Impacts of social forestry and community-based forest management

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SUMMARY

The transfer of the concept of the forest as State domain to tropical forests is usually of colonial origin. In regard to tropical forests, the concept is characterized by a separation of forest management from the social context of use and control by the adjoining population.

In the 1970s, the first efforts were made to reintegrate forest management and output more effectively into society. These efforts were deficient in various ways, and the new orientation of the 1980s was accompanied by a shift from a predominantly sectoral to a transsectoral perspective. Furthermore, the development of strategy was placed within the broader context of rural development and the economic and social viability of sustainable resource management. Integrated forest management, joint forest management and collaborative forest management are some of the cornerstones of this new orientation. However, the scope for implementation of participation-oriented management of forest resources remains limited.

'Social' forestry covers a number of 'social' dimensions. It may be 'social' in that it: (i) seeks to achieve local development impacts from forest resource output; (ii) is socially integrated; (iii) is socially configured; or (iv) contributes to social change. Such social change has various facets, including political, conflict management and economic facets. Social forestry and community-based forest management may carry certain risks, such as the danger of contributing to unsustainable resource use. Social commitment from all players is needed to avoid such risks.

Technical cooperation projects that promote social forestry provide support on many levels, such as on the level of frameworks (especially policy and legal frameworks), social and economic viability, and conflict management and organizational development. The projects fall into two categories, according to whether they have forest conservation and/or sustainable management as their primary goal, or whether these are promoted to achieve other ends. Differences among the projects in these categories emerge in their methods of approach and concern the significance of transsectoral approaches or the

role ascribed to the promotion of non-forest sources of income. In the project approaches a series of impact assumptions come to apply as working hypotheses, and these are of key significance to the success of the approach chosen. They include assumptions about interest in sustainable use and about conservation and management capacity. Projects do not yet systematically test such impact assumptions.

Three frequently recurring problem areas are identified for projects in support of social forestry and community-based forest management. The first of these is dealing with unfavourable political and legal frameworks. However, there are a number of examples of success in coping with such frameworks. The 'success factors' that have emerged are listed. The second problem area is participation and opportunities for it under conditions that are not clearly defined. The third concerns the issue of the economic viability of social forestry and the integration of resource management and development objectives. Rehabilitation of forest resources is often the primary objective of participation-oriented forestry, and the goals of poverty reduction and forest conservation frequently conflict. However, immediate income impacts are not the only benefits of interest to participants. Social, political and cultural benefits, such as regaining control and decision-making authority over resources, play an equally important role in the overall calculations of the participants.

The paper concludes with a country example that illustrates impacts more concretely.

The call for 'social' forestry

The starting point for efforts to develop 'social' forestry in countries with tropical forests is usually the State-engendered policy that assigns to the State a monopoly for the management and conservation of forest resources.

The roots of this concept of the forest as State domain lie in the European Middle Ages. The origin of the term 'forest' is as a legal term: it referred to a woodland area or to resources within it that 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. (Latin *foris* = outside, *forestare* = to deny access.)[1] Control of the forest and the game living within it, and later also timber supplies, was placed within the domain of the central governing authority.

The transfer of this concept to tropical forests is usually of colonial origin.[2] In regard to tropical forests, it is characterized down to the present day by a broad separation of forest management from the social context of use and control by the adjoining population – the traditional users and owners of the resources. This separation is buttressed by the prevailing political, administrative and economic framework.[3]

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1. A comprehensive legal and historical survey of the concept of forest from the Middle Ages to the turn of the 20th century can be found in Weber (1927).
2. In this case, the transfer focused on the rather repressive elements of the concept, whereas the forestry liberalization that occurred in Europe at the turn of the 20th century was omitted from any transfer.
3. An additional important influence for the post-colonial continuation and expansion of this system was, in richly forested areas, the objective of industrial development based on tropical wood exports. See Clément (1997).

One of the shortcomings of these State-centred strategies for forest management and forest conservation is that very few of the governments of countries with tropical forests are actually in a position to meet the capacity requirements corresponding to this monopoly role. The phenomenon of the 'State forest' as an area de facto free of legal constraints and monitoring is widespread. This shortcoming is intensified by the fact that the concepts of protection and management of forest resources suggest primarily sectoral responses, while the pressure for exploitation is usually of transsectoral origin.

