

No. 5

**Forest
Participation
Series**

**Joint Forest
Management and
Resource Sharing**

**Lessons from India
for Zimbabwe**

**Calvin NHIRA
and Frank MATOSE**

iiied

*Celebrating Twenty-Five Years
1988-2013*

**International
Institute for
Environment and
Development**

Preface

Old alliances and new collaborations for local forest management

Today more than ever, government foresters need to pursue policies and create institutions which can control predatory loggers and secure the intergenerational public interest in some form of national forest estate. But they also need to abandon the pretence that they can do everything else besides. Relationships between people who live with trees and foresters who have formal responsibility to look after those trees have always been uneasy. Foresters in many places are now having to re-think their roles in the face of public hostility and disappearing forests. Increasingly they are looking to become supporters of forest management by local people.

The first five papers in this Forest Participation Series¹ illustrate the range of relationships emerging between government foresters and initiatives for community-based forest management. Some of these are entirely local initiatives which have been responded to by foresters. Others are efforts led by forest departments to initiate change and meet local needs. The case studies describe the origins and effectiveness of these initiatives. In all cases a parallel story is told of how the forestry institutions have themselves adapted to changing circumstances and needs.

Mary Owusu Agyemang (paper no. 1) describes how the Ghana Forestry Department has acknowledged and overcome the distrust of villagers in the

management of non-timber forest products (NTFPs). As in many places, NTFPs are extremely important for people living near forests in Ghana. Yet travel to distant forestry offices to pay for the required permit for collecting wrapping leaves was an unacceptable burden for the women around one forest reserve. Fears that a free permit experiment, introduced by some innovative Forestry Department staff, would lead to all kinds of unlawful activities proved unfounded. The leaf gathering women organised efficiently and protected gathering sites from fires and weeds. The author also describes the way in which the Forestry Department has adapted its ways of working through experiments like this, spearheaded by a Collaborative Forest Management Unit.

Jeanette Clarke, Saiti Makuku, Philip Mukwenhu and Josephine Ncube (paper no. 2) describe woodland management initiatives that have developed in a communal area in Zimbabwe. It is argued that government woodlot programmes have been largely unsuccessful and fail to address the real resource needs of communities. It is in this context that local communities have evolved their own changing woodland management strategies. These practices are entirely local in their origin, usually developed first by individuals who then lead by example and demonstration to others. Participatory research methods were used in the study and the authors discuss how an emphasis on both methodology and

¹ Paper nos. 1 to 4 stem from presentations made to the forestry session of 'In Local Hands': an international conference on community based sustainable development, held at the University of Sussex, Brighton, UK, from 4-8 July 1994. The forestry session was facilitated by Dr Gill Shepherd of ODI, and the conference was hosted by ILED.

findings allows a greater understanding of how to document, promote and build on existing resource management practices at local level. The early stages of cooperation with these locally-derived practices by government forest extension staff is also described.

Minkesh Paul Sood's paper (no. 3) is written from the viewpoint of an "enlightened" forest officer in **Himachal Pradesh** state in **India**. He describes change initiated by certain sections at "the top" of the state Forest Department in response to lessons learned from the past 50 years of attempts to resolve its conflicting roles of extension and policing. Sood describes the careful state level preparation for adoption of the Joint Forest Management approach first outlined by the federal government in 1990. An intriguing picture is painted of a Forest Department grappling with the challenges of institutional reorientation towards collaboration with communities. Slow and sporadic progress is being made in training foresters in relevant skills, and there has clearly been an attempt to institutionalise a system for communication, feedback and information sharing in an otherwise strongly regimented forest service. Forest Departments are far from being monolithic entities. Sood's paper highlights the existence of a range of perspectives and enthusiasms at various levels of the Forest Department and the very real structural impediments - low pay, heavy workloads etc - to adopting new ways.

Madhu Sarin and her colleagues in **SARTHI** (paper no. 4), an NGO, describe locally-derived initiatives in **Gujarat** state, **India**, in response to forest resource scarcities. Across a wide area, a diverse range of organisational forms

and access controls have emerged, with group membership consisting of actual resource users irrespective of formal administrative village boundaries. The strength and effectiveness of the groups lies in consensus based, open decision-making with equitable sharing of costs and benefits among all members. Their major weakness lies in the exclusion of women from their functioning resulting in women's needs for forest produce, particularly woodfuel, being overlooked in forest management priorities. This results in highly inequitable distribution of the opportunity costs of protection between women and men, and puts in doubt the long term sustainability of their forest regeneration.

