring procedures where process-type indicators are credible proxies for longer-term impacts" (ibid. 181). All this, in turn, requires new skills among agency staff.

In this context, USAID is working increasingly through international NGOs (like CI, WWF, WRI, TNC). This approach can have advantages like mobilising experience in participatory work and contacts with national NGOs, but also limitations, especially in countries where NGOs are not yet accepted partners for government agencies (Richards 1994). Within German development co-operation, the BMZ tropical forestry sector concept (BMZ 1992) stresses the need for German agencies (mainly GTZ and KfW) to address the situation of forest-dependent people and ensure their participation in forestry projects, and to support not only government agencies, but to collaborate also with national NGOs.

Two recent comparative BMZ evaluations[31] and studies by a "sector project"[32] address institutional issues in (social) forestry projects in Latin America. In

[31] On Ecuador & Costa Rica (BMZ 1996) and Mexico & Dominican Republic (BMZ 1997).

[32] "Ressource Management through Self-Help" or RMSH, see Pretzsch et al. 1992, Pretzsch et al. 1993, Förster et al. 1993.

addition, several projects have started to document their own approach.[33] The projects discussed vary considerably in terms of focus, which may be placed more on the forest (trying to gain control over the deforestation process by means of involving local people) or on the welfare of forest-dependent people for their own sake. As a result, and also due to the different political settings, their strategies differ as well.

The overall trend in German development co-operation in forestry is moving away from only working with – usually badly equipped and poorly motivated – central government forest agencies and towards institutional pluralism at different levels. In some countries, programme approaches combine policy advisory services at a central level with field-based projects in forestry, social forestry and protected area management. There is increasing recognition, that process-orientation and the capacity to react flexibly to sudden opportunities are vital for project success – which in turn requires changes in project planning and management. In the context of the decentralisation of the GTZ and the creation of regional forestry sector networks (*Fachverbunde*) among project staff, mutual conceptual and practical assistance during project planning, implementation and evaluation (as it happened for example with PPF/Mexico and projects in Guatemala, Honduras and Ecuador) is an interesting option.

The recently updated GTZ forestry concept outlines basic principles, service areas, "topics for the future" and a new set of skill requirements for GTZ advisors (GTZ 1999). The focus is much less on technical than on personal, social, and management skills. With regard to forestry-specific qualifications, the ability to deal with policy and institutional issues, and experience in social forestry and integrated land use systems are given the same importance as technical knowledge in forest management and nature protection. With these advisors, it should be possible to deal with the challenges of social forestry in Latin America and beyond.

[33] See e.g. Janka 1998, Carrillo/Ordonez 1998.

V References

AFOCO (Zoila P. Cruz C.) 1997a. Sistematización de la Fase de Orientación. Yuscarán, Honduras: Alcaldía Municipal – AFE-COHDEFOR – GTZ.

AFOCO (Zoila P. Cruz C.) 1997b. Sistematización de Procesos de Desarrollo Humano. Yuscarán, Honduras: Alcaldía Municipal – AFE-COHDEFOR – GTZ.

Agrawal, Arun 1997. Community in Conservation: Beyond Enchantment and Disenchantment. Gainesville, FL: Conservation & Development Forum (CDF) Discussion Paper.

Alcorn, Janis B. 1996. Forest Use and Ownership Patterns, Issues, and Recommendations. Pp. 233-257 in: John Schelhas and Russell Greenberg, eds. Forest Patches in Tropical Landscapes, Washington/Covelo: Island Press.

Amaral, Paulo, ed. 1998. Seminário Manejo Comunitário na Amazonia. Relatório. 20-25 de abril de 1998, Porto Dias, Acre. N.p.: WWF/SUNY/CTA.

Amaral, Paulo et al. 1998. Floresta Para Sempre. Um Manual para a Producao de Madeira na Amazonia. Belém, Pará: IMAZON (& WWF, USAID).

APCOB/CICOL/CICC/CABI 1995. Proyecto Participativo de Manejo Sostenible de Bosques y Recursos Naturales con Pueblos Indígenas. Santa Cruz de la Sierra, Bolivia: APCOB.

Barreto, Paulo et al. 1998. Costs and benefits of forest management for timber production in eastern Amazonia. Forest Ecology and Management 108:9-26.

Bass, Stephen et al. 1997. Policies affecting forests and people: ten elements that work. Commonwealth Forestry Review 76(3):186-190.

Bebbington, Anthony 1996. Organizations and Intensifications: Campesino Federations, Rural Livelihood and Agricultural Technology in the Andes and Amazonia. World Development 24(7):1161-1177.

Bebbington, Anthony 1997. Crises and Transitions: Non-Governmental Organisations and Political Economic Change in the Andean Region. London, ODI, AGREN Network Paper 76, July 1997.

Bodmer, Richard E., John F. Eisenberg and Kent H. Redford 1997. Hunting and the Likelihood of Extinction of Amazonian Mammals. Conservation Biology 11(2):460-466.

Bird, Pippa 1997. Funder or founder: the role of development agencies in shared forest management. Commonwealth Forestry Review 76(3):179-181.

BMZ 1992. Sektorkonzept Tropenwald. Bonn: BMZ Aktuell 14.

BMZ 1996. Hauptbericht zur Serien-Evaluierung Untersuchung von Trägermodellen in Entwicklungsvorhaben zur Bewirtschaftung forstlicher Ressourcen. Phase I Ecuador und Costa Rica. Bonn: BMZ, Referat 201.

BMZ 1997. Hauptbericht zur Serienevaluierung Trägermodelle in Projekten der nachhaltigen Bewirtschaftung natürlicher Ressourcen. Teilmaßnahme Mexiko, Dominikanische Republic. Bonn: BMZ.

Bryant, Dirk, Daniel Nielsen and Laura Tangley 1997. The Last Frontier Forests. Ecosystem & Economies on the Edge. Washington: WRI.

Cabarle, Bruce J. 1991. Community Forestry and the Social Ecology of Development. Grassroots Development 15(3):3-9.

Camino, Ronnie de and Marielos Alfaro 1998. Certification in Latin America: Experience To Date. London: ODI Rural Development Forestry Network Paper 23c.

Carney, Diana and John Farrington 1998. Natural Resource Management and Institutional Change. London and New York: Routledge.

Carrillo, Antonio and William Ordonez 1998. Modelo Municipal para el Manejo Sostenible de los Recursos Naturales en Petén. Guatemala City: MAGA/INAB/GTZ (PMS). BOSQUEjo Petenero, Documento No. 3.

CATIE 1998. CATIE's Contribution to Sustainable Rural Development in Central America: an overview of the impacts of CATIE/OLAFO and Magroves projects, 1989-1998. Turrialba, Costa Rica: CATIE.

Clay, Jason 1996. Generating Income and Conserving Resources: 20 Lessons from the Field. Washington DC: WWF.

COICA and OXFAM América 1996. Amazonía: Economía Indígena y Mercado. Los Desafíos del Desarrollo Autónomo. Quito: COICA & OXFAM América.

Fang, Tula G. et al., eds. 1997. Manejo de Fauna Silvestre en la Amazonía. La Paz, Bolivia: Instituto de Ecología. (& UNAP, UF, UNDP/GEF)

FAO 1997. State of the World's Forests 1997. Rome: FAO.

Förster, René, Jürgen Hess and Jürgen Pretsch 1993. Prozeßanalyse von drei Forstprojekten in Guatemala, Honduras und Mexiko – Eine Erfahrungsaufarbeitung. Eschborn, Germany: GTZ-RMSH.

Ford Foundation 1998. Forestry for Sustainable Rural Development. A Review of Ford Foundation-Supported Community Forestry Programs in Asia. New York: Ford Foundation.

Freese, Curtis H. ed. 1997. Harvesting Wild Species. Implications for Biodiversity Conservation. Baltimore and London: Johns Hopkins University Press.

Gretzinger, Steven P. 1996. Análisis Financiero del Manejo Forestal Comunitario en la Reserva de la Biosfera Maya: Caso de la Cooperativa Bethel. Turrialba, Costa Rica: CATIE.

Gretzinger, Steven P. 1998. Community Forest Concessions: An Economic Alternative for the Maya Biosphere Reserve in the Petén, Guatemala. In: Primack et al. 1998:111-124.

GTZ 1999. Rahmenkonzeption Waldwirtschaft des Arbeitsfeldes "Waldwirtschaft und Naturschutz" der GTZ. Eschborn, GTZ. (draft).

Heindrichs, Thomas 1997. Innovative Finanzierungsinstrumente im Forst- und Naturschutzsektor Costa Ricas. Eschborn: GTZ-Sektorprojekt TWRP.

Hess, Jürgen 1996. Kommunale Bewirtschaftung feuchttropischer Naturwälder – eine leistungsfähige und stabile Landnutzungsform als Garant für den Walderhalt? Sozio-ökonomische Untersuchungen in Waldbauerngemeinden von Quintana Roo, Mexico. Tharandt: Institut für Internationale Forst- und Holzwirtschaft, Schriftenreihe Heft 1.

Imbach, Alejandro C. 1998. Análisis y Perspectivas del Manejo Forestal en Concesiones Comunitarias, Petén, Guatemala. Guatemala: CATIE-OLAFO-MAGA-PAFG (draft).

Janka, Helmut 1998. Kommunale Forstwirtschaft und Erhaltung der tropischen Regenwälder. Erfahrungen mit dem Forstpilotprojekt in Quintana Roo/Mexiko. (GEP, unpublished document)

Kaimowitz et al. 1998. Local Government and Biodiversity Conservation in the Bolivian Tropics. Bogor: CIFOR (unpublished paper).

Kiernan, Michael J. and Curtis H. Freese 1997. Mexico's Plan Piloto Forestal. The Search for Balance between Socioeconomic and Ecolocial Sustainability. In: Freese 1997:93-131.

Kipla Sait Tasbaika: Plan de Manejo Territorial Indígena. Pueblo Indígena Mayangna y Miskitu del río Lakus. (Ritha Mariso Rivas García et al., eds) 1997. Managua: TNC Nicaragua. Serie Documentos del Proyecto Bosawas No. 8 (one of 5 such plans)

Land Tenure Center (LTC)-Institute for Environmental Studies (IES) 1995. Case Studies of Community-Based Forestry Enterprises in the Americas. Madison, Wisconsin: University of Wisconsin.

MAFOR (Proyecto Manejo y Utilización Sostenida de Bosques de Coníferas en Honduras) 1996. Informe Ejecutivo 1992-1995. Tegucigalpa: COHDEFOR-MAFOR-FINNIDA.

Maginnis, Stewart, Jhonny A. Méndez Gamboa and Jonathan Davies 1998. Manual para el manejo de bloques pequenos de bosque húmedo tropical (con especial referencia a la Zona Norte de Costa Rica). (no place) DFID & CODEFORSA.

Manual de Capacitación y Aplicación – Análisis de Género y Desarrollo Forestal n.d. Guatemala City: Proyecto GCP/GUA/007/NET. (based on 1995 FTPP Manual).

Markopoulos, Matthew 1998. The impacts of certification on community forest enterprises: a case study of the Lomerío Community Forest Management Project, Bolivia. London: IIED, Forestry and Land Use Series No. 13.

Méndez Gamboa, Jhonny A. n.d. Determinación de la rentabilidad del manejo del bosque natural en la zona norte de Costa Rica, en fincas de propiedad de asociados de Codeforsa. Ciudad Quesada: Proyecto Manejo Integrado de Bosque Natural DFID/CODEFORSA/ MINAE/ITCR, Colección Técnica Manejo de Bosque Natural No. 2.

Merino, Leticia, coord. 1997. El Manejo Forestal Comunitorio en México y sus Perspectivas de Sustentabilidad. Mexico City:UNAM/CRIM/SEMARNAP/CCMSS.

Morell, M.G. and M. Paveri Anziani 1994. Evolution of public forestry administration in Latin America: lessons for an enhanced performance. UNASYLVA 45(178):31-37.

Motta Tello, María Teresa and Fernando Ortíz R., eds. 1997. Memorias Seminario Internacional de Silvicultura Comunitaria, Cartagena, Colombia 12 y 13 de Junio de 1997. Bogotá: CONIF & Min. de Agricultura y Desarrollo Rural, Série Documentación No. 27.

Müller, Eva 1998. Anbau der Medizinalpflanze "Raicilla" (Psychotria ipecacuanha) im intervenierten Naturwald durch eine Kleinbauernkooperative im Norden Costa Ricas. Wald-Info 23, Juni 1998:29-32.

Ochoa, Ernesto 1995. Memoria del Taller Sobre el Sistema Social Forestal y su Participación en el Desarrollo Forestal Sostenible. Tegucigalpa: CORDEFOR/USAID.

ODA (Overseas Development Administration) 1996. Sharing Forest Management. Key Factors, Best Practice & Ways Forward. Findings from ODA's Review of Participatory Forest Management. London: ODA.

Pávez Lizarraga, Iciar and Alan Bojanic Helbingen 1998. El proceso social de formación de la Ley Forestal de Bolivia de 1996. La Paz: CIFOR / CEDLA / TIERRA /PROMAB, Serie Bosques y Sociedad No. 1.

PDBL (BFDP) 1995. Broadleaf Forest Development Project. Final Report 1988-1995. La Ceiba, Honduras: PDBL.

Poats, Susan V., Paulina Arroyo and Rodolfo Asar, eds. 1998. Género y manejo sustentable de recursos: examinando los resultados. Memorios conferencia internacional de MERGE, Quito, febrero de 1996.

Poirier, Jacques 1998. Documento de Referencia. Primera Reunión Comisión Interinstitucional del Fondo de Manejo Forestal. Región Forestal Atlántida, Bosques Latifoliados Nacionales Bajo Usufructo. No place: PDBL.

Pretzsch, Jürgen, Jürgen Hess et al. 1992. Bestandsaufnahme und Auswertung von Monitoring-Ansätzen und Instrumenten für die Durchführung von RM/SH-Projekten unter besonderer Berücksichtigung forstlicher Vorhaben. Freiburg: Institut für Forsteinrichtung und Forstliche Betriebswirtschaft der Fakultät Freiburg (unpublished report for GTZ).

Pretzsch, Jürgen, René Förster und Jürgen Hess 1993. Prozeßanalyse von drei Forstprojekten in Guatemala, Honduras und Mexiko. Eine Erfahrungsaufarbeitung. Wald-Info 10:13-16.

Primack, Richard B., David Bray, Hugo A. Galetti and Ismael Ponciano, eds. 1998. Timber, Tourists, and Temples. Conservation and Development in the Maya Forest of Belize, Guatemala, and Mexico. Washington DC: Island Press.

Reconocimiento y Demarcación de Territorios Indígenas en la Amazonía. La Experiencia de los Países de la Región 1993. Bogotá: Fundación GAIA & CEREC.

Reuter, M., Chr. Schulz, and C. Marrufo 1998. Manual Técnico Forestal – Información Básica, Métodos y Procedimientos. (in print).

Richards, E.M. 1993. Lessons from Participatory Natural Forest Management in Latin America: Case Studies from Honduras, Mexico and Peru. Journal of World Forest Resource Management 7(1):1-25.

Richards, Michael 1994. A Review of Recent Institutional Change in the Forest Sector in Latin America. London, ODI, Rural Development Forestry Network. (unpublished manuscript).

Richards, Michael et al. 1996. Decentralising Forest Management and Conservation in Central America. London: ODI, Working Paper 93.

Richards, Michael 1997a. Tragedy of the Commons for Community-Based Forest Management in Latin America? London: ODI Natural Resource Perspective No. 22, Sept. 1997.