Forest output is predominantly absorbed on the national and international levels and its local impacts are slight. Regional development impacts resulting from forest output remain extremely limited. Nor is there any impetus behind the development of functional management structures on site. Output also remains far short of its potential because it is based on a resource that is for the most part not controlled and is monetarily undervalued as a result of nearly total open access.

Steps relinking the forest to civil society

In the 1970s, the first efforts were made to reintegrate forest management and output more effectively into (civil) society, that is, to give more consideration to the claims of society to forest resources and to mobilize management capacities other than those provided by government structures.

The focus of these efforts lay at first in drier zones and in areas that were particularly ecologically sensitive, the main goal being to secure the ecological substructure that sustains the rural population. The key activity area consisted 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 forests continued with few exceptions to be excluded. Community forestry (1970s, FAO), social forestry (1976, India), and finally farm forestry,[4] which focused more on the inter-

ests of individual enterprises, constituted important stages in terms of strategy.

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

■ the presence of conflicting goals among the ecological, social and economic objectives, which affected implementation;

■ that quantitative goals with their related incentive systems (e.g. food-for-work) ended up 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;

■ overemphasis on the subsistence factor, which was accompanied by timidity in dealing with the economic interests of the farmers and with regard to developing commercial forest production by farmers, alongside a tendency to underestimate market economy aspects; and

■ a tendency to create a dichotomy between 'classical forestry – bad' on the one hand and 'social forestry – good' on the other.

A noticeable reorientation concerning the management of existing natural forest resources began in the mid-1980s in a climate of growing international debate over the issue of tropical forest depletion. This reorientation experienced a boost in the 1990s, and received international support through the United Nations Conference on Environment and Development (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 transsectoral perspective. Management and conservation of forest resources came to be seen within the broader context of sustainable management of natural resources, and particularly, in view of the direct competition between agricultural and forestry interests for available land, sustainable management of soil resources.

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4. See Arnold, 1991.

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Furthermore, the evolution of strategy was placed within the broader context of rural development and the economic and social viability of sustainable resource management. This was partly a consequence of confronting the issue of poverty-induced overexploitation. But it was also a result of an increase in the value of the 'standing forest' to those living near it, especially in terms of gaining income from the nearby forest, which increases the attractiveness of sustainable forest management as an alternative form of land use.

Integrated forest management, joint forest management, collaborative forest management and forestry for rural development are the cornerstones of this new orientation.

In 'classical' forestry cooperation, attempts to cope with the failure of existing strategies for tropical forest conservation led in the 1980s[5] to the application of 'integrated' forestry projects. Without going so far as to question the State monopoly, integrated forest management aims to reduce the deficiencies of previous approaches. It does this by making use of improved integration of the economic and social functions of the forest, by placing greater emphasis on the significance of local value added and, above all, by employing a more transsectorally oriented approach to confront the growing pressure for exploitation of forest resources.

The concepts of joint forest management and collaborative forest management are another matter. They 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 cooperation between the State and civil society, in which the rural population, user groups, nongovernmental organizations (NGOs) and the private sector all act as responsible participants. This cooperation posits as a premise that all sides participate in the management and conservation of forest resources and in the (economic) benefits as well as the burdens.

A key factor here is the acknowledgement that important potential for the development, application and control of

management agreements and thus for supervising the exploitation of forest resources lies with the users and adjoining populations themselves. Examples of more recent and relevant concrete implementation approaches are contract management and nature conservation by agreement, which are founded on multilateral agreements: for instance, government/forest authorities + rural communities/user groups or government/forest authorities + rural communities/user groups + the private sector.

While central to such concepts is the belief that participation-oriented management is a key factor for the success of sustainable management of forest resources, the forestry-for-rural-development approach has rural development as its foremost objective.

The 1990s

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

Significant impacts on management structures and institutions as well as impacts on the forested area itself can only be achieved if it is possible to move from isolated solutions to a pluralistic kind of forest management in which the supervisory and management potential existing outside the public sector is brought into play effectively, comprehensively and on a permanent basis.

The question arises as to how much institutionalization social forestry would need in order to tap its performance potential noticeably. Here the focus is brought back to the framework for such a change in terms of, for instance, forestry policy and legislation (forest law, land law, financial law and administrative law) and the economic environment, which prepare the ground for new actors to come into play.