This case study is more one of collaborative management *despite* the state, rather than *with* the state. The authors argue that whilst Forestry Department field staff look with pleasure at the "wave in favour of forest protection (sweeping) across villages in the area", villagers do not recognise the Forestry Department. Villagers "do not want to fell their regenerated forests ever again", since the memory of previous large-scale felling during periods of resource scarcity is too strong. And whilst the Joint Forest Management (JFM) approach demands the sharing of benefits - the villagers do not want to share with the Forestry Department at all. The village forestry groups want the right to organise themselves as they see fit, and authority to honour their responsibilities. The challenge for the Forestry Department is clear: to become responsive to locally-initiated forest management by developing powers of facilitation rather than direction.

Calvin Nhira and **Frank Matose** (paper no. 5) develop an analysis of the JFM

approach in India in relation to current and potential "resource-sharing" initiatives in forest reserves in Zimbabwe. Whilst noting major differences in forestry context between the two countries, they point to a number of lessons for Zimbabwe which have been learned the hard way in India. They discuss the influence of policy, the roles of local institutions and mediating NGOs, and the incentives for local involvement. Whilst compared to some places in India the economic interest of local people in reserved woodlands in Zimbabwe may not be high, the subsistence benefits derived may be crucial for poor households. Thus far the Zimbabwe resource sharing scheme has been premised on the state's need to improve forest protection. The authors conclude that a re-orientation is required towards greater community control through negotiation of rights and responsibilities of communities, the state and local institutions. An adaptive management approach is the key - with ways to monitor and learn from experience.

Each of the papers in this series will be of interest to field practitioners of local forest management because they contain details of the steps taken, their successes and failures. Diversity is celebrated here; it is not the intention to derive generalisable lessons. However, certain themes stand out:

- indigenous managers exist, with rules and practices well attuned to local conditions, but they have suffered from a history of state denial of their abilities
- forest departments are changing; some seeing local management as

merely a cheap option in hard-pressed times, others seeking a genuine alternative to ineffective forest protection and resource theft

- both costs and benefits need to be internalised; often the costs of management are internalised within a community, but the benefits are enjoyed elsewhere, ie. if communities are protecting, they should receive genuine incentives (products, guaranteed access to resources or compensation)
- evolutionary not blueprint approaches are needed; recognizing the diversity and complexity of local context, and the importance of exploration and learning
- belief and recognition of ownership of the resource for those expected to manage it is fundamental; local management requires local involvement in decision making, and local institutions providing its authority
- specific consideration of equity amongst participants is needed
- given the above, collaborative management is difficult to bring about, and will clearly not work everywhere; care should be taken not to over-sell its potential where there is little motivation or capacity for its delivery.

James Mayers
Forestry and Land Use Programme,
International Institute for Environment and
Development

Dr Gill Shepherd
Forestry Programme,
Overseas Development Institute

June 1996, London.

Joint Forest Management and Resource Sharing: Lessons from India for Zimbabwe

Calvin Nhira and Frank Matose

Acknowledgements:

We would like to acknowledge the help we received on the tour in India from FarmAfrica - particularly Dr. Richard Hogg, Ford Foundation, members of the Indian Forest Service, members of the communities we visited, Dr. R.V. Singh and staff of Swedforest, staff at the Society for the Promotion of Wasteland Development in New Delhi and the Institute of Bio-Social Research and Development in Kharagpur. We would also like to thank Ford Foundation and IDRC for funding both the trip to India and our research activities related to forestry issues in Zimbabwe.

We have tried to incorporate the useful comments made by participants on three oral presentations made of this work, and we thank Professor Marshall Murphree for comments on an earlier draft of the report.

Note on authors:

Calvin Nhira is a lecturer in the Centre for Applied Social Sciences at the University of Zimbabwe. He has been doing socio-political research on forestry and community-based natural resource management issues for the past six years.

Frank Matose is a sociologist with the Research and Development Division of the Zimbabwe Forestry Commission. He has been doing research on social forestry issues for the past eight years.

Other titles in this series are:

No. 1

The Leaf Gatherers of Kwapanin, Ghana
Mary M.O. Agyemang

No. 2

*Supporting Local Initiatives in Woodland Regeneration:
a case study from Ntabazinduna communal land, Zimbabwe*
J.M. Clarke, S.J. Makuku, P. Mukwenhu and J. Ncube

No. 3

New Forestry Initiatives in Himachal Pradesh
Minkesh Paul Sood

No. 4

*The View from the Ground:
Community Perspectives on Joint Forest Management in Gujarat, India*
Madhu Sarin and SARTHI

Introduction

The objective of this paper is to identify key lessons for Zimbabwe from the experience of "joint forest management" (JFM) in India, and to discuss:

- a long term strategy for the current pilot "Resource Sharing"(RS) policy in Zimbabwe, and
- the magnitude of task involved to make such a strategy work.

It is hoped that the paper will stimulate a convergence of views regarding the development of the "Resource Sharing" programme and the sharing of tasks by the agencies involved in Zimbabwe. The paper stems from a study tour of JFM programmes in India by the authors in January, 1995.