Richards, Michael 1997b. Common Property Resource Institutions and Forest Management in Latin America. Development and Change 28:95-117.

Richards, Michael 1998. Institutional and Economic Issues in the Promotion of Commercial Forest Management Models among Amerindian Societies. London: ODI (unpublished paper).

Salafsky, Nick et al. 1997/98. Chainsaws as a Tool for Conservation? A Comparison of Community-based Timber Production Enterprises in Papua New Guinea and Indonesia. ODI London: Rural Development Forestry Network, Network Paper 22b, Winter 1997/98.

Schmink, Marianne 1997. Building a Conceptual Framework for Gender Issues in Community-Based Conservation. Paper presented at the meeting of the Latin American Studies Association, Guadalajara, Mexico, April 1997.

Smith, Richard Chase 1996. Biodiversity Won't Feed Our Children. Biodiversity Conservation and Economic Development in Indigenous Amazonia. In: Redford/Mansour 1996:197-217.

Smith, Richard Chase (forthcoming). Management Planning for Indigenous Territories in Amazonia: Addressing Social Factors. To be published in Conservation Biology.

Southgate, Douglas 1998. Tropical Forest Conservation. An Economic Assessment of the Alternatives in Latin America. New York/Oxford: Oxford University Press.

Southgate, Douglas and Jorge Elgegren 1995. Development of tropical timber resources by local communities: a case study from the Peruvian Amazon. Commonwealth Forestry Review 74(2):142-146.

Uebelhör, Konrad 1998. El concepto de uso múltiple y su aplicación en un bosque nacional de Honduras. Tegucigalpa: PSA, Documento Técnico No. 2 (draft).

Uphoff, Norman 1998. Community-Based Natural Resource Management: Connecting Micro and Macro Processes, and People with their Environments. Washington DC: World Bank, International Workshop on CBNRM, May 10-14, 1998.

Watson, Vicente et al. 1998. Making Space for Better Forestry. Policy that Works for Forests and People. London: ODI (& CCT, JUNAFORCA).

LIST OF ABBREVIATIONS AND ACRONYMS

Abbr./Acr.	Explanation
AFE-COHDEFOR	Administración Forestal del Estado - Corporación Hondurena de Desarrollo Forestal, Honduras
AFH	Agenda Forestal Hondurena
AFOCO	Apoyo a la Forestería Comunal, Honduras (GTZ)
AMA	Acuerdo Mexicano-Alemán, Mexico (GTZ)
APCOB	Ayuda para el Campesinado Indígena del Oriente Boliviano, Santa Cruz, Bolivia
ASL	Agrupación Social del Lugar, Bolivia
BMZ	Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung, Bonn, Germany
BOLFOR	Proyecto de Manejo Forestal Sostenible, Santa Cruz, Bolivia (USAID)
BOSAWAS	BOSAWAS Biosphere Reserve Support Project, Nicaragua (GTZ)
BSP	Biodiversity Support Project, Washington

Abbr./Acr.	Explanation
CATIE	Centro Agronómico Tropical de Investigación y Ensenanza, Turrialba, Costa Rica
CERES	Centro de Estudios de la Realidad Económica y Social , Cochabamba, Bolivia
CI	Conservation International, Washington
CICAFOC	Coordinadora Indígena Campesina de Agroforestería Comunitaria Centroamericana
CICOL	Central Intercomunal Campesina del Oriente de Lomerío, Bolivia (supported by APCOB, BOLFOR)
CIDA	Canadian International Development Agency
CIFOR	Center for International Forestry Research, Bogor, Indonesia
CITES	Convention on International Trade of Endangered Species
COATLAHL	Cooperativa Regional Agroforestal Colón, Atlántida, Limitada, La Ceiba, Honduras
CODEFORSA	Comisión de Desarrollo Forestal de San Carlos, Costa Rica
COFYAL	Cooperativa Forestal Yánesha Limitada, Peru (supported by USAID, later WWF)
COICAP	Coordinadora Indígena de la Amazonía Peruana, Lima, Peru
CONAP	Consejo Nacional de Areas Protegidas, Guatemala
CONIF	Corporación Nacional de Investigación y Fomento Forestal, Bogotá, Colombia
COSEFORMA	Cooperación en los Sectores Forestal y Maderero, Costa Rica (GTZ)
CPMR	Common property management regimes
CS	Cultural Survival, Cambridge, Mass., USA
CTP	Community timber production
DfID	Department for International Development
ERA	Estudios Rurales y Asesoría, Oaxaca, Mexico
FAO	Food and Agriculture Organization, Rome, Italy
FINNIDA	Finnish development cooperation agency
FLONA	Floresta Nacional, Brazil
FOIN	Federación Indígena del Napo, Ecuador
FSC	Forest Stewardship Council
FTPP	Forest, Trees and People Programme (FAO), Rome, Italy; offices in Latin America in Costa Rica, Ecuador, Peru and Bolivia
FUNAI	Fundacao Nacional do Indio, Brazil
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit, Eschborn, Germany
IBAMA	Instituto Brasileiro do Meio Ambiente e Recursos Naturais Renováveis
ICDP	Integrated Conservation and Development Project

Abbr./Acr.	Explanation
IIED	International Institute for Environment and Development, London, UK
IMAZON	Instituto do Homem e Meio Ambiente da Amazonia, Belém, Brazil
INEFAN	Instituto Ecuatoriano Forestal y de Areas Naturales y Vida Silvestre, Quito, Ecuador
ITTO	International Tropical Timber Organization, Japan
JUNAFORCA	Junta Nacional Forestal Campesina, San José, Costa Rica
KfW	Kreditanstalt für Wiederaufbau, Frankfurt, Germany
LTC	Land Tenure Center, Madison, Wisconsin, USA
MAFOR	Proyecto Manejo y Utilización Sostenida de Bosques de Coniferas en Honduras, Tegucigalpa, Honduras (FINNIDA)
MERGE	Managing Ecosystems and Resources with Gender Emphasis, University of Florida, Gainesville, Florida, USA
MOPAWI	Mosquitia Pawisa, Puerto Lempira, Honduras
NGO	Non-governmental organization
NTFP	Non-Timber Forest Product
ODA	Overseas Development Administration, London, UK
ODI	Overseas Development Institute, London, UK
OLAFO	Proyecto Conservación para el Desarrollo Sosenible en América Central, CATIE, Turrialba, Costa Rica
PDBL	Proyecto de Desarrollo de Bosque Latifoliado, La Ceiba, Honduras (CIDA)
PDTC	Proyecto de Desarrollo del Trópico Cochabambino, Bolivia
PMS	Proyecto de Manejo Sostenible, Petén, Guatemala (GTZ)
PPF	Plan Piloto Forestal, Quintana Roo, Mexico (GTZ)
	Proyecto Política Forestal, Quito, Ecuador (GTZ)
PPTAL	Projeto Integrado de Protecao as Populacoes e Terras Indígenas da Amazonia Legal, Brazil (GTZ & KfW)
PROFORS	Programa Forestal Sucumbíos, Lago Agrio, Ecuador (GTZ)
PSF	Proyecto Social Forestal, Tegucigalpa, Honduras (GTZ)
PUMAREN	Program for the Use and Management of Natural Resources, Tena, Ecuador (supported by CS)
RMSH	Ressourcenmanagement durch Selbsthilfe; sector project (GTZ, until 1998)
SFM	Sustainable Forest Management
TCO	Tierras Comunitarias de Origen, Bolivia
TNC	The Nature Conservancy, USA
UNOFOC	Unión Nacional Forestal Campesina, Mexico
WWF	Worldwide Fund for Nature (international) / World Wildlife Fund (USA)
WRI	World Resources Institute

The Social Forestry System in Honduras

WOLF KILLMANN, KONRAD UEBLHÖR AND GUNTER SIMON
SOCIAL FORESTRY PROGRAMME (SFP), HONDURAS

I Background

Honduras is a decidedly wooded country. 87% of its 112,500km² are defined as necessarily forested, unsuitable for other land use. Today, however, only 50% of the country's area is covered by forest, half by pine forest and the other by tropical deciduous forest (mangrove, tropical wet evergreen forest, tropical dry forest and cloud forest). So far, 107 conservation areas have been put forward (about 23% of the country's area), of which 48 (or 15% of total area) have been given a legally protected status. The largest part of the protected area is cloud forest (watershed area) and tropical wet evergreen forest. Over the last 10 years, between 80,000 and 100,000 ha forest have been lost annually, mainly because of the conversion of tropical forest into agricultural land, in particular pasture.

According to official statistics, 45% of Honduran forests are owned by the state, with 31% privately owned and the remaining 24% communally owned. In fact, there is a substantial grey zone, and unclear property rights lead to permanent conflicts in rural areas.

Around 60% of the 6 million Hondurans live in the countryside. This is where poverty (70% of the total population live in poverty) and illiteracy (45% on average, in rural areas 60%) are highest.

In 1996, about 110,000 people were employed in forestry (mainly in pine forests). This sector produces about 5% of GDP, and with proper forest management, this contribution could be increased to double that level or more.

II The social forestry system

The social forestry system in Honduras (Sistema Social Forestal - SSF) aims to ensure that forests fulfil their social function.

Working definition for the project:

SSF describes a collection of strategies and measures with the objective to increase the direct and active participation of the rural population living in and adjacent to forest areas, in forest use. It is hoped that this will reduce rural poverty and at the same time ensure a sustainable management of the renewable resources of the country.

Important aspects are the participation in or the direct take-over of management of state forests by cooperatives and communities on the one hand and the creation of jobs in private forestry on the other.

III Legal framework

The SSF is named as a strategy for the first time in the Forest Law of 1994 (Decreto Ley 103). The new Honduran forestry department established in this legislation (Corporación Hondureña de Desarollo Forestal) is charged with developing the social forestry system with small farmers in order to protect and maintain the forest and to support its regeneration. This was meant to help reduce forest fires, excessive forest pasture, illegal logging and shifting cultivation. It was left to COHDEFOR to decide in what way the small farmers were to participate in the forest-generated benefits.

The same law defines operational aspects of favoured small farmer organisations, such as their legal form, the form of contract, the allocation of areas of use, use techniques, agroforestry, participation of citizens and governmental assistance.

On the basis of this mandate, COHDEFOR started its work with small farmer organisations in state, community, and private forests, as all forest stands on land of various ownership were legally under the stewardship of the state.

However, with the passing of the Law on the Modernisation of the Agricultural Sector (LMDSA, Decreto 31-92) in connection with the Structural Adjustment Programme in 1992, COHDEFOR lost the jurisdiction over private and communal forests. Formerly a ‘firm’ with economic objectives, it now became

transformed into a state agency (Administración Forestal del Estado - Corporación Hondureña de Desarrolo Forestal/ AFE-COHDEFOR, or A-C for short). The forest stands now became the property of the landowners and the A-C was now only responsible for the management of state forests. In private and communal forests, it merely retained normative functions.

The Agricultural Modernisation Law (LMDSA) expanded the beneficiaries of SSF beyond cooperatives and other small farmer organisations. It specifies that the A-C has to include the integrated development (desarrollo integral) of rural communities in the forest management plans of the state forests.

In the implementation decree accompanying the LMDSA, this is expressed in more detail. It stipulates that small farmers up to 20 ha are to be included in the SSF, regardless of whether they are formally organised or not. Theoretically, this means that a larger proportion of the rural population can benefit from the SSF.

Specifically, the new law stipulates that

- management plans (planes de manejo) have to be presented and approved by the A-C for every kind of forest use in state forests.
- the A-C is to support SSF as a strategy of sustainable rural development in state forests, whenever an ‘appropriate settlement density’ in the rural population has been reached. This support is in essence the acknowledgement of the rights of the local population, the incorporation of the communities in the implementation of the forest management plans and their inclusion in any resulting revenue.
- in the case of public auctions of standing trees, the responsibilities and rights of the population at that site must be taken into account. At the auction, a statement of the following must be given:
  - number and location of groups or farmers
  - the envisaged form of incorporation of their rights and responsibilities via the A-C or the buyer.

- the A-C is responsible for regulating the property rights on the forest
- small forest owners can join together to implement forest management planning, but are free to organise forest utilisation individually.
- communities located within state forests are able to rent forest areas and to use them in accordance with the corresponding forest management plans. The usufruct contract with the A-C (contrato de usufructo) regulates the term of use and other details.
- contracts for services, work and labour with communities or farmer associations to implement silvicultural measures should be supported by the A-C.
- communities and farmer associations are able to participate in investment funds set up for afforestation.

In the year 1995, a presidential decree established the Fondo de Manejo Forestal (forest fund). This stipulates that the A-C should donate 50% of proceeds made from usufruct contracts to a forestry fund, which, in the corresponding zone, is to be jointly run by the A-C, a forest-user group and an international development cooperation. The funds are to be invested in the forest to ensure its sustainable management.

A presidential decision made in 1996 added certain restrictions to these earlier decrees. Small farmers or their associations are now only allowed to sell up to 1000 cubic metres of pine or 200 cubic metres in deciduous forest per year in direct sales (as opposed to public auction). Furthermore, the decision to include forest user groups in the dealings of the forest fund made the year before was revoked. Another resolution made in the same year restricted utilisation possibilities still further. Commercial logging by small farmers was banned. Instead, it was decided that commercial logging is to be carried out by the timber industry and that the usufruct benefits in the SSF cover only other forest uses. Participation of small farmers in timber utilisation could take place at the most in the form of employment as labour for the timber industry.

Since the enactment of the Agricultural Sector Modernisation Law in 1992, which included a wide range of possibilities for the local population to participate in the management mainly of state forests, this potential has steadily been reduced through a number of decisions and decrees.

IV Implementation of the SSF

In the first years since its foundation in 1974, the A-C concentrated its support on establishing cooperatives, almost all of which were involved in pine resin tapping, with a few exceptions undertaking timber processing with manual saws. A state company was the main buyer for resin and this ensured a stable price. When this company went bankrupt in 1984 the price for resin collapsed, and a large number of cooperatives stopped working.

An FAO pilot project, based on the participation of a majority of the population within the project areas, gave the SSF a new direction. A wide range of activities, such as felling and manual sawing, resin tapping, seed collecting, thinning etc. were supported. In each of the four project areas, a forest technician was employed by the project, who lived in the community and assisted every kind of farmer organisation. The work was not restricted to forestry activities but included the expansion of village infrastructure and help in dealing with other government institutions (e.g. education, health).

- Good results, especially a substantial decrease in forest fires in the project areas, led to the concept of Areas de Manejo Integrado (AMI, areas of integrated management) being added to the SSF in 1986. These were areas between 1000 and 10,000 ha, fully or partly wooded, where communities received assistance through a permanently stationed forest technician. However, the 50 or more project areas were gradually given up over the next six years for the following reasons:

- within the A-C, the priorities in forest policy changed, with saw mills being allocated forest stands for their supply which were within AMIs.

- the extensionist technicians were often insufficiently trained for the job and also badly chosen; in addition, they were often deployed in other areas or, with the right qualifications, left to join the private industry.

- the technical extension and the commercialisation of the products, which were often not allowed to be sold on the free market, were left without the necessary backing and logistics.

- Appropriate methodological instruments for developing and propagating applied technology, training, self-help, participative planning etc. were also lacking.

A new shift in policy was initiated by the Agricultural Sector Modernisation Law of 1992, which was mentioned above. This expanded the SSF to include communities and small producers and, in theory, allocates small farmer user-groups decision-making possibilities and influence.