In fact, the scope for implementation of participation-oriented management of forest resources remains limit-

5. First examples of this type of project date from as early as the late 1970s, that is, to a point in time when the demand that forest management contribute to rural development was officially introduced to the international discussion at the World Forest Conference under the topic of 'Forests and Peoples'. For the purpose of this paper, however, the date of the broader establishment of a particular project type is what is primarily of interest.

ed. Even where it is already a stated policy goal, a favourable environment remains to be developed for the blossoming of management capacities outside 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 frameworks is thus of great significance for both the present and the immediate future.

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 covers a number of 'social' dimensions. According to a recent study on impacts and approaches of technical cooperation projects in support of community-based forest management in Africa, Asia and Latin America, these 'dimensions' are relevant to all projects of this type, though to varying degrees and with differing challenges in concrete terms.

- ■ 'Social' forestry is 'social' in the sense of seeking to achieve local development impacts from forest resource output, including the addressing of the social viability issues raised in ecologically sustainable forest management:

  ■ through direct participation by the adjoining rural population in forest output;

  ■ through integration of the resource-use interests of the adjoining population; and

  ■ through expansion of the adjoining population's possibilities (legal, economic) for achieving 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 include:

  ■ monitoring and decision-making authority;

  ■ management and conservation measures;

  ■ expertise and service tasks; and

  ■ investment and yields.

  These are transferred or given back, in whole or in part, to the civil society, e.g. to user groups, community resource management institutions and service NGOs, instead of being concentrated in the hands of a government institution or private concessions. Management potential and performance capacities within the civil society are thus mobilized.

- ■ 'Social' forestry is 'social' in the sense of being socially configured, that is, adaptable, dynamic, responsive to the context and social environment. Social forestry projects take varying forms depending on the particular (political, economic, cultural, ecological) environment and remain flexible because of the 'social creativity' of the participating interest groups shaping this forest management. Social viability and social integration as described above are, besides, only 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 frameworks.

- ■ Finally, 'social' forestry is 'social' in the sense that it contributes to social change.

  ■ Participation-oriented forest management constitutes an important area for the concrete implementation of reform processes: decentralization, institutional pluralism, etc., in the sense of a renegotiation of authority and tasks for both the State and civil society. Social forestry projects thus always have a political dimension. They can supply important incentives for effective, that is, substantive, decentralization, in that they introduce 'decentralization 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 harmonizing of interests dimension (between resource

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users, the State and the private sector, or between different user groups). This is because it grows out of the negotiation and agreement processes of various interest groups under changing conditions and provides impetus for redistribution processes related to access and control over resources.

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

■ 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; the new managers must make a place for themselves as a new force in the management system as a whole.

Risks and side-effects of social forestry and community-based forest management

Social 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 unsustainable forest management, it must also involve the development of conservation and exploitation agreements that include an element of social commitment for the participants, as well as functional monitoring procedures and instruments.

One of the key prerequisites for such a commitment is that the mandate for management of forest resources come not only 'from the top down' (from State to civil society) but also 'from the bottom up' (that is, from the resource users to 'their' management organizations).

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 ineffective in regulating and monitoring resource use. This 'issuing of the mandate' is not necessarily based on the legitimization patterns usual in Western culture (such as the democratic election of a management committee), but rather on whatever variety of legitimization is integral to the culture of the resource users. Two aspects deserve particular attention in this respect.

■ First, the potential of the informal legal system in resource exploitation. Depending on the cultural context, informal legal systems such as traditional tenure can constitute an important foundation for legitimization and social integration of management institutions.

■ Second, such well-known key terms as participation, process orientation and impact monitoring take on particular significance during the formation of social commitment, legal accountability and the supervision of management agreements, and make a vital contribution (see below).

A survey of social forestry and community-based forest management projects

A look at technical cooperation projects in the field of community-based forest management and social forestry shows that they provide active support on almost all of the levels discussed:

■ frameworks and the conditions they create;

■ social and economic viability; and

■ conflict management and organizational development.

The projects may be roughly divided according to their objectives into two separate categories:

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

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 living conditions and to stabilize the ecology 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 participants. As an instrument to develop sustainable forest management, participation-oriented management can only be effective

if investments in sustainable management are attractive and at least economically viable for the participants in terms of their various benefits. One important prerequisite for 'attractiveness' is long-term guarantees of access to benefits.