Much has been done in terms of debating the efficacy and practicalities of RS in Zimbabwe (for example Matose and Clarke, 1994; Matzke and Mazambani, 1994; Vermuëllen, 1993; Matose, 1994; and papers produced during the feasibility study for the Mafungabusi Resource Sharing project). However, the authors felt there was much to be gained

from comparing Zimbabwe with India - a country that has a longer experience of the kind of programme perceived to be appropriate in Zimbabwe.

In this paper we firstly deal with definitional issues and the factors that present difficulties for comparison between the two countries. We contrast the two countries along a number of criteria. Secondly, we explore a number of themes which we think have lessons for Zimbabwe. The themes relate to the legal basis of the programmes, the roles and functions of different actors, coverage of RS/JFM in terms of land area, institutional arrangements, and economic issues including involvement of the forest authority in integrated rural development activities and promotion of agriculture in forest areas.

At appropriate points in the discussion we also draw lessons from the community-based wildlife management programme, CAMPFIRE, in Zimbabwe. We conclude by urging creativity in the orchestration of the RS programme in Zimbabwe.

Defining "Joint Forest Management" and "Resource Sharing"

As we understand it, JFM in India is the management of reserved and protected forests by the Forest Department (FD) with the active involvement of surrounding communities in terms of designing, planning and executing management plans. The communities receive benefits from such involvement

which are clearly spelt out at the beginning of the programme.

On a smaller scale, comparable intentions were stated for the pilot RS programme in Zimbabwe:

- "to guarantee the conservation and

management of Mafungabusi State Forest by involving the neighbouring communities in the decision making and profit sharing derived from sustainable forest resource development and utilisation programmes".

- "[to] develop appropriate models for forest grazing, access and utilisation of other forest resources leading to the conservation of Mafungabusi as a water catchment and state forest and without compromising the environmental agenda". (Forestry Extension Services Division, 1995).

There would thus appear to be much similarity between the two programmes. However, Indian foresters are currently debating going beyond the initial intentions of JFM, which were essentially the rehabilitation and protection of degraded forests, to emphasizing fostering participatory rural development and expanding the programme so that it can apply to non-degraded forests as well. This has been stimulated by the ironic situation where

the degraded forests are regenerating thanks to the implementation of JFM while the non-degraded forests are being degraded. Should one wait until non-degraded forests become degraded and then implement JFM? Another major area of discussion revolves around the respective rights and roles of state agencies, communities and non-governmental organisations in the whole JFM programme. (See paper nos. 3 and 4 in this series).

An emphasis on meeting the needs of communities has major implications for the technical management objectives and silvicultural approach to forests under JFM. In India, where previously there was an emphasis on mature timber destined for industry, the focus is now on multiple uses and multiple products as outputs of the forests. Rotation cycles have also been much reduced since timber for meeting subsistence needs does not have to be fully matured, nor do communities have the patience to wait to benefit from long maturing hardwoods.

Key Differences Between India and Zimbabwe

There are important differences between India and Zimbabwe in terms of the driving forces behind the different programmes, the activities involved and the likely trajectories of the programmes in the future. The comparisons and contrasts below are made in the spirit of stimulating debate, and to alert the reader against simplistic and wholesale exportation of the Indian experience to Zimbabwe.

First, India is a fairly large and diverse country that has had a long history of decentralised government. Pressures for devolution of powers continue. States like Jammu and Kashmir, and the Punjab, where political problems have been experienced in recent times, have had more powers extended to them over certain functions of government than other states. These experiments with devolution of powers date back to the

post-independence "community development" phase of the 1960s during which *panchayats* were constituted as institutions of village governance in which elections for positions are fought on a party political basis. This signalled the break with the British Raj policy of indirect rule which involved dealing with "traditional" structures such as the princes of princely states, and the *zamindars* at more local level. Zimbabwe has gone through a more recent local government reorganisation programme in which wards and villages were carved out of the "traditional" territorial and authority structures of the pre-independence era. This surface similarity between the two countries breaks down when we consider the much more hierarchical society of rural India given the pervasive influence of the caste system in day-to-day social relations.

Secondly, the Indian Forest Service is a massive and powerful department *viz à viz* other Indian government departments, especially those dealing with rural development. In terms of JFM we think that if such a huge department and bureaucracy was able to change and embrace the new policy in India, it may augur well for relatively smaller bureaucracies, such as the Forestry Commission (FC) in Zimbabwe.