According to a survey undertaken by the FAO, 311 groups were organised in the SSF in 1993. The nature of forest use was as follows:

Sale of standing trees	27%
Lumber cut with manual saws	25%
Resin tapping	25%
Agroforestry	23%

Other forest uses were forest nurseries, forest protection (all kinds), small saw mills, joineries, fuelwood collection and sale, cashew nut cultivation, collection of seeds and small livestock pasture.
Objections to the restriction of use to 1000 m^3 per year in pine forests and 200 m^3 in deciduous forests were raised by the participants, who quite rightly argued that they deserved to have complete authority over forest use if they were expected to ensure management and forest protection for the total area at the same time.

According to a survey undertaken in 1997 by the PDBL project, which is supported by Canada, there are currently 50 000 ha (or 1% of the total state

forest area) which are under proper management in the form of usufruct contracts and management plans.

Due to the dominance of the private sector in the management of state forests and the lack of necessary extensionist structures and personnel for social forestry within the A-C, it is mainly organisations involved in international cooperation together with a few local non-governmental organisations which support and implement the larger projects of the SSF in state forests.

V Problems in implementation

V.1 Forest policy

A major problem which had a lasting negative influence on the implementation of the SSF lay in the inconsistent and erratic forest policy of the country. Between 1974 and 1992, the A-C was solely responsible for the management and use of all forests of all ownership categories. However, in spite of intensive bi- and multilateral assistance, it did not have the administrative, organisational or man-power capacity to fulfil this obligation. This meant that large forest areas were left to themselves or to the resident population, who frequently used them for agriculture rather than for forestry. Large parts of commercial pine forests were allocated to saw mills to supply them with timber for relatively little charge, without this leading to a proper forest management. The LMSDA legislation returned the standing stock to the private and communal landowners, and the A-C was left with a purely normative role. It retained only its jurisdiction rights and its utilisation rights over state forest land. Many private landowners then evicted the farmers who had been living on their forest land, as this had now become a valuable revenue source. This led to major conflicts in rural areas and resulted in an increase in rural poverty and to further land occupations in state forests.

The 'socially oriented' government headed by president Reina (1994-1998) was caught in the dilemma of having to fulfil the management plans in state forests, which had been imposed by the banks to supply industry with sufficient amounts of timber via public auctions, and at the same time of trying to carry on with the

SSF as a measure to reduce rural poverty. Reconciling the two demands has proved impossible. The forest management plans concentrate on achieving a sustainable timber supply and on a rapid conversion of natural pine forests into homogenous age-class stands in the compartment system. Neither the concept of multiple-use forestry nor a cooperation with the population living in the forest can be found in the management plans.

A new strategy for a long-term development of the forestry sector was developed with the participation of the state sector, sections of the timber industry and civil society. The process and its documentation (PLANFOR 1996-2015) was supported by bilateral technical cooperation (in particular Germany through the PSF). In spite of massive resistance by the World Bank and USAID, this was then declared to be government policy in a public statement made by president Reina. Afterwards, PLANFOR was accepted by both donors.

However, during the last administration, objections were raised by opponents who saw in the SSF the danger of valuable forest resources being given away to small farmers. They managed to push through the amendments mentioned above, which severely restricted the possibilities of the SSF.

The administration of president Flores, in power since January 1998, has increased these tendencies. It quite rightly argues that the A-C has proved incapable of managing the state forests sustainably. This fits the general neo-liberal model followed by the government, in which the goal is a ‘minimal state’, where forest office staff is to be cut back and where free forest extension services are to become the exception. The new government would like to copy the Chilean example by leasing large parts of the state forests to concessionaires in long-term contracts (a de facto privatisation). Obviously, a broadly implemented SSF concept contradicts this and it is possible that it will have to be replaced with other ways in which the rural population can participate in the revenue from the forest.

V.2 AFE-COHDEFOR

The A-C is still a very bureaucratic apparatus which works slowly and clumsily. The usufruct contracts and their corresponding management plans are very complicated affairs which require previous knowledge. The authorising procedure in the administration can take at least six months and reaching the signatory phase is often connected to a payment.

The frequent, politically motivated turnover in the forest department staff hampers their work. New staff have to familiarise themselves with their job and often lack the trust of the local population. In addition, the staff is overworked because the employment of qualified personnel is thereby often rendered impossible.

So far, there has not been a single case of the forestry fund being used for its planned purpose. Money paid into the fund has now been frozen.

The idea or concept of SSF has only been accepted by very few forest officers at the intermediate and lower levels. A wide range of different interpretations exist as to what SSF actually means. The few foresters who are interested in implementing SSF in practice usually have no support from their politically instated superiors.

V.3 User groups

Most user groups lack the expertise and financial means to develop forest management plans. Where plans exist, they do not have the technical skills necessary to implement them. The exceptions are groups which are assisted by bilateral development cooperation projects. Experience of these projects shows that considerable effort has to be made in non-technical training, because the rural population has no prior experience in cooperative forms of organisation. Even the communal organisation in the villages often does not function properly, but this is the precondition for the communities to press for their rights with respect to the state authorities.

The survey financed by Canada mentioned above, however, shows that there are also problems in marketing the forest products. Communal utilisation is often economically unattractive.

V.4 Summary and outlook

Honduras is the only Central American country which has an official policy to implement social forestry since 1974. Various changes in the legislative framework led for a while to a better integration of the rural population in forest management and then to renewed restrictions to this integration.

The survey on usufruct contracts undertaken by the Canadian-supported PDBL project shows that forests managed under these conditions are in a relatively better condition than before the management started or than neighbouring forest areas. In pine forests, less forest fires, a better regeneration and less damaging management could be demonstrated. Deciduous forests registered less illegal logging activities.

On the other hand, in relation to the total forest area of the country, the SSF concept has contributed very little to the income derived from the use of the Honduran forest resources. Accordingly, it has contributed correspondingly little to reducing rural poverty.

The effects of the tropical hurricane Mitch, which hit Honduras at the end of October 1998 will also influence the development of the SSF. The necessity of filling the empty state coffers in order to rebuild the destroyed infrastructure supports those circles who demand a further transfer of state forests to efficiently functioning private enterprises. The effects of the hurricane have also added momentum to the debate over a more ‘efficient’ management of state-owned pine forests through concessions and the passing of a ‘concession law’ is being contemplated. This would necessarily mean a further restriction of the SSF.

The argument put forward by opponents of the SSF, that rural poverty would be reduced by a ‘trickle down’ effect induced by employment in commercial forestry enterprises, has so far not shown the hoped for impact.

However, it is assumed that even with more commercial use in Honduran forests, a certain portion will still be managed according to the principles of the SSF and that the policy guideline of a participatory management of some state forests will remain.

Rational Management of Tropical Dry Forest with the People at the Centre of the Project Azua, Dominican Republic

PETER ASMUSSEN, MARTIN SCHNEICHEL

Since January 1999, the rural regional development project 'Bosque Seco' (Rational Management of Tropical Dry Forest) in the Southwest of the Dominican Republic is in its follow-up phase. The objective of the project was to enable the rural poor to meet their basic needs and to manage those natural resources at their disposal in a sustainable manner, so that the forest can not only be protected but also recover from decades of exploitation and gain in productivity.

The two elements of this objective could only be met together, as the population makes its living mainly from charcoal burning, extraction of posts, simple timber and sleepers for the small railroads of the sugarcane plantations, and to a lesser extent from rearing goats and bee-keeping, irrigated agriculture on very small pieces of land, collecting oregano, and work as day labourers. There are hardly any alternatives.

The context

The "target group" of charcoal burners and small farmers belong to the poorest and most marginalised section of Dominican society. Over half the population over twelve years of age is illiterate. Water, electricity or medical welfare seldom make their way to the communities of the dry forest. The roads are in bad condition and communication is virtually impossible. The villagers are usually not organised, neither by the state nor privately, the exception being a more informal membership in a political party. Church services are also barely available. Local non-governmental organisations hardly ever come to the communities. Until recently, people had to rely on middlemen for selling products from the dry forest and also for buying food. These middlemen also gave food as credit for future

supplies of charcoal or sleepers, increasing the dependence of the population on them.

The women are doubly disadvantaged. Their standing within the social structure of the dry forest communities is low, as they have few possibilities to earn their own income alongside their housework and they 'only help' with the forestry work. *Machismo* is rife in this society, which allows the women little personal freedom and this results in a lack of self-confidence. They are in a very dependent situation.

The badly degenerated tropical dry forest, covering around 5000 km² , is a secondary forest of leguminosae (prosopis juliflora is the dominant species), thornbushes and cactuses (3-5 metres high) which emerged after the original stands of mahogany, oak and other valuable species were felled. It is mainly situated on state land or is in the hands of large landowners, who normally do not manage it but rather acquired ownership in order to qualify for forestry credit, or for land speculation purposes. Hardly any of the small farmers possesses a land title and conflicts over land traditionally used by them are the order of the day.

Dominican forest legislation prohibits the felling of any kind of living wood. Exceptions are only given in extremely bureaucratic procedures and are connected with official or unofficial payments. Charcoal burning was also illegal in principle. The charcoal burners and their wives were constantly under threat of being arrested or having their goods confiscated, whether during burning, transport or selling. On the other hand, charcoal is still the main fuel for many poor Dominican households. The subsidies for cooking gas, and pressure applied by the forest department on large consumers, however, have led to a dramatic drop in demand for charcoal over the last years.

Project procedure and impact

From 1987 onwards, the GTZ, together with the regional planning institute *Instituo para el Desarrollo del Suroeste*, INDESUR, started an attempt to regenerate tropical dry forest within an orientation phase. This was to be achieved

mainly through the development of alternative income sources. In the fulfilment of these tasks, the executing agency was to be supported for a reasonable period until it could continue the work independently.

In a second phase of the project, the focus now shifted to the tropical dry forest itself, hitherto largely ignored in its role as an income source. An inventory of this forest was undertaken and charcoal burning received more attention. The initially planned development of alternative income sources proved to be unrealistic, and so the project staff, with the assent of the forestry department, started to organise the sale of forest products themselves.

Gradually, four concept elements emerged on which the project concentrated in its further development:

I. *Organisation of users*. I.e. strengthening of the self-help groups of those men and women who live off the forest products at a village level and the federation of these groups, the FEPROBOSUR. The objective was the formation of an independent and autonomous representation of this group of people for the later development process.

II. *Rational management of the tropical dry forest.* Development and application of a *simple* - for campesinos comprehensible - integral and sustainable form of management for the tropical dry forest, which enables its regeneration whilst concurrently providing income.

III. *Direct sales of forest products to provide higher income.* The sale of all FEPROBOSUR products on the main markets in Santo Domingo and some province capitals whilst to a large extent avoiding intermediate trade. This objective is aimed at raising the household incomes and at achieving a high degree of economic independence for the federation FEPROBOSUR.

IV. *Transfer of land titles.* The safeguarding of future utilisation of revenue from the new, and labour-intensive, forest management by granting land titles based on the Dominican land reform. These were to be issued to village groups for collective management and not to individuals.

Through a joint planning and operating process which involved all the relevant and de facto active agents of the region, significant progress could be achieved in all four areas.

I. By the end of 1996, men and women of 40 communities had formed 82 groups, and FEPROBOSUR had, after becoming financially independent by charging a fee for the central marketing of the products, developed into a confident representation of the target group. The federation advocates its interests successfully in relation to other institutions and is now nationally known and respected.

II. The tropical dry forest is clearly and visibly regenerating. The volume of standing timber has doubled between 1992 and 1996, the shading of the soil has increased and the ubiquitous cactuses have begun to be supplanted by the now more common and taller deciduous trees. Timber utilisation, initially confined to dead wood, has now been expanded to include first thinnings of the dense and thriving stands.

III. In the area of wood products, FEPROBOSUR has practically acquired a monopoly position for the Southwest of the country and has replaced the old marketing structures consisting of local and regional middlemen. It either delivers its products directly to the consumer or supplies a wholesale retailer who organises the distribution to the municipal markets. For the campesino families, this direct marketing and the diversification of the products they can offer from the tropical dry forest translates into a stable and significantly higher income.

IV. Over 167,000 ha of tropical dry forest have been transferred so far to the property of campesino groups in the form of provisional land titles. These are now managed according to sustainable criteria and are protected by the campesinos against non-local users. The readiness to do this has made the supervision by forest department staff to a large extent superfluous.

Supporting the executing agency and the user groups

As time passed, it became increasingly apparent that it would be impossible to support the executing agency enough to enable it to assume total responsibility over the planning and implementation measures by the end of the cooperation. The executing agency became an object of political interests and conflicts arose between the project team and the director of INDESUR over the jointly agreed-upon objectives of the project. At the national level, the will to seriously tackle resource management and eradication of poverty was obviously lacking.

The project reacted to this situation by incorporating local NGOs from 1992 onwards and by consistently putting the local resource users at the centre of all events. To this aim, the nine villager self-help groups working with the project were encouraged to form the umbrella organisation FEPROBOSUR, which took over the marketing of charcoal within a few months.

This task could only be managed by the full-time employment of one of the target group representatives and could not be carried out from his remote community. For this reason, the president of FEPROBOSUR moved to the provincial capital Azua, the project headquarters. He soon became first an additional and then the main focus point for charcoal burners and farmers who visited the project. Soon, a controversy developed between FEPROBOSUR and the powerful association of transport companies, who had been transporting charcoal to the capital Santo Domingo at exorbitant prices. In the face of massive resistance, the young farmer organisation, still in its initial phase, managed to win its first bargaining success and implement the agreement.

The expansion of the project into new areas led to new tasks for FEPROBOSUR. Its representative had to visit all the relevant communities, participate in lots of meetings, arbitrate conflicts and set up new groups of charcoal burners. Soon, several other members of FEPROBOSUR were helping the president. An office independent of INDESUR was sought and rented. The work could no longer be done on the side, salaries and expenses had to be paid, the radio transmitters of the project staff were taken over. In addition, a telephone

was needed and it became necessary to travel to the various, widely scattered villages. All this cost money, which could be provided by levying a fee on the products which were to be sold. Within a few months, FEPROBOSUR was able to carry the running costs itself. The project financed a few necessary investments, for example six motorbikes, and still paid for further training and for the larger members meetings.

At the same time, the partnership between the president of FEPROBOSUR and the representatives of the nine communities within the project necessitated new forms of working and planning. In the communities dependent on charcoal burning, neither mid- nor long-term perspectives are possible due to the primacy of daily survival. Some of the farmers did have experience in organising, which included setting up annual working plans, but these were often not implemented, as written testimonies do not rate high in this society which lacks a tradition of writing. Even for those who were able to read and write, typical methods and instruments of technical cooperation were of little use. However, there was lively interest in concrete measures which could improve their precarious economic situation. In order to agree on objectives and activities, planning procedures were developed which were oriented to the needs and skills of the most active members.

Two important needs of the charcoal burners were now defined as objectives at this stage: the direct sale of charcoal to raise income and the regeneration of the natural resources in the vicinity of the villages to provide for a secure livelihood for their children in the future. Other measures, like building their organisation and a supporting structure of NGOs, the integration of women, the implementation of small-scale infrastructural improvements and acquiring land titles were all developed as time went by. The framework for the everyday practical work was given by the possibilities and problems identified by the campesinos themselves and countless, mainly informal discussions concerning the planning and evaluation of all activities. It was only the success of this process, which basically consisted of common sense and the will to work together, which led to this approach being understood as a new concept.

Contacts with local NGOs, which had existed since the middle of the second phase, were now intensified and other potentially interested organisations were asked to cooperate and were helped and integrated with further training courses and financial assistance. A body of six NGOs, the 'Grupo de Apoyo' was formed, which advised the FEPROBOSUR in various areas. Four of these NGOs took responsibility for the support of one region with several communities; one of these offered additional courses for the development of leadership capacities, another prepared the allocation of land titles and helped with legal problems by for example pushing through the acknowledgement of groups as legal entities. The representatives of the target group, of the NGOs, INDESUR and the GTZ met regularly to exchange experience and to coordinate joint planning, agreements and even activities. After a while, certain INDESUR technicians were deployed in these NGOs and they now work there as integrated staff under the supervision of the NGOs.