Differences among the projects in both categories therefore emerge above all in regard to methods of approach, and concern the significance of transsectoral approaches or the role ascribed to the promotion of non-forest sources of income.

Furthermore, in the project approaches a series of impact assumptions come to apply, explicitly or implicitly, as working hypotheses, and these are of key significance to the success of the approach chosen. The following examples may be given.

- Assumptions about interest in sustainable use.
  - If access of the local population to natural resources is guaranteed, the people will use these resources on a sustainable basis and will apply forest-conserving land-use methods.
  - A return of State forests to 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 exploitation.
- Assumptions concerning conservation and management capacity.
  - When the adjoining population participates in the management of forests, it actively invests in its conservation.
  - Conservation and management capacity will be improved by including non-governmental players (adjoining population).
- Assumptions concerning sustainability of afforestation measures.
  - Privatization increases the sustainability of afforestation measures.
- Assumptions concerning the reduction of pressure for exploitation.
  - The achieving of increased income in other sectors leads to a reduction of income deriving from illegal/unsustainable forest exploitation.

The step of addressing such (implicit) impact assumptions in regard to social forestry and community-based forest management by means of indicators or by systematically documenting the experience and observations made is not yet a matter of course in all projects. However, a clear shift to critical monitoring is becoming apparent in the area of economic impacts of forest management participation; sweeping positive assumptions have become rare. More and more frequently, the projects are conducting systematic impact observation in regard to economic viability, and business and economic indicators are increasingly employed.

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

Problem area 1
Dealing with unfavourable
political and legal frameworks

The majority of participation-oriented projects are set up in an environment of State-centred forestry policy and legislation. Even where political and legislative specifications have changed their orientation in the direction of greater participation, they usually have not yet been, or are just starting to be, applied. Application of such specifications is often not in line with the interests of particular groups or implementers and in any case goes against the classic definition of the roles of forest authorities and the population and the relationship between them.

The importance of this fact is often underestimated during project planning and 'time framing' in that:

- too little light is cast on the issue of policy and legal frameworks, and the issue is not truly addressed;
- the forest administration's acceptance and readiness to implement are optimistically overestimated in regard to the agreed participatory approaches;
- objectives are accordingly set unrealistically high; and
- conditions for donor support are often defined on a strictly formal basis ('granting of pilot status for the project', 'change of legal framework') without the integration of 'softer' process indicators to point the way. Such indicators would document institutional change in terms of the increasing commitment and reliability

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of relevant cooperation partners, e.g. on the basis of functioning agreements on coordination and cooperation on different and increasing levels of technical and administrative competence.

Nevertheless, in Africa and Latin America there are examples of coping successfully with unfavourable forest policies and legislative frameworks. Projects in support of social forestry and community-based forest management have managed to influence the process of designing such frameworks and to contribute significantly to changing or adapting them.

Several factors for success have emerged in the process. Of course these factors do not constitute a catalogue of individual elements that can simply be extracted from their respective contexts and applied elsewhere at will. They do, however, give an idea of which kinds of strategy orientation the projects adopted and what consequences this can have for the planning and monitoring of 'framework-impacting' projects. Examples of success factors worth mentioning in this context are:

- the close linking of lessons learned from the field (field activities) to the substance of policy advising;

- a facilitator strategy that is suited to integrating relevant interest groups and key persons and to making them into active players in the search for implementation and monitoring of solutions (the project as 'interested' facilitator, but not as one striving to establish a certain position; a process-supporting rather than a pre-programmed mode of procedure);

- a diversification of partners in implementation (NGO cooperation, for instance), not in order to oppose the government partner but rather to provide it with support, by consistently integrating, calling upon and referring to the State mandate and responsibility;

- consistent adherence to project agreements and governmental agreements;

- cooperation along the lines of 'soft' and 'multiplier' process indicators, that is, by means of the use of indicators:

  - that allow a constructive approach to, and assessment of, cooperation progress that goes beyond the strictly formal level of, for example, legally based changes;

- in which a multiple security is striven for, with binding, individual multilateral agreements on various vertical and horizontal levels: for example, various levels of hierarchy, various levels of centralized or decentralized/local authority, various levels of technical responsibility and services, and partners from various sectors (private sector, NGOs, governmental organizations); and

- finally, that take into account the observation that 'social forestry requires success from the start'. For example, pilot approaches should be concentrated in locations with a relatively high probability of success linked to corresponding (positive) impact monitoring.