Thirdly, JFM had a long gestation period in India. This began with experiments in West Bengal in the early 1970s, and eventually led to JFM being adopted as official policy by the Government of India in 1988. Into this scenario must be fed: the impact of the "land to the tiller" reform programmes immediately after independence which placed a ceiling of 50 hectares per individual and limits on

the buying and selling of land; the "green revolution" movement of the 1960s and 70s (the latter two led to self-sufficiency in terms of food production); the impact of activist non-governmental organisations, some operating at community level with an environmental agenda such as the Chipko Movement; and the farm forestry (1970s), social forestry and common property resource management (1980s) programmes. JFM is thus built on and is supported by the mistakes and lessons from all these past experiences. In contrast, Zimbabwe has had a less than satisfactory post-independence land redistribution programme and a limited rise in agricultural commodity production in the communal areas. The limited gains in this area, due to some expansion in service and input provision, are currently under threat from the impacts of implementation of structural adjustment programmes. In forestry, there is a shorter history to learn from, of rural afforestation and woodland management programmes begun in the early 1980s, and of the recent "resource sharing" initiative which has some roots in certain practices in the pre-independence era.

Fourthly, we think that certain characteristics of the Indian countryside make it easier to engage with communities than in Zimbabwe. India is a low-wage, excess-labour economy with much higher population densities in the countryside, low labour mobility and high dependence on forests for livelihoods. Zimbabwe, on the other hand, is basically a migrant labour economy (high mobility) with the bulk of incomes in the rural sector coming from remittances outside the rural areas, from the formal employment sector. There

may be high dependence on forests locally in communities living near forest reserves given the marginal agricultural potential near the forest areas (Matose, 1994; Vermuelen, 1993). However, in general, we perceive that the challenge to generate interest for RS amongst communities is greater in Zimbabwe. We will argue that incentives in Zimbabwe will need to surpass those on offer in India. Given the low value of forestry

products, promotion of value-adding processes, such as processing and marketing, and general infrastructural development, will be critical.

Lastly, JFM has only been applied to heavily degraded reserved and protected forests in India. In Zimbabwe, the forest reserves have certainly been affected by human activity but cannot be said to be degraded to the same extent.

Applying some Lessons from India

Policy and Legal Framework

Visionary Policy

The Government of India's adopted JFM policy of 1988 emphasizes rehabilitation of degraded forests and meeting the subsistence needs of people in terms of employment generation, gathering of non-timber forest products and post-harvest allocations of timber products and revenue from the forest areas. Zimbabwe's policy on RS is presently on a pilot basis. When the decision is taken to expand the programme to other locales we hope that a similar policy with a clear vision will be developed.

Government Guidelines

Guidelines were adopted in 1990 in order to give a signal to the different states on the broad parameters of the new direction. The guidelines emphasize the objectives of the policy and outline in very broad terms the institutional arrangements through which states should engage communities, and the planning, execution and benefit sharing mechanisms.

State Orders and Resolutions

At state level, orders and resolutions provide much more detail than the guidelines mentioned above. They also deal with forest protection committee registration procedures. State forest orders differ from one state to another, especially with regard to benefit sharing mechanisms.

In Zimbabwe, it is conceivable that the above guidelines and orders could be collapsed into broad guidelines to districts that are then subject to negotiation at the ward or village level. The CAMPFIRE programme took this route. However, we should note that the CAMPFIRE programme has had problems when the Department of Parks and Wildlife Management has asked the Rural District Councils to adopt and adhere to its guidelines, since under the programme the "appropriate authority" status over wildlife is devolved to the Rural District Councils. We therefore see ward/village control of the programme as vital for effective local participation in management of forest resources.

Agreements Between Forest Departments and Participating Communities

Forest Protection Committees (FPCs) in India are only formed when 50 per cent of the village adult population agree to their formation. The terms and conditions outlined in the state forest orders are negotiated with each community. A memorandum of agreement is then signed which spells out the rights and responsibilities of each party. The agreement is a legal document which is enforceable in a court of law if either party reneges on its responsibilities.

The pilot RS programme in Zimbabwe is at the stage of negotiating with communities on:

- which kinds of activities would be carried out in the forest area;
- the rights and responsibilities of each party; and
- the execution and monitoring functions of each party.

While we do not think that drafting memoranda of agreement is appropriate at this stage, it should be noted that the negotiations appear incomplete without some form of formality in agreement. Thus far, the FC has had the greater say in the direction the programme is taking. It is envisaged that communities will take part only in the formulation of by-laws.

The by-laws will only bind community members and not the statutory authority. A more comprehensive engagement with communities at this stage will help to inform future negotiations in an expanded programme in which the parties codify the relationships by means of memoranda of agreement. This is likely to be essential in assuring communities about control and continuity of the programme.

A contrast can be made with the CAMPFIRE programme which delegates appropriate authority status over wildlife management to Rural District Councils. In some rural districts, that authority has not been devolved downwards nor have any serious efforts been made to train communities to manage wildlife as opposed to managing the benefits of wildlife (Murobedzi, 1994)¹. In cases of grievance, communities can only resort to making moralistic appeals to the Rural District Councils or the concerned government department. We find no fundamental impediment to development of contractual agreements at ward or village level².