Even though INDESUR was no longer conceptually involved in the project, it still had an important role to play. Firstly, it supplied the legal framework within which the project could develop. This is important considering the traditional distrust between the state, self-help groups and NGOs. When dealing with or filing an application to other state institutions, it is important to have a state advocate. It also continued to supply traditional counterpart services, such as the upkeep of vehicles and the payment of the salaries of certain technicians. It was clear to everyone that the state had to remain integrated into the project and had to continue to play its part.

Two governmental organisations in particular had to be integrated or at least involved: the forest administration subordinated to the military FORESTA and the Agricultural Reform Office IAD. The former supplied the project with forestry technicians from the second phase onwards to advise and control the charcoal burners, issued permits for the transport and sale of timber and charcoal and eventually reduced the fee for these permits considerably. The control of transport into the capital was now carried out by two military road-checks, on each of which a charcoal burner recommended by FEPROBOSUR and

employed by FORESTA was posted. Today, the local charcoal markets in the Southwest are organised jointly by FORESTA and FEPROBOSUR.

The Dominican Land Reform Office IAD distributes land titles to farmers, usually for agricultural activities. After several years, the project was able to persuade it to issue titles for forest management, and to issue them to groups of people, women as well as men, for common management, instead of only to individuals as before. However, like all state institutions in the Dominican Republic, the IAD suffers from lack of funds, and therefore often cannot fulfil its obligations in the field. For this reason, several of the project groups are helping the IAD. One of the NGOs possesses considerable experience in this area and can coordinate all activities. A further two church NGOs specialising in legal support for grass-roots groups have taken the responsibility for individual court cases. The GTZ paid for the employment of an experienced land surveyor and of a motivated lawyer and the IAD also supplied lawyers and land surveyors. Representatives of the target groups were naturally also involved in most of the implementing stages. Since the beginning of this cooperation, it has been possible to transfer 167,000 ha of forest.

After a while, the leaders of the target group became quasi-members of the project team. Local representatives, GTZ field staff, locally contracted personnel and INDESUR technicians all jointly plan, implement and evaluate project measures. Persons closely connected to the target group, namely former members and leaders of the farmer organisation MCI (Movimiento Campesino Independiante), which collapsed because of political interference, have taken the place of former project technicians as locally contracted staff. Among these, there are many who are highly experienced in the organisation and leadership of groups. They proved better suited than academic foresters or agriculturists for tasks related to advising local communities. Less than three years after its foundation, the “target group” itself took over the task of expanding the project into new areas, as it has an interest in growing larger, in integrating more members, in spreading the financial risk onto more shoulders and in eliminating illegal competition.

The project team's method of working with campesinos

The success of the project was made possible primarily by the committed work done by the campesino groups themselves. The main concern of the project team was to motivate and support these groups. The most important prerequisite for this is participation, namely participation of the project staff in the decision-making process of the "target group", in the implementation of the activities decided by the target group and in the evaluation of these activities, in contrast to the participation of representatives of the target group in the planning process and activities of the project team. In order to ensure participation in this sense, a number of procedures have proved important:

On the first official visit made to village communities where the project team saw opportunities to have an effect on development, the principles of technical cooperation with the following possibilities and limitations were explained:

- the project is willing to work with all the villagers who wish to do so, as long as they show initiative in changing their situation themselves. This offer is made to both men and women of the village. Meetings with little or no participation by women will give rise to this question being raised with the aim of ensuring an appropriate participation of women. As long as there is no significant participation by women, the project team will offer no concrete assistance.

- As cooperation with individual campesinos or families is not possible, the interested villagers must organise as a group and apply for membership within FEPROBOSUR.

- The project team does not work for the campesinos but rather with them, it supports their initiatives and activities. It is made very clear that the project team is in no way obliged to work with that particular community, and that faced with a lack of interest it will offer its services elsewhere.

The project team contrasted starkly with other institutions and the promises of periodically visiting politicians, in that it made clear that it had nothing to give

away, neither money, nor food, nor material. The support consisted chiefly in experience in rural development, expert knowledge, and the utilisation of connections to state institutions and NGOs.

In joint workshops made up of campesinos and members of the project team, participatory rural appraisal (PRA) instruments were used to analyse the situation of the village. The questions asked by the project team were focused more on potentials than on problems. The aim was to define activities for the management of the existing resources of the village which could enable villagers to increase their income on their own. The process consciously avoided orienting the planning towards problems which could only be solved with the help of investments from national or international funds. In many communities, the priorities of men and women differed at first. The project staff had to ensure that the women were given a hearing and that decisions made were later accepted by the whole community.

The discussion process in the community needed time. For this reason, it has proved expedient to spread the situation analysis of the community over a longer period of time and not to finish it, as is usual in PRA-workshops, within a week. The analysis can thereby be continuously expanded and updated in the consciousness of the community and the responsible advisors. A written documentation of this process has hardly any relevance for the participants.

When planning and implementing activities, it has proved wise to coordinate the contributions of the participants at meetings beforehand and to decide in what order they should be discussed. The advisor of the project team should discuss the main points with the respective groups or individuals. When a discussion on details or contested points within the community takes place, he should cease to attend as soon as this is advisable, i.e. as soon as the community no longer needs his mediation. The project team becomes involved again only after the village community has decided on what course to take and has informed the team of their decision. This procedure must be explained to the community and a date must be fixed. At first, this all takes rather a long time, and the project team has to be patient. However, once a discussion and decision-making process has been

successfully completed, a dynamic can be expected which will soon compensate initial ‘delay’.

Whenever possible, the project did not make advance contributions, but rather gave assistance after the village community had taken the first agreed step. If material or equipment was necessary for this first step which was not available in the village, then these would be supplied by the project, but it would always be explained and clearly stated whether and why this took the form of a gift, if it was lent, or if it was given as a form of credit. Greater financial assistance is normally not possible for technical cooperation projects. Whether other institutions were prepared to contribute to certain activities remained something which had to be organised by the campesinos themselves. Support in this, for example in formulating an application, was naturally given. The respective agreements between the project advisors and the campesinos would normally not be written down, except in the case of credit.

In the joint planning process, a common goal would be formulated and then a discussion would take place on how to achieve it. Then, the first steps would be undertaken. At each meeting, be it formal or informal, with the whole village, with certain groups or with individual leaders, the steps taken would be evaluated according to their purpose and the actual effect they had, the new situation would be analysed and the further course of action would be discussed. Only in exceptional cases would this process or parts of it be documented. It was important that decisions would be discussed beforehand, that they could be made quickly and that it was possible to act flexibly or to react to the actions of a third party. This flexibility in decision-making after short, informal agreements in the community, in the car, after work over a glass of beer, and sometimes a little more formally in the FEPROBOSUR or project office, was the essence of the participatory project planning.

Behaviour of the advisory staff

The project procedure described above makes relatively high demands on the advisory staff, who have to build up a personal relationship with the

campesinos. This kind of target group work cannot be accomplished within the rhythm of a normal nine-to-five office job. Because of the nature of the campesino working day , it is necessary to have time in the evenings, at the weekend and on holidays. It requires a sensitive touch, but also enough self-confidence to be able to act, advise or to withdraw according to each specific situation, as there exists no formally agreed planning document to fall back on. In this kind of work, the project management should give the advisory staff plenty of leeway, has to be there to talk to in case of any problems arising, should motivate the staff to use their freedom of action and should anticipate mistakes and be ready to deal with them constructively.

It is not absolutely necessary to speak the 'language' of the campesinos, but it is more convincing. The university education of the advisors is usually more a hindrance than a help, and people close to the target group with experience in the 'university of life' are often more suitable. Common sense is needed, as are easily comprehensible explanations. Words foreign to the farmers should not be used and it is important not to speak in long sentences, even though people from educated classes like to do so. At meetings, it has proved useful not only to say what one wants, but also to provide a negative formulation of how something should not be done. Humour can defuse critical points, can attract more attention and can sometimes state the facts better, but it is hardly learnable. Often, university graduates are not used to portraying information in simple words.

Among the advisory staff of state institutions, but also among many NGOs, the view is often held that campesinos need sensitisation and that their awareness for the destruction of their environment needs to be kindled. However, the campesinos are the first to experience the damage to their environment and they usually know the reasons for it. This 'consciousness-raising' is usually quickly dealt with if one asks how the environment looked like 20 or 30 years ago, what has changed since then and what the causes of this change could be. The drying up of streams, the reduced rainfall, the loss of harvests, the lack of tree shade and deforestation soon crop up. In addition, campesinos know many things that project staff do not know. To accept that their knowledge takes a different form

and is transported and articulated differently is difficult for some advisors and this prevents them from negotiating on equal terms, not just to impart their knowledge but also to learn from the campesinos.

Advisors should formulate their suggestions as a question, and then wait for discussion and comment. One should deliberate carefully at what point superior knowledge - if this is truly available - should be pushed through, and when it makes more sense to let the campesinos experience a failure.

If objectives are to be jointly striven for, they need to be clearly comprehensible to everyone, and practically conceivable. Economically relevant objectives motivate best. For example, if the self-confidence of a group is to be improved, there is no point formulating this as the objective to be jointly aimed at, but rather, activities need to be found which, if successfully implemented, would have the desired effect. In the project 'Bosque Seco', for example, the financially perceptible success in the negotiations over the transportation costs of the dry forest products led to a significant increase in the respect given to FEPROBOSUR and to the self-confidence of its leading staff.

If a peoples organisation is to be built and supported, this is dependent primarily on the personal development of its members, at least of its leaders. If this development is successful, then a rapid increase in the potential to solve incoming problems independently is the result. This is why the advisory staff has to steer a careful course between the underestimation of the campesinos, which can lead to frustration and to the advisor getting a reputation of being paternalistic, and an overestimation, which can lead to mistakes which might otherwise have been avoided.

The high demands made on the advisory staff mean that the GTZ-advisors cannot simply rely on the advisors 'functioning' by themselves and that they should keep close contact with the leaders of the target group at least. As soon as possible, however, staff should refrain from paying routine visits to the individual villages.

The sustainability of a development process, be it in the area of natural resources management or of independence in the target group, need not wait until the final assistance phase of a project to be realised. The fact that project support is limited in time should be rooted in the consciousness of all participants and the organisation of the work should lead step by step to a situation where even if the project-staff were to leave prematurely, then the main processes and activities could continue. When planning a project with the aim of a sustainable later development, these aspects should be taken into account from the start.

As we are dealing with poor sections of the population, this includes not only imparting planning and decision-making skills but also defining economically relevant goals and their achievement. Without a perceptible improvement in the family income, every initiative undertaken will collapse after a certain period. That is why a focus on potential benefits and not towards problems is crucial. This is the only way to set a process going where a responsible shaping of the future and the long-term sustainability of the project measures can be attained.

The situation in 1999

Towards the end of the normal assistance phase, FEPROBOSUR combines 84 village groups in those 40 communities which are most important for the protection and sustainable use of the tropical dry forest. A managing committee made up of seven men and two women, with the support of the project staff, is working towards the strengthening of the organisation and is responsible for the nation-wide sales of wood and charcoal worth around 1.5 million DM. It supports the integration of women in all activities as well as the implementation of small infrastructural measures in the villages by supplying material and further training.

The women's groups in the villages are in no way less involved in the decision-making processes than the men and are accompanied by a team of particularly active women chosen from their midst. FEPROBOSUR has developed into a nationally known organisation which is acknowledged by state institutions as the representation of the silviculturalists of the Southwest. Its represents the interests of its members confidently and successfully, negotiates and enters into contracts

for the use and protection of forests, and takes part in national conferences. For the future, it has plans for the self-reliant securing and improvement of the living and working conditions of the communities.

Of around 5000 km² of tropical dry forest, more than 1,800 km² are now under sustainable management. Another 800 to 1000 km² belong to the Jaragua national park and are therefore as protected as the national park administration can guarantee. The rest, apart from stands on the Haitian border, is hardly used. The regeneration, therefore, is fully underway. Taxation plots show an increasing rate of increment, which has resulted in the tripling of the timber volume since 1992. The shading of the soil has improved and trees are beginning to crowd out the cactuses.

These successes have finally convinced the state institutions. The long-standing resistance by the forestry department has changed into a laissez-faire attitude, intercepted with occasional and hesitant support. The land reform office has accepted the communities which are to be given land titles, is starting its own supporting programmes there, and for this reason is starting its own office in the project location. In order to ensure the continuation of a participatory approach, the office is employing some of the locally contracted project personnel.

Social Forestry - Hope from the midst of despair?

Experience and Reflections from the Integrated Forestry Development-Project in Ambatolampy, Madagascar

MARTIN TAMPE

I THE DEVELOPMENT IN MADAGASCAR

The forest policy of Madagascar has undergone a radical change over the last few years. Whereas at the beginning of the nineties, the responsibility of the forestry administration for the management, control and regeneration of public forests still went without saying, today not only the incorporation of the local population but also their leading role in management is a stated objective. This has been laid down by a number of laws (Law on the local management of natural resources N° 96-025, Forest law N° 97-017) but has not yet reached the implementing stage.

How did this happen? Through the combination of

- the admission that the hitherto practice of the forestry administration was unable to prevent the destruction of over 80% of Madagascan forests, which had originally covered practically the whole island. Painful elements of this are the daily bribery and the insufficient provision with personnel and material which degrade the forest officers to curious rarities in forest areas but not in the capital.
- the increasing political importance ascribed to the environment and the forest, encouraged in part by the environmental action plan.
- an active support of the reformulation of national forest policy by the donor countries coupled with the prospect of funds for its implementation
- the simultaneously introduced policy of decentralisation and privatisation
- the strengthening of non-governmental organisations

- a surprising determination to and capability for change within a large section of the forestry officers.

What consequences did this have when seen on the background of Madagascar's forest history?

Historical and prehistoric studies in cultural and settlement history and pollen analyses have proven that a shift in the composition of the flora and fauna of Madagascar took place in connection with climatic change some 5000 years ago. In the Western and South-western parts of the island in particular, increasing drought and rising temperatures changed the environmental conditions. Settlement began about 2000 years ago, and for over 1000 years seems to have had little ecological impact. Only in the 12th and 13th centuries, as the conflicts between the different tribes for predominance increased, in which the highlanders (Merina) finally won, were large districts especially around and north-west of the capital Antananarivo laid bare by recurring fire. The forest has remained a hide-out for enemies, thieves and evil spirits, in other words a threatening factor, until today. The fact that since the varying settlements by Europeans significant amounts of tropical timber were exported, contributed perhaps to impoverishment, but certainly did not have a decisive influence on deforestation.

Forest clearings with the aim of other land use (in particular pasture) was another factor for deforestation, but, because of the sparse settlement or lack of population and utilisation of large parts of cleared areas, this was probably of minor importance.

Today however, several hundred thousand hectares of natural woodland and secondary forest, in particular in the last remaining larger forest area, the eastern slopes of Madagascar, are burned and cleared annually for short-term shifting cultivation. An effective control, or the possibility to halt this is non-existent. It is no wonder then, that the incorporation of the population in the conservation and sustainable management of the forests has become the big (and last?) hope.