Problem area 2
Participation and opportunities for participation under conditions that are not clearly defined

Participation of the population in the management of forest resources involves much more than a simple formal transfer of the State's rights and management tasks to the people. Just as important is the process by means of which this transfer takes place. It enables the population to make use of its new possibilities for participation in a competent manner and to assume supervisory functions effectively on the basis of the development of a management mandate that applies both upward and downward. It further makes it possible for the State and the government forest administration to define and realize their new role and their responsibility in the altered management constellation. It also makes it possible for third parties such as NGOs and the private sector to become involved in the process through specific services, interests and responsibilities.

Projects often find that the scope they have to provide support to such a process is not clearly defined. This is because of unfavourable legal frameworks for participation-oriented forest management combined with the absence of an explicit mandate for 'pilot approaches', owing to lack of real support for participatory concepts on the part of relevant decision makers or implementing bodies. It is thus difficult for projects to develop and implement comprehensive strategies of adequate support to the various actors in such a process.

Problem area 3
Economic viability and integration of resource management and development objectives

The issue of the economic viability of 'social' forestry and the balanced reconciliation of development goals and resource management goals remains an additional challenge for the projects, especially whenever the economic potential of forest resources is limited or can only be realized 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 extreme degradation or have depleted stocks because of previous concessions; or
- where State management and development cooperation have already visibly failed.

Very often, therefore, the rehabilitation of forest resources is the primary objective of participation-oriented forestry, and even cost-covering management is at first 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. Much more often there is competition between investments in sustainable forest management on the one hand and individual income needs or investments in 'development' on the other.

Nevertheless – and this is illustrated in the example of the Gambia (see below) – it would be a mistake to reduce participant benefits entirely to economic considerations and immediate income impacts alone. Social, political, cultural and indirectly beneficial side-effects – such as regaining control and decision-making authority over resources – and the achievement of long-term security in the access to rights and products 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) it may be based on a mandate derived from traditional ownership of land. Furthermore, output and benefits from social forestry do not have general local impacts, but rather impact specific groups. The integration of the various and often conflicting group interests (e.g. the user interests of immigrants) and the question of the balance to be struck between interests of particular groups and use by the population as a whole thus constitute, for a number of projects, an important factor within the issue of (socio-)economic viability.

Following this look at individually recurrent problem fields in social forestry projects, we shall conclude with a country example that illustrates impacts more concretely.

In concrete terms: the impacts of forest management by communities in the Gambia

The small West African State of the Gambia lies in the ecological buffer zone on the edge of the Sahel. Its own remaining dry forest resources are threatened with massive degradation. As a consequence of the only partial success of previous approaches, the concept of community-based management of natural forest 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, legislation and institutions, and the concept and its implementation have, for the most part, taken root firmly at the national level.

Given the size of the Gambia – 11 295 km^2 – even small additional areas (in absolute figures) placed under effective community management exert a significant degree of influence on overall forest management, with impacts on the price structure of forest products, marketing structures, and the behaviour patterns of users and consumers. At the same time, the specific local conditions contribute in several respects to a favourable environment for the development and institutionalization of social forestry, and they foster the comparatively rapid evolution of verifiable impacts: the administrative apparatus is rather small and comprehensible, and the conditions characterizing communication density and decision-making channels would under most circumstances be described as a 'well-decentralized environment'. Ecological conditions across the country are comparatively homogeneous. The same can be said for the cultural environment surrounding forest and land use.

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Without going into detail regarding these points, some observations on impact trends that have emerged on site with the establishment of the community forest management concept are made below. The basis of these observations is a one-month study visit in November 1998. The goal is not to draw up a quantitative 'indicator-bound' catalogue of impacts but rather to present a preliminary but clear retrospective view of impacts from the perspective of participants and non-participants, in order to show the many impact levels as well as principal impact tendencies.

Impacts and impact tendencies

Conditions for forest resource management

■ With its forest policy and legal framework, the Gambia has developed an environment that is particularly favourable to participation-oriented forest management.