Other Roles of the State

In addition to the above functions, the State clearly has a role in monitoring activities and impacts, and in promoting appropriate biophysical and social research. To fully address its roles, the

¹ We note the new, fairly broad initiative by the World Wide Fund for Nature in Zimbabwe to train communities involved in the CAMPFIRE programme in the management of all land-based resources.

² It may be necessary to work outside of both the Rural District Councils Act and the Communal Lands Act to create "body corporates" of the wards and villages. The Department of National Parks and Wildlife Management is currently revising the Parks and Wildlife Act to enable itself to grant appropriate authority status to bodies below the rural district councils (Murphree, pers. comm.)

State will need to assess the training and reorientation needs of its institutions in the light of the existing and potential capacity of other agencies (see below). To facilitate RS approaches, state institutions are likely to need to engage in management training for employees. Consideration should also be given to a State role in management training for community members, and provision of secretarial services to community institutions in their formative stages.

Roles of Non-Governmental Organisations

NGO roles in JFM in India have been catalytic, and have ensured that the programme is spread to different locations. NGOs play a major role in articulating demands for the programme to maintain its community needs focus. There are two main reasons for State interest in NGO involvement in JFM: to mediate the relationship between the FD and communities which might otherwise be so poor that dialogue is impossible; and to complement state inputs, or provide inputs where the state is unable to do so. We would argue that these two roles of NGOs are necessary for the RS programme in Zimbabwe, just as they were found to be necessary for the CAMPFIRE programme.

Mediating Between State and Community

In India, Forest Departments and communities have had some notable successes in terms of cooperation, but in many areas there is a long history of conflict. However, the great number and range of NGOs working at community

level in India is unique. In forestry, NGOs are often found to be consulting both communities and the state agency regarding the roles and responsibilities of each party, the institutional mechanisms through which JFM will be implemented and assisting in drafting memoranda of agreement.

Providing Additional Resources

Available State resources for Zimbabwe's forestry sector are low, particularly because of the impacts of the structural adjustment programme. NGOs may be able to mobilise resources of their own, and some have proven strengths in community development.

Profiling JFM Areas and Drawing Up Microplans

Baseline data, on communities and resources where a programme is being considered, is crucial for purposes of planning as well as determining the impact of the programme. Following this with development of detailed microplans about who will have access to which part of a forest, for which products, when and how, is a time-consuming process for which state agencies may not be sufficiently prepared.

Training of Forest Department Staff and Communities

In India it has been necessary to retrain and reorientate foresters engaged in the JFM programme to equip them with participatory and communication skills. In key instances, training began with the most senior forestry officials, thus ensuring that there was vital support from the top. There has also been a major focus on training community members in new roles, including processing and marketing skills for products procured from the forests.

We find these functions somewhat ignored in Zimbabwe. Communities are being expected to take up roles which they have not been prepared for while FC staff are being expected to do the best they can with little reorientation or additional resources. Many staff are responding impressively in the field and in equipping themselves with necessary skills. Others however, are being asked to spearhead a programme whose philosophy and efficacy they are not entirely convinced by, and for which they are not fully skilled.

Networking

NGOs are helping to spread the lessons of JFM by putting communities involved in the programme in touch with each other or with communities just about to begin JFM. NGOs networks are also increasingly well established - in which NGOs share experience and can act collectively.

Undertaking Research

The issues involved in JFM and RS are many and varied. In India, a concerted research programme for JFM has grouped activities into gender, ecology, economics and institutional issues. Different NGOs, and in some cases academic institutes, have been given the task of doing research across the country on one or more of these issues.

Moulding Policy

This role has been taken up by NGOs working at a national level, for example the Society for the Promotion of Wasteland Development. As the above discussion has indicated, the change in policy direction was only arrived at after drawing lessons from a spectrum of experiments spanning over twenty

years. NGOs were critical in drawing out these lessons and in lobbying government to adopt the policy nation-wide. They were then active in helping federal and state governments draw up guidelines and state orders. Currently, NGOs are lobbying for extension of versions of the JFM approach to non-degraded forests, and for firmly establishing participatory rural development as the primary objective of JFM.

Roles of Communities

Negotiating Roles with the State

Some of the roles that communities have taken up in the JFM programme in India include:

- planning, monitoring and coordinating protection activities;
- managing inter- and intra-village conflicts;
- adopting, implementing and monitoring regulations for collection of non-wood forest products, grazing, labour for forestry and other activities;
- adopting, implementing and monitoring regulations for the sharing of proceeds; and
- planning for, and executing, future development activities.

We find the above roles and functions important for the RS programme in Zimbabwe. (See also paper no. 1 in this series, on experience in Ghana). Indications from the programme to date imply that the FC intends to take the lead in all these roles (with the exception of research, where an applied social science department at the University of Zimbabwe may take some responsibility).

Within the FC, three divisions are involved in the programme. However, at present it is often the case that these divisions work on their own. Reflection by the FC is needed to assess whether it has sufficient capacity to push the programme forward given the limitations noted here and in previous sections. Clearly, there are possibilities for overcoming some of these constraints through collaboration with other institutions.