Since the end of 1997, the new forestry law and the decree ‘New forest policy’ are in force. They ascribe user groups a central role in the management of public forests. This can be organised directly through management contracts, but also with ‘secure local management of natural resources’ (GELOSE). In the latter case, a utilisation plan is set up either for individual resources or for the whole territory of a village. In a participatory process, a distribution and form of resource use which is both wished for by the villagers and accepted by the (village and technical agency) administration is decided on. This plan is not as binding as for example registered land tenure, but it does give the village security in the face of outside claims.

In any case, the forest and land remain state owned. Only the timber used is transferred to the user group. This is a regulation which is similar to the German hunting legislation, where the property claim over game is transferred only after it has been killed.

Photo 4:
Value generation from sustainable use: The Forestry Union of Ambatolampy, Madagascar, sawing up timber in the forest

II WHAT IS THE BASIS FOR THE «HOPE IN SOCIAL FORESTRY» ?

It is not self-evident that it is promising to 'set the fox to keep the geese'. And as the first trials in Madagascar are still young and have not matured into consolidated examples of social forestry, it is only correct to speak of hope. The justification for this hope is not very specific:

- in particular regions and social constellations trees and woodland have a cultural importance which could be used for their conservation
- the well-funded information and training campaign for a forest and field integrating land use is at its height
- the damage to the countryside in areas without forests (most of the country) is evident
- agricultural yields are sinking, and this can be linked partly to the disturbed ecological balance
- disturbances in the ecological balance are registered with alarm by the people, who do not see a viable ‘way out of the crisis’
- wood shortage has led to severe increases in the price of fuel in many regions
- revenue from the forest is becoming more attractive due to increasing timber prices and a better exploitation of non-wood products (such as honey or internationally sought for medicinal plants)

Whether these factors can lead to a long-term shift in the self conception and cultural and economic conception of Madagascar remains to be seen. There are still weighty arguments against:

- cultural and economic habits are stubborn and cannot be overcome overnight;
- a pronounced individualism and distrust hampers social organisation which go beyond the extended family units

- Madagascan society and religious community, characterised by two faces (traditional/pre-Christian - colonial/ Christian or Islamic) shows little inclination to respect the regulations of a state which is known to be corrupt;
- expected economic returns from a sustainable forest management are extremely limited due to the dumping prices which exist on the world market but also in Madagascar because of short-term forest exploitation practices (the prices reflect the harvesting and transportation costs but not the cost of silviculture, road maintenance and administration);
- the mean annual increment in autochthonous Madagascan forests is not more than 1 m^3 per hectare;
- the transition away from forest-destructive land and forest use practices is initially experienced as the immediate loss of benefits;
- the relinquishing of short-term benefits does not guarantee that others will not enrich themselves and that mid- and long-term benefits will materialise;
- the omnipresent fire in Madagascar does not inspire confidence that long-term investments in forests will be effective;
- secondary forest uses such as honey production are developing slowly and necessitate a safe marketing chain;
- tourism as an alternative source of income is only possible in certain areas because of the lack of good infrastructure in the forest areas of Madagascar.

It is indisputable that an integrated forest-land management in rural areas would, in the long-term, result in a maximum total of benefits for the population and the economy. This has been shown convincingly for certain individual cases and this is the basis of the project's confidence.

III STRATEGIC ELEMENTS OF THE PROJECT

The implementation of forest management plans and village development plans is not seen as dependent on outside funding. Rather, the project aims to develop models which are generally applicable and is conscious of the limited funds which

are available nationally. Therefore, the emphasis is laid on measures which support self-help and the training necessary for the implementation of realistic action. The project rests on the following strategic conceptions:

III.1 Integrated land use approach

The sustainable management of forests is not usually at the centre of the social and economic interests of villagers. If the forest is not perceived as a danger, then at most it is regarded under the aspect of fulfilling basic needs. It would be a hopeless task from the beginning onwards, however, if a participatory and committed development process were to be started 'from the back door', i.e. from the most marginalised factor. Indeed, in many cases there is even a marked competition between forests and other land uses.

With an integrated land use and village development approach, there is a chance to operate with real motives and reasons and to avoid creating a superficial interest in forests which in reality is motivated by an opportunist expectation of financial benefits. In this more realistic approach, the forest can be awarded the attention it really commands in its role as a productive factor, a protective element in the countryside and a cultural location.

In the example of the natural forest management in Tsinjoarivo, the plan wants to reduce the forest area in favour of the agricultural area in the mid-term from 70% to 60%. In this context it can be remarked that the existing forest-free area, with intensive cultivation, could feed ten times the number of people currently living in the area (about 2000 people).

However, because of the current state of knowledge of, training in, introduction to and trials of new agricultural techniques, this fact does not hinder new clearings as of now. It can be expected, though, that together with an economic development on the basis of a significant rise in agricultural production, solutions can be reached step by step for other problem areas like infrastructure, health and education.

A research project funded by the 'Tropical Ecology Support Program' (TÖB) connected to the GTZ project was able to contribute substantially to the improvement and concretisation of this integrated approach to land use and development planning. By incorporating services agencies, it was possible to achieve perceptible changes for the village population in the first implementation phase.

III.2 Economic profitability

Lots of activities seem clearly ecologically sensible and technically feasible. Whether they can become effective in the sense of a sustainable development also depends on their economic profitability. In order to avoid bad investments and disappointing experiences, a systematic analysis is carried out on the practical feasibility, the profitability to be expected and thereby also the mid-term option of self-financing. The creation of an extension structure funded by the users themselves is one of the central challenges of the current phase and is to be the subject of a TÖB research project.
With the aim of carrying out profitable projects, the GTZ project has been supporting the forming of village savings funds and credit groups. The now existing 15 funds involve around 17,000 people and manage total assets of about 350,000,- Deutsch Marks capital, 100,000,- DM mid-term third party funds and 30,000,- DM savings. The capital stock comes mainly from the selective support of private investment (local subsidies) which are to be repaid into the newly founded credit institutions. Through a consistent supervision of the project formulation, by accompanying the projects with advice and by a careful observance of the necessary guarantees, the funds were able to ensure a repayment rate of about 95%.

However, it has been found that in spite of technical feasibility, high success probability and secure financial resources, promising innovations are not carried out or are given up after a while. In these cases, it is often social, cultural and individual factors which play a decisive role in blocking or opening up new development perspectives. The need for intensive assistance when trying out new

techniques and advice with problems and difficulties that crop up is also frequently underestimated. The project is currently engaged in developing new forms of services in rural areas and in their economic stabilisation within a commercial relationship between seller and customer.

III.3 Support of a sustainable dynamic in behaviour and culture

The participatory approach in the identification, planning and implementation of project activities is the determining organisational element, even when it is often not intensive and broad enough. The affected regional organisations (technical services, regional administration, NGOs, cooperatives and self-help groups) steer the project in a cooperative way.

But as in many other cases, it has been found that the formulated objectives and principles are not necessarily the ones which dominate the course of action. This can be grounded in simple untruthfulness, but is often caused by enigmatic cognitive- emotion-action-continuums of the respective persons. In the same way, economic incentives alone are not reliable indicators for the realisation of innovations and development initiatives.

Without claiming to have dealt with this complex but extremely important subject satisfactorily, the project does see progress in an iterative monitoring and analysis process of behavioural and cultural dynamics. A short monitoring rhythm which focuses particularly on hindrances in plan realisation, has proven exceedingly fruitful for a collective learning process and in developing a transparent behavioural culture, but also for clearer discussions and more realistic targets in the planning process.

Aspects which should be given attention in every planning and monitoring in the above sense include:

- realistic analysis and planning of capacity
- exact description of the work situation
- analysis of social implications

- analysis of expected conflicts
- documentation of the personal risks involved in the implementation of planned activities
- comparative benefit-analysis for the participating actors
- analysis of disadvantaged groups by the project or by rational project steering, and possibilities of incorporating them in a constructive way.

IV THE MANAGEMENT BY USER GROUPS IN AMBATOLAMPY

IV.1 Preparation

The first project plan drawn up at the end of the eighties entailed the support of the forestry administration in the management of the regional forests (pine afforestations). Six months ago, this has been replaced by a management contract between a user group which had emerged over the last four years (forest union of Ambatolampy) and the forestry administration. Conditions in the contract are

- the implementation of the existing forest management plans
- the employment of forestry and finance experts
- the maintenance of the existing forest roads and buildings
- the maintenance and replacement of machines and equipment left to the user group;
- a permanent right of the forestry department to control the technical and financial management;
- the pledge that burnt areas defined as forests will under no circumstances be converted to other forms of land use.
- the sole use of generated income for the management (or expansion) of the forest.

This contract was only possible through the support and assistance given to the gradual creation of 214 grass-roots groups and their eventual association to individual cooperatives in the three forest areas, which finally led to the foundation of the forest union.

This structure was complemented by intensive discussions with the forestry department, which, at the executing level at least, now 'suspiciously supports' the model. The local forestry officers are still the source of many smaller conflicts, however, in which the rather non-united population eagerly participates. The background of these conflicts are illegal revenue sources and positions of power which are threatened by the new situation.

IV.2 Technical management data

Management currently takes place in one forestry station (Manjakatompo) in the western part of the region, which consists of 1,700 hectares of pine afforestations, 1,300 hectares of natural forest and 5,000 hectares of upland steppe, in one pine afforestation covering 150 hectares in the middle eastern part (Ampahibato) and in so far only a small part of a large natural forest comprising of 15,000 hectares in the far East of the region (Tsinjoarivo). Whereas the management of the pine forest follows simple regulations along the classical method (mainly natural regeneration, spacing, thinning and pruning, 25 year rotation period), in the natural forest, a more differentiated technique in tune with the local population is being sought for. This distances itself consciously from the standard regulations (rotation by areas with a systematic utilisation of all boles above 40 cm chest height diameter) and is oriented towards the principle of the selection system (*Plenterwald*). The forest is divided according to diameter into three strata (1: up to a diameter of 10 cm; 2: a diameter between 10-20 cm; 3: a diameter over 20 cm), which are handled differently. To simplify management, up to six crop tree species are selected for each plot, which deviates from the principle of a high as possible diversity, for small areas at least. The activities in the three strata are aimed at increasing the quality and share of crop tree species. However, it should be made clear that these measures are optional ones which make timber utilisation possible, but which are

not necessary for the continued existence of the forest and which only increase the value of the stands after long periods. The maximum limit for timber extraction lies at 30% of standing timber within a decade, which translates at an average maximum use of 0,85m³ per annum and hectare. This corresponds to increment estimations for autochthonous Madagascan tree species. The silvicultural interventions are planned according the following principle (table 1):

Table 1: Possible silvicultural interventions in the 3 horizontal stand strata

Lowest stratum		**Middle stratum**		**Highest stratum**	
Occurrence of crop tree species	Possible intervention	Occurrence of crop tree species	Possible intervention	Occurrence of crop tree species	Possible intervention
+	-	+	-	+	Individual felling
+	-	+	-	-	Opening up
+	-	-	Thinning	-	Opening up
-	-	+	Thinning	+	Individual felling
-	Secondary felling	-	Secondary felling	+	Opening up
+	-	-	-	+	Individual felling
-	-	+	-	-	Opening up
-	Planting / sowing	-	Secondary felling	-	Opening up

The fact that hardly anything is known about the increment rate of Madagascan tree species and about their reaction to silvicultural interventions, should give rise to accompanying research, but should not be an obstacle to a planned management. The alternatives are between generating an interest in the conservation of the forest and with that gradually developing an understanding of silvicultural

knowledge and techniques, or that the forest will disappear in a very short time. In this context, many questions seem of rather secondary importance.

Whereas in the pine forest areas under the jurisdiction of the forest administration, the responsibility of the user groups is restricted to the actual forest management itself, in the natural forest area Tsinjoarivo, which is state land in a general sense (terrain domanial), a communal management of all natural resources is being prepared. This includes public pasture, water economy, and a bundle of public social services, so that a village development plan is emerging.

IV.3 The economic situation

A proper management of forests requires pre-prepared information and training and a functioning system of enterprises which have the necessary basic equipment which can ensure a technically and financially successful accomplishment of the plan. These initial investments come to a total of 71,6 DM per hectare for an enterprise covering 1,500 hectares (table 2).

Table 2: Initial investment for forest management by user groups

Measure	**costs per hectare in DM**
Information, preparation (20 days), training (80 days)	6,6
Forestry equipment, administrative equipment, vehicles	54,0
Forest management plan, maps (10,- DM + 1.- DM)	11,0
Total	**71,6**

In the case of the Ambatolampy forests, these costs were carried by the project. It will now be shown that these can be financed easily under optimal conditions, and in a series of payments under (normal) adverse conditions, by the revenue from the forest itself. There is, however, absolute agreement among the forestry consultants and experts of Madagascar that the actual management and future economic planning must be financed by forestry generated revenue. That is why it is

necessary to have an economic viability calculation before drawing up a management plan .

If the construction or reparation of forest roads becomes necessary, then this obviously exceeds the above calculation. The cost can be estimated at around 10 DM per metre. Given a hypothetical road density of 20 running metres per hectare, this would result in an investment of 200,- DM per hectare. This shows that any investment in the road network needs careful deliberation. Nevertheless, the use of the roads as connecting roads between the villages is an additional benefit. The maintenance costs come to about 0,3 DM per metre and year, that is 6 DM per hectare and year for our example.

The utilisation potential in natural forests differs according to the growth conditions to varying degrees from the pine forests. Given a mean annual increment of 1 cubic metre, a useable bole wood percentage of about 40% can be reached in the natural forest. In the favourable case of infrastructure being available, the resulting fuelwood (another 40%) can also be marketed. In Tsinjoarivo these figures are significantly lower, however, as there is hardly any large timber as of now and there are no roads. In pine forests, an annual increment of 20 m^3 is realistic, with the proportion of sawnwood and fuelwood being the same at around 40% each.

Due to these different conditions, a very different labour volume is necessary, which translates in the cost structure of the regular management as follows (table 3):

Table 3: Running costs in natural forest and pine forest.

	Costs/a/ha natural forest (DM)	Costs/a/ha pine forest (DM)
Personnel forestry work	7	75
Personnel technology/ administration	15	15
Materials/ repairs	10	10
Amortization	10	10
Maintenance of infrastructure	7	7
Total	49	117

This results in the following balance sheet for the Ambatolampy (Figure 1)

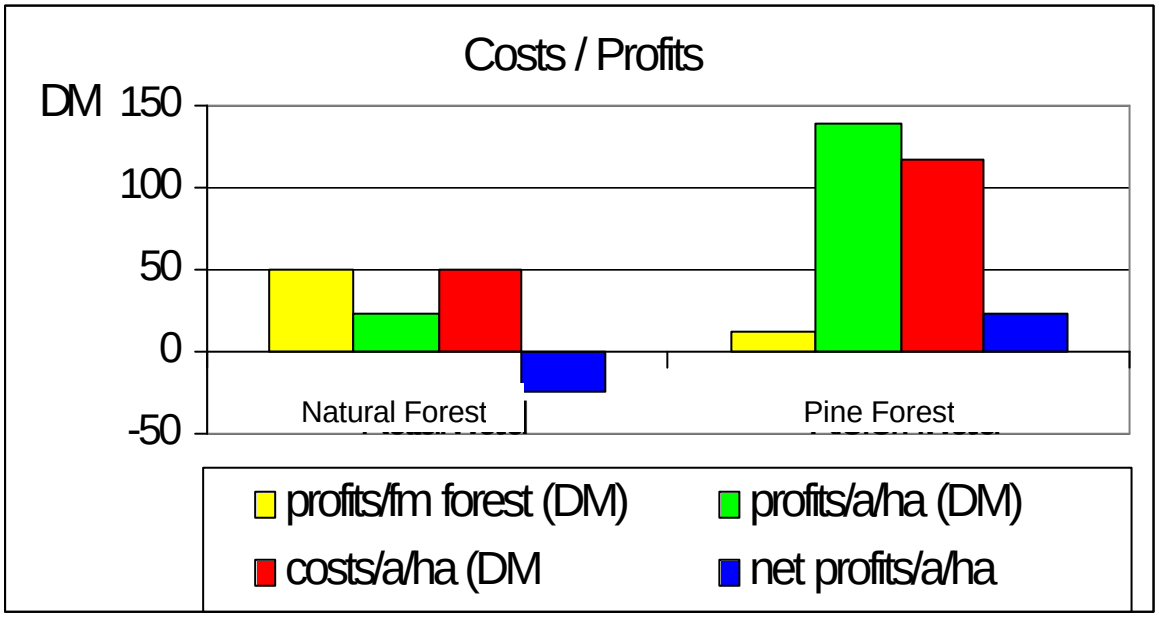

Figure 1: Costs and profits in the current condition of the Ambatolampy forests

The wood price for indigenous quality timber is at about 350.- DM/ m³ in the capital city Tana. In the depleted forest of Tsinjoarivo, an average on location timber price of around 50.- DM/ m³ can be expected, at a total quantity of 0.5 m³/ a/ ha. The price for on location pine stands at about 25.- DM/ m³ for sawnwood and 3.- DM/ m³ for fuelwood. Given the currently usable wood of 10 m³ / a/ ha in Manjakatompp and Ampahibato, this would mean gross profits of 140 DM/ a/ ha.