National forest conservation and management capacity

■ Through management agreements with communities called Preliminary Community Forest Management Agreements and Community Forest Management Agreements, nearly 16 000 ha of additional forest area has been placed under management or conservation.[6] Here the most important management instrument is fire prevention; the principal initial incentive for the communities is to regain and secure long-term control over the forest resources around them, *vis-à-vis* the State and external users.

■ Besides the direct protection and rehabilitation impacts on community forests themselves, indirect protection impacts are to be observed on the surrounding forest and bush areas; areas which, designated as State forest reserves, had previously been subject neither to active forest resource management

nor to other protection measures. The result is a sharp decrease in the overall frequency and extent of bush fires since 1995.

■ Transferral of management responsibilities to local communities has set in motion a diversification of management institutions. It places value on existing local potential for control and management of resource use (e.g. on the basis of traditional custodianship over land) and develops it further. With the formation of two community forest associations, development of secondary organizations with medium-term potential to play a part in monitoring, conflict management and advisory services has begun.

■ As part of the development of the Gambian forest management concept with community forest management as the key instrument, a new definition was reached of the functions of the areas classified as forest parks: from the forest park as a 'State forest preserve' to the forest park as a centre for application-oriented forestry research and training (e.g. for community forest organizations in villages).

■ On the level of the forestry administration itself, 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. Non-forestry advisory services, which are supported by a project, are provided in cooperation with NGOs.

Impacts on the resources

■ Fire prevention functions not only as a protection instrument in the strict sense, but also forms an important instrument for forest rehabilitation, through establishing the value of the regeneration potential of the dry forest. The natural regeneration is maintained and promoted and leads, after only a relatively short time, to a visible improvement in the condition of the forest and to decreased susceptibility to fire, as well as to an increase in economically important tree varieties.

6. This compares with almost 12 000 ha of forest under effective State management (1998 figures).

Economic impacts

Macroeconomic level

■ As the portion of forest resources coming under effective control grows, the economic valuation of those resources increases. Formerly, the dealers' costs in marketing forest products, especially fuelwood, were essentially limited to exploitation and transportation costs and fees or 'expenses', so that access to the resource itself was de facto practically free of cost. Here a change has taken place, and in regions relatively close to urban centres (Banjul and Serrekunda) and with a high density of community forests, dealers marketing dead wood must now, for the first time, deal with villages that have community forests and pay for access to this resource.[7]

■ With the reduction of the economic undervaluing of the resource and the correspondingly higher local output, an initial contribution is made to revalorize the role of the rural areas in the production of forest resources and products.

■ Reduction of losses caused by fire makes possible enhanced economic exploitation of the productivity and output potential of existing forest resources; this is shown particularly through use of fuelwood and forest pasturage (year-round forest pasturage, brushwood use).

■ In the long term, increasing the worth of resources, in conjunction with access to long-term security of usage rights (ownership titles), provides an important incentive for more investment in forest resource management and in forest products.

Microeconomic level

■ Locally and, through indirect conservation impacts, also regionally, the community forests contribute to stabilizing the resource basis for various livelihood activities: year-round forest pasturage; use of brushwood both as fuel for household needs and, in favourable locations, increasingly as a new income source for women.

■ Community forests have stimulated the development of new income sources in related areas (e.g. the establishment of private nurseries).

■ Community forests stimulate the development of new marketing structures and income sources through new interest groups (in which especially women participate, see above).

Modes of resource exploitation

■ Forestry as a variety 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 offtake-oriented management was observed, hand in hand with increased readiness for investment in protection of resources (e.g. controlled burn-off, mobilization for fire fighting).

■ Hand in hand with the strengthening of a sense of ownership in regard to the forest, the participants' consciousness of the value of its resources was raised.

Other social impacts

■ Dialogue and cooperation between resource users and government services have developed, and the forestry authority is increasingly taking on advisory and service tasks for the population.

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

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7. The consumer, rather than pay a higher price for fuelwood, can switch to cheaper brushwood, which first became available as fuel after fire prevention improved.

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■ 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 displacement of certain user groups has begun. It is leading to a shift of exploitation pressure to areas free from effective management.

■ The workload for individual groups has increased in connection with growing seasonal competition between agriculture and forest management for manpower.

However, looking back at the various social dimensions of 'social' forestry, these 'critical' impact trends appear to be a natural part of the process of shaping sustainable pluralistic forest management structures. As such, they need to be monitored and might form just another challenge for the social creativity of participants in that process.

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