Institutional Mechanisms

Forest Protection Committees (FPCs) are central to the JFM in India. They are the local institutions through which communities and Forest Departments (FDs) effect management and protection arrangements. FPCs have linkages with *panchayats*, the lowest-level formal administrative structures which usually cover two or three villages. But since *panchayats* are political bodies, FPCs are conceived to focus specifically on forest resources and to provide greater continuity and neutrality. FPCs are formed only when a minimum of 50 per cent of a village population accept the need to have them. Membership to FPCs is from communities with relative homogeneity to avoid cultural conflicts and each household within the participating village becomes a member. There are management committees within the FPCs that are responsible for the keeping of records. The committee thus administers community development funds, infringements and all the other protection activities. Decisions within FPCs are generally taken through consensus rather election.

Resource Management Committees (RMCs) are being proposed in Zimbabwe

for the pilot RS project. They would be formed at the level of the existing Village Development Committees (VIDCOs). It is proposed that RMCs be involved in planning, monitoring and implementing the various project components (Forestry Extension Services Division, 1995).

Formation of appropriate institutions for the joint management of forests, given the nature of the past relationship between the FC and communities, will require mediation by some neutral agencies such as NGOs. As mentioned, NGOs in India have both mediated between former adversaries and trained forestry personnel. This is pertinent to the Zimbabwe situation. To create effective institutional mechanisms for a JFM approach will require appropriate training and a high level of commitment amongst forestry staff.

Which Communities Should be Involved?

A rule of thumb used widely in the participating states in India is that all villagers living within a five kilometre distance from a forest are involved in JFM. Although the forests might have been accessed by villagers living further than the 5 km radius, in general the selection criteria are not complicated by involving them. This has led to conflicts between participating and non-participating villages. The effectiveness of FPCs has in large part depended on their success in managing these inter-village conflicts.

In the case of the pilot resource-sharing scheme in Zimbabwe, it is intended that all the surrounding Wards will participate (Forestry Extension Services Division, 1995). Several background studies

indicate quite intense use of forest resources by communities living less than 5 km away from the boundary of the pilot RS project (Matose, 1994; Matzke, 1993; Vermuelen 1993).

Economics and Incentives

Involvement in Rural Development Activities

In some parts of India, in Madhya Pradesh state for example, the Forestry Department has taken on the function of coordinating other rural development activities in communities, such as providing water, training and educational facilities. The Forestry Department in Madhya Pradesh sought funding from the World Food Programme, as well as from the District Development Fund and the General Fund available from the District Administration Department within the state. Involvement in rural development activities has led to a reduction in inter-community conflicts since those not directly involved in JFM are not completely ignored.

Forestry departments in India tend to have many more staff on the ground than in Zimbabwe. Furthermore, it should be noted that these rural development efforts are generally informal arrangements. Parallel possibilities may exist in Zimbabwe however, if the potential is explored for linking up resource sharing with other programmes, such as CAMPFIRE, at the district level. A mechanism already exists for coordination of district-level initiatives through the District Development Committees (DDCs). Many of the priorities identified by communities

surrounding Mafungabusi forest - the pilot RS area - were either thrown out or were not followed up by the FC because they were perceived to be beyond the institution's brief. We argue that such demands could have been brought before the appropriate DDC and follow up action sought with the help of relevant line departments.

Intensification of Agriculture in and around Forests

Many forest areas in India have experienced invasions by neighbouring tribal people seeking land for agriculture. In Madhya Pradesh, there used to be tenant families living within forests who acted as a labour reservoir for forestry activities. In the same state the FD participated in provision of infrastructure to enable families to raise crops under irrigation within forest areas. Tenant families have also formed protection committees to police against illegal activities by farmers from outside the forest areas.

When the forests in Zimbabwe were gazetted there were already communities who cultivated and lived within the valleys and grazed their livestock within the forests. These people were not evicted, instead they were given permits, thus making them 'tenant farmers'. Over the years the population grew, leading to conflicts developing with forest managers. The tenant system was 'rationalised' in the late 1960s and early 1970s through the employment of an agriculturalist who was to develop complementary small scale agricultural systems on forest land.

These plans were incorporated into the forest management plans of the 1970s

(Judge, 1975). There were three main justifications for the agricultural plans. The first was the fact that the FC felt it necessary to intervene in the conflict between the resident communities and the local forest managers (Matose and Clarke, 1994). The second reason was an economic one. Agriculture would increase the value of the forest area since there were considerable areas of land within the forests which could be used for farming, including valleys for cultivation or dry-season grazing, and forest ridges which could provide wet-season grazing. The third reason pertained to the people themselves. It was thought that their involvement would reduce the need to police and institute fire control measures. A resident population's grazing animals would reduce the incidence of fire through removal of grass, while policing would be reduced significantly as a result of the tenants' vested interests in keeping other people from settling on forest land. Since the forest areas had potential to provide timber, wildlife, agricultural land and grazing, if any one of these components were to be developed in isolation it would give a "low income return in relation to land area" (Judge, 1975). During this period, it was recognized that the greatest economic potential of the forest areas could only be realised if the components were developed in complementarity.