It is clear that the depleted natural forest in Tsinjoarivo cannot carry the estimated costs. Therefore, the material equipment (vehicles) has been reduced to a minimum, and the administrative costs are carried by the forest union UFA. A profitability analysis on the management of such forests, which are more the rule and not the exception, would have to include local use and marketing of non-forest products (medicinal plants, honey) and other services (tourism) as well as the value of biodiversity and the improvement of soil fertility, in order to establish a competitiveness with other land use forms.

If the economic objectives are consistently striven for (quality timber in natural forests, stand improvement in pine forests) then a significant increase in the net profits can be attained. In natural forests this will take a long time, but in pine forests, depending on the stand condition, silvicultural tending can lead to perceptible success within a few years. Several examples of natural and pine forests in Madagascar show what is possible (Figure 2):

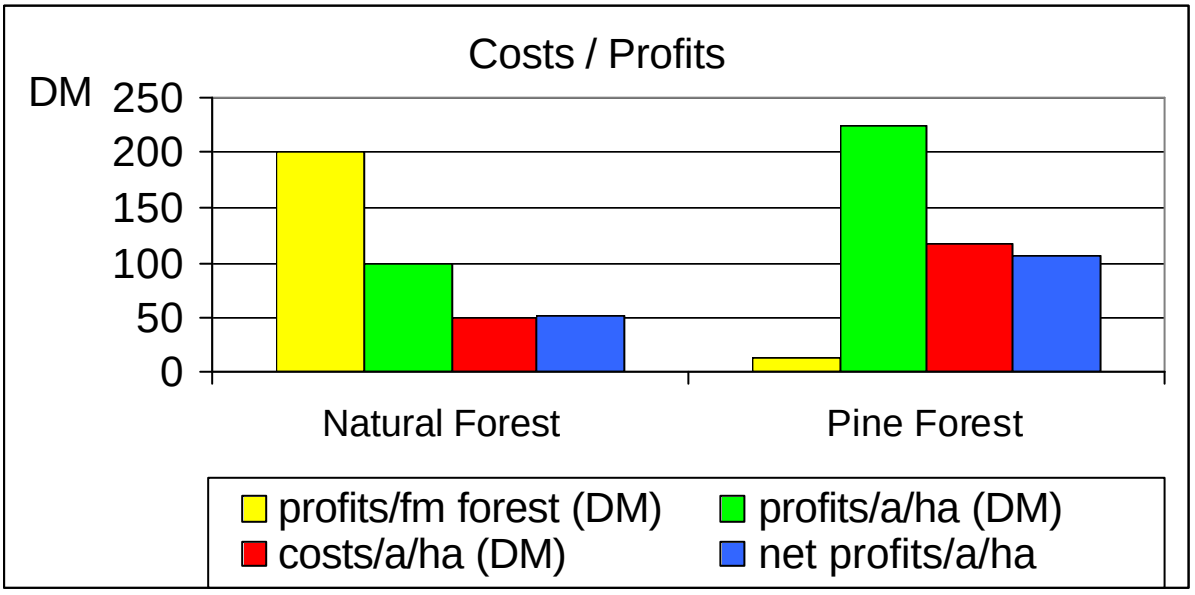

Figure 2: Costs and Profits in ideal stands

In the natural forest, a mean annual increment of 1m³ and a utilizable 0.5m³/a/ha of quality timber is assumed, which would obtain a price of around 200.- DM in location. In pine forests, an annual mean increment of 20 m³ is assumed which would allow the utilization of 16 m³/a/ha.

Community Forest Ownership: Key to Sustainable Forest Resource Management. The Gambian Experience

FODAY BOJANG, DIRECTOR OF FORESTRY
DOMINIQUE REEB, FORESTRY ADVISER, GTZ/DFS

I Introduction

At the turn of the century The Gambia was still covered by dense and almost impenetrable forests. In 1981 about 430.000 ha or 45% of total land area were classified as forest, it was estimated that this area was further reduced to about 340.000 ha or 30% of land area by1988. Likewise, the degradation of the forest condition is so severe that most closed forests have disappeared leaving only a tree and shrub savannah of poor quality. At the same time, The Gambia belongs to the group of the least developed countries, with an average income of $325 per capita and its population of 1,025,000 (1993) relies mainly on forest resources for its energy needs.

The main cause of forest destruction are annual fires which systematically burn most vegetation. This is in combination with human activity resulting from the high population density (96 inhabitant/km^2) and its growth rate of 4.1% per year (1993 population and housing census).

While the seriousness of deforestation and the resulting environmental degradation with its socio-economical consequences were timely acknowledged, the situation in The Gambia with regard to forest management since the official introduction of the concept of scientific forest management by the colonial administration in the latter part of the 1940's, has been one of state control and manipulation. In the early 1980's it became apparent that the prevailing forestry practices were inadequate to halt the destruction of the country's forest resources and that new approaches would have to be sought to meet the challenge of preserving a sufficient forest cover.

It is in this context that the Forestry Department, with the support of a German funded project (the Gambian German Forestry Project, GGFP) started to initiate a concept of natural forest management in 1984.

II The initial situation

Forest management in The Gambia, as in the developing countries in general and in Africa in particular has hitherto been characterized by extensive state involvement with little recognition of the potential for achieving positive long term sustainable forest management, development and utilization through the involvement of the local communities. The Gambia government Forest Policy of 1976 was a broad statement of policy that was not specific on the instruments for achieving these objectives. It expected public involvement in the development of the forest resources without providing a conductive environment for this.

With the introduction of the state owned Forest Park concept in the 1950's and of the forestry legislation in 1977 which vested the state with overall power over the national forest resources, the local population that claimed traditional ownership of surrounding forests began to develop a feeling of alienation which finally resulted in their unwillingness to participate in the protection and management of what used to be 'their forests'.

Because the communities no longer saw the forest as theirs, they began to perceive all their activities in the forests as 'illegal', with the consequence that forests utilization practices became increasingly damaging. This behaviour was further enhanced by the restrictive Forest Regulations. Inevitably the forest resource base of the country continued to deteriorate as the result of a lack of public concern and of an increase in population pressure and illegal activities.

The forestry personnel who were mostly involved in forest protection in accordance with the forest laws were deemed to be playing a policeman's role and were both feared and disliked by a significant cross section of the local communities. Thus their technical advice on forestry matters was not taken seriously by the target communities.

In conclusion, this institutional framework deprived the rural population of responsibility for forest management, although it was most affected by deforestation, while the forestry administration was entrusted with a mandate it was unable to fulfil due the tense relationship with the population and also because of the lack of human and material resources. In reality, forest resources became 'ownerless' and were exposed to systematic 'mining' that caused considerable destruction and wastage. While everybody could acknowledge forest destruction and was aware of its consequences, the existing and unadapted institutional set up was preventing any efficient action.

In the mid-1980's, when more knowledge was gained in The Gambia about the state of forests and about the potential of natural forest management, it became clear that the government would never be in a position to manage the forest resources countrywide on its own and that a new approach would have to be found to save the remaining forest cover.

III The process of change

III.1 The introduction of community forestry

The introduction of Community Forestry in The Gambia was born out of the realization by the Forestry Department of the futility of its efforts at protecting the nation's forest resources without the committed and willing involvement of the local community. The department also recognized the inadequacy of the policy under which it was operating as well as the inadequacy of the Forest Act and Regulations. Consequently, in 1987, the Forestry Department and the Gambian German Forestry Project wrote their first "Proposal for the introduction of Community Forestry in The Gambia". The proposal went through two revisions until, in 1990, the first attempts at introducing community forestry were undertaken.

Although the policy and legislative environment remained the same at the start of the programme, the commitment to change the approach within the department and the Ministry responsible for forests as well as the commitment within

government to see that the negative trend in forest degradation is halted and eventually reversed, made it possible to implement community forestry. The long-standing demand by the local communities to allow them to manage their own forest facilitated the process.

III.2 Institutional arrangements for community forestry implementation

The introduction and application of community forestry is a process of confidence building and is demand driven. One of the primary conditions a community has to fulfil before entering a Community Forest Management Agreement with the Forestry Department is the creation of a Forest Committee at the village level. This committee, which is generally formed on the basis of the already existing village institutional structure, consists of representatives from both the male and the female members of the community and is responsible for all work organization at village level. Its members are assisted by extensionists and the forestry staff in areas such as participatory problem and solution analysis, work planning and preparation of management plans. They also receive training in rudimentary forestry practices such as forest protection, tree nurseries, plantation and utilization as well as in basic book keeping. Where necessary and possible, training in other revenue generating economic activities is also provided. Other members of the community benefit from this training through their participation in work implementation and through their committee members.

Community forestry implementation distinguishes three phases: a preparatory phase during which the forest management by local communities is prepared; a preliminary phase during which the communities shall demonstrate their capacity in forest protection and management; and a consolidation phase during which the communities gain further managerial and technical forestry skills aimed at self-management. For the development of confidence between a participating community and the department it has been found necessary to mutually agree upon a Preliminary Community Forest Management Agreement (PCFMA) for the preliminary phase and a Community Forest Management Agreement (CFMA) for

the consolidation phase. The basic idea of the PCFMA is to develop suitable conditions for community forest management. It gives time to conduct negotiations, manage eventual conflicts over land ownership and allows the villagers to demonstrate their genuine interest in protecting their forest. Before submitting the PCFMA, the villagers have to demarcate the forest they intend to manage on a permanent basis. Special care is given at this stage to integrate other land use forms such as agriculture and pastural land management. Once it has been approved by the local authorities and by the Forestry Department, the PCFMA is valid for a period of three years and is then automatically replaced by the CFMA if the community has shown its ability to manage their forest.
This CFMA grants permanent ownership rights over the forest resource of a clearly demarcated forest to the community or communities and specifies details on the extent of cooperation with the Forestry Department, such as technical assistance and on the specific responsibility of both parties. With the CFMA, the communities are entitled to keep the benefits derived from their forests. The only condition attached to the CFMA is to manage the forest resource according to a simple management plan that has to be approved by the responsible Divisional Forest Officer.

Every agreement signed with the community is accompanied with an attestation from the traditional chief to the effect that the community has customary ownership of the land that they claim or that they have permission from the chief's office to annex the forest land for their community forestry activities. In the traditional Gambian society the traditional chief is regarded as the customary custodian of all unclaimed lands as well as those claimed lands which have not been cultivated before. In recognition of this role, the traditional leaders are involved from the beginning. Many community forests already established are being jointly managed by two or more villages. It is in the negotiations of these joint managements that the traditional chiefs have been found most useful. As traditional seats of arbitration, the involvement of the chiefs helps to stem any future conflict between claimants of the land concerned.

In situations where there have been multiple claims on a piece of forest land, the Forestry Department and the chiefs work together to secure a joint management of the forest by the claimant communities. Because such conflicts cannot always be solved between communities especially in the densely populated area close to the urban centres where competition for land is high, the Chiefs recently innovated and implemented the concept of a 'peace committee'. This committee is composed of seven elected village heads (Alkalolu) that are highly respected for their knowledge of traditional rights and for their objectivity. Already in two occasions, this committee was able to settle serious conflicts without interference of government administration.

The community, through their forest committee, is also required to open a bank account into which all revenue from the forest management activities is paid. While part of this money can be used by the community to finance development activities at the village or larger community level, the agreement requires that a certain proportion, about 40%, be reserved for reinvestment in their forest. During the PCFMA stage they are exempted from all taxes. After the CFMA, while still exempted from all licence and permit fees they are required to pay 15% of their collections into the National Forestry Fund as a contribution towards the development of the forestry sector and community forestry in particular.

Extension work is mainly carried out by teams of private extensionists and foresters. However, in order to enable the large scale implementation of community forestry within a reasonable time, the Forestry Department has encouraged the collaboration of experienced NGOs especially in the field of extension. So far two strong and renowned NGOs are participating in community forestry.

The practice of community forestry is not without problems, however. As surprising as it may seem, it takes a long time to create a sense of forest ownership among the villagers. This is the result of profound mistrust about governmental actions and policies. This sense of ownership has to be carefully built up during the PCFMA stage. To achieve that objective, the use of financial or material incentive is avoided. No compensations are given to the villagers for

the protection and plantation work that they carry out in their forests. A task decided upon by the forest committee and executed by the villagers without external support strengthens the perception that they are the real owners of their work and therefore of 'their forest'.

III.3 Management Activities

Forest management at the community level is based on the principle of management planning. With technical assistance from the department, communities prepare simple management plans which guide their intervention in the forest area. Adapted tools are used for adequate visualization and documentation of the plan. One of the key pillars of the management plan is the establishment of fire protection structures around the forest such as fire lines and the subsequent establishment of greenbelts. In the early stage, planting material for the greenbelt such as stumps and seeds are provided by the Forestry Department. The greenbelt also serves as a permanent demarcation line clearly indicating the ownership status of the forestland.

The communities are also encouraged to set up village nurseries where seedlings for planting in the firebreaks or for enrichment planting are produced. Ultimately all plant production should take place at the village level, while the Forestry Department will limit its supply of seeds to those which are not available locally.

Through their forest committees, the communities organize themselves in such a way that fire prevention structures are put in place with minimum delay. Customary norms are followed for organizing themselves into work forces for the accomplishment of the various tasks. The Forestry Department does not involve itself at this level of organization. In this way the communities can realize their own potential.

The interventions at the community forest level are based on the successful experiences on natural forest management of the Gambian-German Forestry Project which has demonstrated that keeping fires out of the forest is the most important initial intervention for a successful revival and development of the

forest. Other activities include controlled and planned harvesting, e.g. initial concentration of all harvesting activities on deadwood exploitation, and enrichment planting with valuable timber species. Dead wood exploitation immediately yields revenue for the participating communities.

IV The outcome

IV.1 The policy and legislative review process

For the sustainable countrywide implementation of community forestry, the Forestry Department saw the need to review and revise both its forest policy and legislation, based on the successful experience gained during the past years, in order to create an appropriate and conducive environment for local community and individual involvement in forest management. This was done in line with the expectations of Agenda 21 and the Forestry Principles of the Rio conference.

As mentioned earlier the Forestry Department realized the inadequacy of its operational policy for forestry development and therefore embarked on a process of a participatory review of the policy in 1992. This process was concluded within one and a half years from commencement.

The resulting draft policy was then presented to a workshop attended by multi-disciplinary policy level personnel as well as representatives of the local and traditional authorities who had the opportunity to propose certain changes and to introduce new elements. Government approval of this policy was received in November 1995.

The policy makers had the chance to develop this policy according to tested concepts and to the exhaustive experience gained during five years of people's participation in community forestry. Therefore, the new forest policy could put forward realistic proposals which could respond to the basic needs of the population rather than just setting theoretical goals.

The Gambia now has a Forest Policy that specifically calls for community forest management undertakings as well as private forestry. The policy also calls for

community ownership of the forest resources being managed by them and the benefits accruing from them, while calling on the government to provide technical assistance and guidance to the participating communities and individuals through the Forestry Department.

However, this policy requires supporting legislation, which the current forest laws cannot provide. The Forestry Department initiated a similarly participatory process of legislative review. This process, which is now completed, while resulting in maintaining a significant proportion of the previous legislation, has caused the introduction of numerous new elements pertaining to tree and forest tenure, management and utilization at the community and individual levels. The new legislation has been specially tailored to regulate the process of getting community forest ownership and to secure the corresponding ownership rights. It also outlines the obligations of the Government and those of the communities and it includes provisions for conflict resolutions and tax incentives as well. This legislation will form a very strong basis on which community forestry and private forestry will be able to expand.

The proposed new law has been presented to a workshop of farmers who had the opportunity to comment on it and to make proposals for the introduction and/or elimination of certain elements. As a third step in this participatory legislative review and revision process, the department again presented the revised proposals to a two day national workshop of multi-disciplinary policy-making personnel in July 1996. The comments of this workshop were included in the draft that has been submitted to the government for its consideration. Its enactment by Parliament is expected shortly.

It has been found necessary to follow a long process of public participation in the review and revision process of the policy and laws in order to avert any future significant negative developments that may hamper the development and expansion of community and private forestry in The Gambia. The consultation reaffirmed the need to devolve authority for forest management to the local communities as the public appreciation of the proposed changes and introductions was amply demonstrated by the participants during that process.

IV.2 The growing importance of community forestry in The Gambia

Already over 6000 ha of forest have been brought under active community management since the introduction of the programme in 1990. Applications have been received for the management of over 7000 ha additional area. There are 45 established community forests while over 50 are awaiting approval. More than 300 villages are now involved in community forestry in The Gambia. Applications from new villages are received in large numbers. The rippling effect of community forestry is considerably higher than previously expected. While in the past forestland was considered as marginal land reserves, people are now considering them from a different perspective.

Due to the importance of community forestry, a visible trend in the reduction of bush fires is taking place. The absence of fire is certainly the best criteria to measure the success of forest management. Fire prevention and control is extremely difficult in absence of proper alternatives. Community forestry constitutes such a valuable alternative for the rural population. Similarly, illegal exploitation within community forest is successfully eradicated because every villager is willing to protect 'his forest'. The improved control over forest resources and particularly over firewood exploitation will help to change the status of wood being more or less a free access resource. As a matter of fact, large amounts of wood are still not unaccounted for. In the near future community forestry should lead to a much improved control system of exploitation and therefore the true value of forest products will be gradually introduced, thus creating more incentive to manage a valuable resource.

Another significant development has been observed among the cattle herders who, at the initial stage, did not support the concept of community forestry management. They feared that forest management would exclude their cattle from the forest. They were further of the opinion that fire was beneficial to the production of fresh grass regrowth. After about three years of forest management their attitude changed radically due to the improved health condition of their cattle. Furthermore the absence of fire has considerably increased the amount of available fodder within and outside the forest. Herders who in the previous years

use to migrate into the region of Casamance in Senegal are now staying on their community land. Consequently farmers are now benefiting from the presence of these cattle during the dry season through the intake of manure on their fields.

The protection of the forest cover has reversed the trend towards the degradation of natural resources. Through community forestry management the resource base is gradually building up again with wide ranging beneficial effects.

VI The lessons learned

The rural population is environmentally aware:

One of the most important lessons learnt by The Gambia during the past six years of implementing community forestry is that communities are very aware of the economical and environmental consequences of deforestation and are therefore prepared and willing to participate in forestry activities, provided the government creates the right environment for their participation. Once confidence is established, a responsible and dynamic development process, geared toward a sustainable management of natural resources, takes place within and among the participating communities.

Suitable institutional environment initiates self-development:

A recent study has shown that among the first villages to have participated in community forestry, the forest committees have built up confidence in managing their forest. As a result the communities have decided to use the same mechanisms to manage other natural resources such as farmland and pasture.

Similarly, with the growing number of villages involved in community forestry, the responsible committees are now organizing themselves to form regional associations to rationalize their operations and to strengthen their position during negotiations. They also have the aim to further promote community forestry on their own. These associations will be able to maintain the linkages between the rural population and the Government.

Once the proper legal and institutional environment is provided, the population continues to build up capacity without external support because it responds to its vital needs.

The importance of clear ownership rights over natural resources

Natural resources can be managed by the population if and only if their ownership status is clearly established and understood. For forest resources that are managed on a comparatively long-term basis, the ownership rights should not be limited in time by the government. The ownership should be permanent on the condition that the owning communities are not depleting their forests.

In the process of community based natural resource management, all types of monetary or material compensation for work done should be avoided as they will be perceived as a "salary", thus giving the impression to the villagers that they are implementing an activity supervised by an outsider rather than work they have decided upon and for which they have understood the necessity. Actually, the absence of compensation strengthens their sense of ownership and creates strong ties between the villages and their forest.

During community forestry implementation and contrary to what is often believed, it has been found that the communities did not see the forest primarily as a source of revenue. Access to forest ownership is their first motivation because they fully understand the importance of preserving the forest to meet their own needs and to secure their future without interference from outsiders.

The Gambian experience can be replicated in other countries if the political will is there:

The Gambian experience in community forestry is already interesting villagers, organizations and administrations of the neighbouring countries such as Senegal and Guinea-Bissau. Exchanges with villagers of these respective countries have already taken place and have created a mutual interest for the development of a common concept. Indeed, forest protection and management in a given country, even successful, cannot be done in isolation. It is necessary to harmonize the

forest policies of these countries in order to prevent the existing trend of gradual deforestation. In that respect The Gambia Government has shown that with sufficient political will and courage, the empowerment of the local communities can lead to a much improved forest management, and on its side the population has proved that they can be entrusted with such responsibilities.

The later aspect has relevance beyond the Sub-region. It shows that the origin of the problem has often been misunderstood. While it is true that forest degradation results from demographic growth, poverty, poor education it is basically a problem of institutions inhibiting constructive actions due to the lack of security of tenure and benefit for communities or individuals to manage natural resources which belong to the state.

While six years experience is too short to draw any decisive conclusions with regard to adopting community forestry as the policy instrument for achieving the policy objective of keeping 30% of the total land area under forest cover and managing 75% percent of this, we in The Gambia are convinced that it is the only objective course of action under the present socio-economic conditions towards a sustainable management and utilization of the forest resources.

Forest Certification: Enhancing Social Forestry Developments?

BARBARA V.KRUEDENER

Forest certification – the concept

Forest certification is a market-based instrument to recognise good forestry practice. It is a procedure whereby an independent certifier gives a written assurance that a forest is managed in accordance with agreed ecological, economic, and social criteria. A label informs the consumers that the products they buy come from a certified forest. Thus, forest certification is an instrument that harnesses market forces to provide an incentive for good forest management.

Forest certification is applicable to all types of forest enterprise, whether industrial or small-scale, corporately owned or community based, located in the North or in the South. It was designed as a tool to promote forestry that is socially beneficial as well as environmentally responsible and economically viable (Forest Stewardship Council, 1994). In the face of increasing failure of other policy instruments to contain forest destruction caused by logging operations, early proponents of certification hoped this new and market-based instrument would enhance control over the industrial exploitation of forests. At the same time, advocates of social forestry expected it would provide market access and other benefits for small-scale, low-impact, community run 'eco-timber' projects (Irvine, 1999).

Current trends – running counter to social forestry approaches?

This latter aspect – the opportunities and benefits of certification for small scale forest operations run by local people - is the most obvious point of departure for a discussion about how certification might be a suitable instrument to further social forestry. Current figures of forest enterprises certified under the scheme of the Forest Stewardship Council (FSC) suggest that rather than giving market access to

social forestry enterprises, certification might work in favour of ‚classical' industrial forest management. More than eighty percent of the certified forest area are managed by large-scale industrial enterprises, corporately or publicly owned, while only two percent of the area are under communal management (the remainder being managed by private individuals). However, these two percent of certified forest area operations under communal management make up 17 percent of the total number of certified forests. [34] This suggests that there is a considerable number of community based enterprises making use of certification, although in the overall picture large-scale, public or corporate operations predominate. Forest certification could, thus, be seen to consolidate the dichotomy between 'classical' forest management on the one hand and small pockets of social forestry projects on the other. Yet, a continuation of that dichotomy hinders the structural and institutional reforms necessary for pluralistic forestry models to develop on a larger scale (v. Stieglitz, 1999).

In the following two issues will be looked at:

- Is forest certification a suitable tool to underpin social forestry models, i.e. forest management by local people?
- Does forest certification - by providing ‚legitimation' and improved market access predominantly to large-scale, industrial forest management operations - act as a barrier to social reform processes in the forest sector?

It will be argued that forest certification helps to strengthen social forestry approaches through external recognition and internal consolidation of management capacities. It will also be shown in which way forest certification, rather than blocking reform, to the contrary, can even act as a catalyst for structural and institutional change in the forest sector.

[34] Figures of forest area under ‚communal management' include forests managed by community organisations, cooperatives, communal or family user groups, and municipalities. In tropical countries, the majority of certified communally managed forests is in Latin America. Figures are based on the FSC's list of certified forests, January 2000.

However, this paper will not address the issue of how far structural reform of the forest sector and a higher integration of forest management into its social context will pave the ground for social forestry to expand. Finally, attention will also be drawn to the limitations of certification in contributing to the consolidation of social forestry approaches.

Photo 5: Mahogany planks at the community sawmill of Petcacab in Mexiko. Together with another three communities of a producer co-operative Petcacab was certified in 1995 according to the principles of the Forest Stewardship Council (FSC).

Boosting social forestry through good PR

An international certificate of good forest stewardship, such as the FSC label, provides an enormous boost of recognition and publicity to forest management approaches by local people. Often, such operations are marginalised by central government institutions and representatives of the ‚classical' or ‚scientific' forestry model. The publicity generated by certification by far exceeds the circles usually associated with rural development concepts like donor agencies and research institutes. It reaches a wide array of people from national and international environmental NGOs to buyers and consumers.

been reported that the international attention has helped to sway criticism of the ecological impacts of community forestry that had been voiced by urban-based environmentalists (Maynard and Robinson, 1999). A case study on the impacts of certification of the indigenous community forest management project in Lomerío, Bolivia, concludes that certification of the project has given an important boost to the acceptance of indigenous groups' forest management in Bolivia as a whole (Markopoulos, 1998).

Thus, the international stamp of approval has helped to recognise local people as competent managers of their forest resources, comparable – through a common label - to ‚scientific' forest managers of large enterprises in the US or Sweden.

More important to many communities, however, is that the external recognition for responsible resource use can help pave the way towards obtaining land titles or officially recognised use rights. In the case of the indigenous community in Lomerío, it has certainly aided their quest for getting official recognition of tenure for their traditional territories (Markopoulos, 1998). Also the certification of campesino groups in Honduras has accelerated the process of government recognition of local use rights (Markopoulos, 1999). Generally, forest certification has brought about a heightened awareness and recognition of tenure and use rights of local and indigenous people in national level institutions (Bass and Simula, 1999).

The importance of external recognition to small and community-run businesses is confirmed in a recent survey of small businesses seeking or having already achieved certification. Publicity and prestige were mentioned most often as the non-market benefits that they expected from certification (Scrase, et.al., 1999).

Strengthening management capacity

Many authors have observed that certification contributes to local people's capacity to practice sustainable forest management (Bass and Simula, 1999, Markopoulos, 1998,1999, Irvine 1999, Maynard and Robinson, 1999). There are three aspects of management capacity that certification fosters: Technical aspects

of sustainable forest management; general enterprise management; and management of social relations. Capacities are raised (and capacity needs highlighted) in the phase of preparation for certification, during field auditing and after the certificate has been issued when conditions, or corrective action requests, have to be fulfilled before the next monitoring visit. Finally, the national level negotiations on the development of locally adapted standards provide an opportunity for mutual learning.

Capacity-building stages in forest certification:

For enterprises preparing for certification the principles, criteria and indicators serve as an encompassing guide to all aspects of sustainable forest management that have to be dealt with. Where general principles and criteria have been interpreted for the national context by supplementing them with relevant indicators, these national standards provide detailed and specific management requirements.

In the absence of nationally adapted certification standards such guidance will be provided by the certifiers' generic or local interim standards[35]. The certification standards, though not designed as a forest management manual, provide clear objectives. Certification itself adds the incentive to achieve those objectives. The preliminary visit (scoping visit) that the certifiers usually offer their clients can also be regarded as part of the preparation phase. Scoping visits identify major strengths and weaknesses based on a briefing with the managers and/or a rough estimation of the applicant's performance. This in turn helps the enterprise preparing for certification to deal with any major gaps before the full assessment.

[35] FSC accreditation requires certification bodies to provide a generic set of standards for the FSC Principles and Criteria as well as produce an interim standard when they first start operating in a country where no national FSC-endorsed standard exists. Interim standards consist of the certifier's generic set supplemented by existing local regulations, guidelines, codes of practice, etc. and the results of a stakeholder consultation.

The next step in capacity-building is the field assessment. Although certifiers have to remain independent of other interests, and therefore are not allowed to provide consultancy services to an operation they certify, in practice the field assessment serves as an informal training opportunity. When the assessors interview forest managers and operators about the performance of the operation under investigation the discussions provide a lot of useful hints and recommendations to those involved. As Jack reports in a study on the impacts of the certification process in Bolivia, „one young forester I interviewed stressed that he saw these reviews not just as a duty to be performed, but as a chance to incorporate outside expertise into management practices“ (Jack, 1998).

The third phase starts when certification has been achieved, but conditionally[36] on certain improvements. The summary of field results provided in the certification report identifies strengths and weaknesses of an operation. It points the forest managers to areas to consolidate and areas to improve. It normally contains a list of corrective actions, or conditions, that have to be met within a given time-frame. Together with specific recommendations it provides a clear guide to what kind of training or other measure might be needed to address any areas of non-compliance with the standards. The regular monitoring visits by the certifier ensure that the corrective actions are followed up.

Management capacity

The case studies on certified community enterprises carried out so far report that certification has had most impact on local people's skills in the areas of general management and of management of their social relations. FSC Principles and Criteria require an enterprise to have organisational procedures for planning, implementation and monitoring with clearly defined and distributed

[36] The FSC-system does not provide for ‚gradual' certification corresponding to different levels of achievement, but allows certificates to be issued on specific conditions. The certification scheme of the Indonesian Ecolabelling Institute, on the other hand, does not allow for conditional certificates, but has a scale of bronze to gold as an incentive to achieve full compliance.

responsibilities, i.e. a formalised management system. Preparing for certification means, therefore, not only making sure that all the performance requirements are met in the field, but also that a management system is in place that ensures that the level of performance can be maintained.