Detailed settlement plans were developed for each reserved forest, which followed commercial agricultural models but also incorporated tenants in overall planning. The objectives were:

- "to manage the tenant community so that it plays its required role in forest

area protection and in contributing to the economy of the region;

- "to devise a farming system based on cattle and veld management which complements the forest enterprise, and to allocate land to the required number of African tenants so that the holdings, together with the grazing in the productive forest areas, provide the tenants with the opportunity of making a worthwhile living" (Judge, 1975).

According to the plan, a limited and carefully controlled number of tenant farmer families would each be allocated 10 hectares of land and 50 livestock units, estimated to generate an annual gross income of Z\$1,000 per family. This was at a time when their counterparts in Communal Lands were averaging Z\$360 per year (1970 values). Beyond the tenant farmers there was a recognition that the forest areas could provide wet-season grazing for neighbouring communities as the tenant farmers' livestock units could not sufficiently reduce the fire hazard on their own. Tenant farmers were to be required to pay nominal rent each year and were to be given leases that lasted for ten years with options to renew (Judge, 1975).

These plans were not realised. Zimbabwe's liberation war in the late 1970s and continued instability in some areas in the early 1980s meant that the FC was unable or unwilling to effect the plans. Forest populations increased greatly during this period, making the original plans unworkable even if the institutional willingness had been apparent. In conclusion, whilst even in their original conception the forest tenancy plans had flaws, the potential for developing viable agricultural tenancy remains.

Zimbabwe's current policy, of seeking eviction of "squatters" and then trying to engage them in RS, is yet to prove workable. Whilst contexts are rather different, there is much to be learned from India's example in going beyond allowing settlement in forest areas to trying to develop both their agricultural and forestry potential to the full. However, two main issues will need to be addressed: who has legitimacy to be settled on forest land in the light of various claims by different groups of people?; and how to meet the needs of growing populations of settlers over the years?

Sharing of Revenue

In all the states that were toured in India, the net revenue share of FPCs ranged from 25 per cent to 80 per cent after the final harvest at the end of each rotational cycle. The revenue shared is dependent on the memorandum signed between the FD and the FPC at the start of the JFM initiative. Whereas sharing of the net revenue after the sale of the harvest is a major incentive, communities get other benefits in the interim.

Collection of Non-Timber Forest Products

One of the most important sources of livelihood for poor rural households in India are non-timber forest products (NTFPs) collected for sustenance or marketing from jointly managed/protected forests. The range of products collected varied by forest type with *sal* (*Shorea robusta*) forests having the greatest diversity. Access to all types of NTFP has been deregulated to all participating villages who in turn manage the sharing and collection of these products. The products ranged

from mushrooms, honey, *sal* leaves (for plate making) to medicines and raw materials for cottage industries. In the states of West Bengal and Madhya Pradesh, the FDs even assisted communities in securing transport and better markets for their products. Major investments on the part of FDs were witnessed in developing appropriate technology for adding value to the NTFPs for them to fetch higher prices elsewhere.

Concessionary Timber Sales

Communities are also sold timber at final harvest at rates lower than market rates to meet their needs for construction. Participating communities are also given some usufruct rights over timber from the first two to five years of rehabilitating degraded forests as an incentive. This is usually in the form of silvicultural thinnings of the multiple stems of coppice regrowth, especially of *sal*. This is aimed at ensuring that communities get a constant supply of timber for their household consumption and in some cases, for sale.

Employment Opportunities

Employment opportunities are another form of incentive prior to the sharing of the net proceeds from JFM. Whereas the FDs used to employ their own labour for forestry operations, under JFM, they employ participating villagers through FPCs while using the same budgetary allocations for such activities. Such opportunities are supposedly given to the disadvantaged members of communities - poorer households and women household members (where it is culturally possible to employ women). It is noteworthy though that, in general, employment of FPCs is of a rather token

nature and wages from the FD are very low.

Community Funds

State FDs in West Bengal and Madhya Pradesh have assisted communities in setting-up savings accounts and community funds. These monies are derived from the net revenue earned at the end of each rotational cycle. The funds are also derived from the sale of NTFPs. Once the community funds are created, they are channelled into various community projects. Thus, in the case of Madhya Pradesh net revenue from timber sales has contributed to infrastructure for irrigation, schools and bridges. In these cases, the FD has

facilitated involvement of the relevant agencies in delivering these services to the communities involved in JFM.