However, while the requirements for a management system help to improve the management capacity of a forest enterprise, the associated requirements for documentation can be problematic, particularly in developing countries and for small-scale enterprises (Thornber, 1999, Scrase, et.al., 1999). They seem inappropriate in environments in which oral culture and traditional forms of management prevail, having been deemed impossible in projects without outside support (Tolfts, 1998). It has therefore been suggested that the requirements for documentation should be adapted to match the realities of social forestry operations (Irvine, 1999, Scrase, 1999). If documentation is only produced to formally fulfil certification requirements or to make auditing easier and if it is carried out by outside agencies like donor projects on behalf of the forest managing communities involved, it is not likely to benefit the management effort of those communities. If, on the other hand, simple and manageable monitoring and documenting systems could be developed specifically for community enterprises, then the requirements of certification could foster communities' managing and monitoring capacities even more strongly.

Managing social relations

Both in the case of campesino groups in Honduras and the Lomerío community in Bolivia certification has demanded a better handling of the enterprises' social relations. In Lomerío certification has helped to strengthen the social and institutional relations between the communities, their communal organisation and supporting agencies. As a consequence the communities were brought back into active decision-making which they had lost in the process of commercialisation. The assessment by the certifiers itself only identified some of the institutional and social weaknesses without attempting to address any of them in detail. However, the condition attached to the certification that a strategy for increasing community participation in decision-making and conflict resolution be designed and

implemented together with the recommendation that a larger conflict evaluation be carried out led to a thorough analysis of the situation and to the preparation of a work plan to gradually address the problems (Markopoulos, 1998). In Honduras, too, the certifier imposed conditions aimed at improving management of social relations. The assessment process had identified conflicts between the campesino groups vested with forest usufruct rights and the wider communities who use the forest resources traditionally. As a consequence the certifier asked the campesino groups to develop mechanisms for integrating the wider community into the decision-making process while leaving it to the group how this should be done. (Markopoulos, 1999).

Looking at opportunities for capacity-building in forest certification processes, it is generally important to bear in mind that the role of the certification exercise is mainly to highlight capacity needs rather than to fill the gaps itself. However, the analysis of strengths and weaknesses helps an enterprise to identify and focus on these capacity needs as well as enabling it to communicate them to outside agencies who are in a position to provide support.

Finally, an important and often overlooked opportunity for capacity building is the forum where nationally or locally adapted criteria and indicators are developed. This provides room for discussions on technical aspects of forest management for forest managers from a diverse range of backgrounds and experience who otherwise often work in isolation. Although not many forest managing communities have been directly involved in national level standards discussions, supporting NGOs and associations have had access to such forums. In the following it will be shown that these multi-stakeholder forums can also have a significant impact for forest sector reform processes.

Forest certification as agent for reform in the forest sector?

The following three elements of the forest certification process as designed in the FSC system contribute to making it a catalyst in social reform processes in a country's forest sector: the application of certification standards, particularly those related to stakeholder participation; the local consultation of stakeholders

that forms part of the evaluation procedures; and the national level multi-stakeholder processes for the development of standards. Moreover, the resulting stakeholder agreements are binding for the certification contract and can have policy implications beyond the certified operation.

Application of certification standards

The social aspects contained in the global FSC Principles and Criteria of forest stewardship identify roles, responsibilities and rights of those forest stakeholders that are directly involved in or affected by forest management activities. The adaptation of these generally formulated requirements into locally appropriate indicators and their implementation by the forest management unit help to integrate forest management into its social context.

Examples are the right of local communities with legal or customary tenure or use rights to maintain control to the extent necessary to protect their rights or resources, over forest operations (FSC Criterion 2.2), the right of indigenous peoples to control forest management on their land and territories (FSC C. 3.1), the principle of not giving away those rights to other agencies without free and informed consent, and the role of indigenous peoples in identifying sites of special cultural, ecological, economic, or religious significance to be protected (FSC C. 3.3). They also stipulate local communities‘ involvement in forest management through employment, provision of services and training, and through consultations (FSC C. 4.1, 4.4).

The certification requirements regarding rights and responsibilities of forest stakeholders set out in these criteria are not based on static definitions. At the level of the forest management unit such agreements are subject to revisions through continuous consultations between the forest management and groups directly affected by management operations (FSC C. 4.4) and through mechanisms to resolve disputes or grievances regarding tenure claims and use rights, resources and livelihoods of local peoples (FSC C. 2.3, 4.5). For instance, the certification of the Lomerío Community Forest Management Project is said to have „promoted the redefinition of community roles and responsibilities in forest

management and enterprise administration, with greater emphasis placed on active participation in decision-making. Without certification, it is likely that the conflicts engendered by enterprise development would have received far less attention“ (Markopoulos, 1998).

Local stakeholder consultation

The ongoing and participatory definition of roles and responsibilities of different stakeholders in forest management is also emphasised by the local stakeholder consultations that the FSC system requires for every forest that is evaluated. Stakeholder views are solicited on the standards to be used locally[37] and on any issues of performance of the applicant enterprise in relation to the FSC Principles and Criteria (FSC, 1998a).

Indeed, these stakeholder consultations might be the most crucial instrument with regard to reforms towards greater social integration of forest management because they provide recognition and ‘legitimation’ of all relevant stakeholder groups (Bass, 1999). Input and involvement of the following groups is, thus, facilitated and ensured: „local or national government and non-government organisations which are involved in forest management, and which represent a range of environmental, ecological, legal, social and economic perspectives“ (FSC, 1998a).

National standard development initiatives

At the national level, certification initiatives and associated standard setting processes facilitate a redefinition of roles and responsibilities with regard to forest management. Most forest certification systems developed nationally or regionally so far, acknowledge that forest certification standards should be based on broad stakeholder consensus and acceptance. However, they vary considerably in the degree to which different stakeholders are allowed to and have participated in the actual decision-making.

[37] i.e. the interim standards that are applied in the absence of FSC-endorsed national standards

The FSC Process Guidelines for Developing Regional Certification Standards define a stakeholder, or stakeholder group, as „any individual or group who may be affected by, or expresses a strong interest in, forest management, or the development of forest management standards." This may include "foresters, environmental and conservation organisations, loggers, forest dwellers, research and academic institutions, social and human rights advocacy groups, indigenous communities, development and aid organisations, government representatives, timber trade dealers and associations, and concerned individuals" (FSC, 1998b). The guidelines specifically recommend actively including "groups which are often excluded from decision-making processes" such as "under-represented social and ethnic groups, women, youth, rural communities, land owners, loggers and foresters." (ibid.).

A broad stakeholder basis and balance of interests combined with clear rules of procedure, fair decision-making, transparency and accountability as requested for FSC recognition of national standards and initiatives make national forest certification initiatives into forums where a consensus agreement between government, corporate and civil society interests can be reached on how forests should be managed and with whose involvement.

Binding agreements with wider policy implications

But can these processes actually influence the wider political and social environment and structures, or are they likely to remain marginalised? The product of the consultative elements in the certification process, be they at the FMU or national level, is an agreed definition – within the global framework of FSC Principles and Criteria and national legislation – of how forests should be managed. This agreement becomes the contractual basis between certifier and certified operation. Rather than stopping short at general commitments and policy declarations (which are still often found at international level discussions on SFM criteria) the consultative processes in certification lead to binding agreements between stakeholders with an immediate impact on the forest management enterprise seeking certification. Moreover, dispute resolution mechanisms at the level of the FMU, the certifier and the national certification initiative ensure the

possibility for the renegotiation of these agreements and ongoing conflict resolution.

However, the dynamics of such processes can also have wider repercussions beyond the FMU. By highlighting the need for a more conducive political or legal framework for SFM, forest certification standards and procedures can underpin policy or legal changes. In Bolivia, the national forest legislation of 1996 was markedly inspired by the certification debate. Its legislative requirements for forest management mirror those of certification and thereby create an enabling framework for SFM and certification. In Costa Rica the development of national standards for certification went hand in hand with the establishment of a new government incentive system for sustainable forest management. Individual forest certifications can also spur reforms in the legal and policy realms. As mentioned above, in both Honduras and Bolivia pioneer certifications of local user groups have helped to bring about and/or accelerate processes of government recognition of local use and/or tenure rights (Markopoulos, 1998,1999). Particularly with regard to tenure and use rights of local people and indigenous groups, forest certification has brought about a heightened awareness and recognition in national level institutions (Bass and Simula 1999).

What certification doesn't do

Development agencies and NGOs have contributed considerably to raising expectations about the benefits that certification offers to local forest managing communities. However, some of these have proven to be unrealistic since certification has some important limitations that should be borne in mind by those who promote it for social forestry.

No mechanism for accessing market potential consistently

Although certification is a market-based instrument it does not provide a mechanism to improve the business and marketing performance to the same extent as for the quality control system for forest management (Maynard and

Robinson, 1999). Indeed, certification has highlighted the difficulties that communities and smallholders who only recently entered the process of commercialisation face in this area.

In many cases NGOs and/or donors promoted certification for social forestry projects as a tool for the communities to benefit directly from higher prices achieved in international markets. Although large market potential exists for certified products, communities have been unable to access it consistently. A pronounced gap remained between their business capacities and the demands of international buyers regarding product quality, consistency of supply, and handling of business transactions.

The identification of this capacity need, however, has not yet translated into any visible change in donors' strategies of supporting social forestry projects. Their focus still is - often exclusively – on forest management and does not include business development and marketing expertise. A recent report investigating common problems of small businesses to access certification concludes with the recommendation (amongst others) to develop a ‚small business guide to market opportunities for certified products' (Scrase, H., et. al., 1999). Other authors recommend supporting social forestry projects to enter into local and national markets first, rather than to „leapfrog into international markets" (Irvine, 1999, Markopoulos, 1999).

Contrary to fair trade labelling schemes, forest certification does not entail the fostering of business partnerships and management of supply chains which include secure and just commercial deals and support with market information and promotion. As a result, certified social forestry projects frequently continue to be dependent on exploitative local trade structures, particularly when they have to sell unprocessed timber. The case study of campesino groups in Honduras concludes that the groups' limited business skills have prevented them from exploiting direct exporting opportunities. At the same time they sold certified timber without a price premium to a local manufacturer who was in a better position to make use of the existing demand in overseas markets (Markopoulos, 1999).

Suitability to communities' complex social and diverse land use systems

Secondly, forest certification stops short at the forest boundary. Its exclusive focus on forest management in many ways makes it a „single-issue" scheme that is often ill-suited to the more complex and encompassing land management systems employed by local people and communities.

Management decisions necessitated within the wider system of resource management might clash with the requirements of certification. This is particularly the case when certification has led the management to focus too strongly on one forest function: timber production (Bass and Simula, 1999).

Similarly, some authors have questioned the suitability of certification to adequately address the complex social fabric of community enterprises. As an instrument designed to fit many different circumstances worldwide, it has proven „a rather blunt tool for measuring or promoting social development" at the community level (Maynard and Robinson, 1999). The standards provide for some benefit sharing between those groups who are directly responsible for forest management and the wider community. The extent to which benefits should be shared under certification requirements, however, often depends on how the certifiers interpret the relevant clauses in the standards and how they take account of different stakeholders views.

Consequently some authors have perceived the standards' interpretation as not going far enough, while for others it has gone too far. Maynard and Robinson claim that the certification of communities in Quintana Roo did not improve equity between those household heads, or ‚ejidatarios', who are vested with forest rights and the non-ejidatario households, let alone within ejidatario households (ibid.). Bass and Simula, on the other hand, argue that the conditions attached to the certificate of campesino groups in Honduras for better integration of the interests of the larger community have exceeded local perceptions and norms of reasonable claims towards benefit sharing (Bass and Simula, 1999).

The problem of satisfactorily interpreting particularly the social aspects of the certification standards is exacerbated by the frequently limited expertise of assessors in this area and by procedural exigencies that do not allow a sufficiently thorough analysis of the complex social structures and relations in community enterprises.

Conclusion

Although the large majority of forests certified according to the FSC principles and criteria are large-scale industrial operations, the few certifications of community enterprises that do exist, particularly in Latin America, provide interesting lessons about the benefits and limitations of certification for social forestry.

Among the benefits is the publicity that an international certificate generates, as it can help improve relations with outside agencies like governments and donors. In particular, communities have appreciated the recognition of their competence as forest managers as well as the positive impact on negotiation processes with government authorities regarding land tenure and use rights. Internally, the different steps in the certification process have offered learning opportunities and highlighted capacity needs. Thus, certification has been shown to help consolidate communities‘ management capacities, particularly in the realm of general management and management of social relations.

However, the case studies of certified social forestry enterprises have also helped to expose the limitations of certification. These have been primarily linked to the business success of the enterprises, since – contrary to expectations frequently raised by NGOs and donors – certification has no mechanism to facilitate consistent access to the market potential for certified products. Moreover, current certification practice and standards are not well adapted to match the diverse land management objectives and social equity issues of forest managing communities.

Indeed, the case studies show that forest certification has so far not benefited to any significant degree from social forestry theory and practice. More input into

the design of certification programmes is needed from social forestry and community development experiences to adapt certification procedures and audit techniques to the needs and management realities of forest managing communities.

Such input and participation is also needed to a greater extent than at present in national certification initiatives. The design of the FSC certification system opens new avenues for the definition and negotiation of agreements between stakeholders. Only if these avenues are effectively utilised by all stakeholders can certification bring momentum to structural reform processes in the forest sector.

References

Bass, S., Simula, M.: Independent Certification/Verification of Forest Management. Background Paper for the Worldbank/WWF Alliance Workshop, November 1999.

Forest Stewardship Council: FSC Accreditation Manual. Document 3.1, 1998a.

Forest Stewardship Council: FSC Process Guidelines for Developing Regional Certification Standards. Document 4.2, 1998b.

Forest Stewardship Council: Statutes. Document 1.1, 1994.

Irvine, D.: Certification and Community Forestry: Current Trends, Challenges and Potential. Background Paper for the World Bank/WWF Alliance Workshop on Independent Certification, Washington, 1999.

Jack, D.: Of Markets and Forests: Certification and Sustainable Forestry in Bolivia. Working Paper, Bolivian Council for Voluntary Forest Certification (CFV), October 1998.

Markopoulos, M.: The Impacts of Certification on Community Forest Enterprises – a Case Study of the Lomerío Community Forest Management Project, Bolivia. IIED, Forestry and Land Use Series No. 13, 1998.

Markopoulos, M.D.: The Impacts of Certification on Campesino Forestry Groups in Northern Honduras. Oxford Forestry Institute, 1999.

Maynard, B., Robinson, D.: Quintana Roo Forest Certification Case Study. Natural Resources Institute Ethical Trade and Sustainable Rural Livelihoods – Case Studies (draft).

Scrase, H., et. al.: Certification of Forest Products for Small Businesses: Improving Access – Issues and Options. UK Department for International Development RNRKS Forestry Research Programme (ZF0083), September 1999.

Stieglitz, F.: Wirkungen Sozialer Waldwirtschaft – Zwischenbericht aus der „Wirkungsanalyse Soziale Waldwirtschaft". GTZ-Wald-Info 24, 1999.

Thornber, K.: Overview of Global Trends in FSC Certificates. International Institute for Environment and Development (IIED), May 1999.

Tolfts, A.: How Appropriate is Certification for Small- Scale Timber Producers in Melanesia. Overseas Development Institute, Rural Development Forestry Network Paper 23 d, 1998.

Deutsche Gesellschaft für
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Begleitprogramm Tropenökologie (TÖB)
Förderung der Tropenwaldforschung
Tropical Ecology Support Program
Postfach 5180
D-65726 Eschborn
Federal Republic of Germany

Fax: **+49-(0)6196-79-6190**
E-Mail: **TOEB@gtz.de**
Website: **http://www.gtz.de/toeb**

Im Auftrag des Bundesministeriums für
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