In comparison, the pilot scheme for Mafungabusi is much more limited in scope. Some of the proposed projects include a Resource Education Centre at which communities will receive training in various facets of resource management and skills development, a bee-keeping project to deter those already involved in honey collection from indulging in "harmful" activities to the forest, and controlled access to the following NTFPs: *macimbi*³, grazing, grass, mushrooms and dead/dry wood. Wildlife is also being considered in the longer-term.

Conclusion

Comparisons of India and Zimbabwe

Arguably, the prime objective for Joint Forest Management in India is improvement of the welfare of rural communities.⁴ In contrast, the Resource Sharing approach in Zimbabwe is currently premised on protecting the forests from any further degradation.

In implementing its pilot RS scheme, the Zimbabwe FC is currently constrained by policy from giving communities equal partnership. Hence the benefit-sharing scheme was basically worked out by the FC. However, we detect a hesitancy on

the part of the FC to move towards a greater sharing of rights and responsibilities if there is any indication of ecological impacts. The emphasis on protection of ecology in such a programme is short-sighted. To quote from Martin (1994 and 1994a):

"it (is) doubtful whether ecological research is even a key factor in sustainability issues, but also it is doubtful whether any one group can 'design systems' which another group will adopt".

To paraphrase Martin further, the belief in the infallibility of science and the implications of a 'technical fix' is

³ *Macimbi* are edible caterpillars (*Gynanisa maia* and *Gonimbrasia belina*).

⁴ However, a growing area of concern about JFM in India, is that the policy framework has not progressed towards real local empowerment. JFM still depends on government largesse, the FDs reserve the right to cancel JFM agreements unilaterally. Authors such as Kothari *et al* (1995), Hopley (forthcoming) and Saxena (1996) discuss this.

misplaced in matters which are primarily socio-economic. There is no way that all ecological, economic and social relationships can be predicted and managed in advance of a programme such as the RS initiative. The more important issue is to institute an effective adaptive management approach, coupled with feedback from monitoring and evaluation activities of the effects of management actions (Martin, 1994 and 1994a).

The following table summarises the main economic benefits derived by communities under JFM in India and RS in Zimbabwe. The table shows the wide gap that exists between the two countries in terms of economic incentives.

Recommendations for Resource Sharing in Zimbabwe

While we think that it is important to have a long term perspective, there are certain elements of the pilot RS programme in Zimbabwe that should be revisited forthwith in the light of experience of JFM in India. Our recommendations below have implications for both the short-term and long-term direction of the programme:

- A thorough process of negotiation on the rights and responsibilities of communities, the FC and local

BENEFITS TO COMMUNITIES	INDIA (Joint Forest Management)	ZIMBABWE (pilot Resource Sharing)
Collection of non timber forest products (NTFPs)	Yes	Yes
Share of net proceeds of timber sales	Yes	No
Usufruct rights to timber	Yes	No
Assistance in processing and marketing of NTFPs and crafts	Yes	Limited (only honey)
Access to concessionary timber sales	Yes	No
Assistance with water resource development	Yes	No
Employment opportunities	Yes	No
Community development initiatives	Limited	No
Grazing rights	Yes	Yes
Wildlife offtake	Limited	Yes (In long run)
Agriculture in forest areas	Limited	No

institutions should be undertaken in the pilot RS area, Mafungabusi.⁵

- Incentives currently proposed for Mafungabusi should be revisited in the light of the priorities identified for the forest area by communities. Where the FC is unable to address these priorities, mechanisms for working with other agencies, government or non-governmental, should be sought so as to increase the range of incentives.
- In the short term, the FC should identify implementation partners to take up key roles necessary for implementing pilot RS initiatives.⁶
- In moving towards a more robust long-term sharing of roles and functions, the FC should engage in an exercise to assess its own capacity to develop the pilot project, including prioritisation of its current functions.
- The FC, in partnership with other suitable agencies, should develop a training programme for the communities involved in the pilot project focusing on:
 - planning and implementing forest protection and development activities;
 - managing inter and intra village conflicts;
 - adopting, implementing and monitoring regulations for forest use and benefit sharing.
- The FC should move quickly to implement the programme once a more complete dialogue with communities has been established. Locating project implementation staff on site will be crucial for this.
- Work should begin in laying out a clear policy statement and guidelines for the RS programme on a national basis.

Efforts to derive lessons from experience of collaborative approaches to forest management, within Zimbabwe (see paper no. 2 in this series) and elsewhere, should continue. We have scratched the surface of the Indian experience (see also paper nos. 3 and 4 in this series). Initiatives in countries such as Ghana also have much to offer (see paper no. 1 in this series). In our view such lessons can help realise what we believe should be the central objective of RS in Zimbabwe, namely that of enabling communities to exercise control over and benefit from the sustainable management of forest resources.

⁵ In 1995 the Forestry Commission embarked upon a process of negotiations with the communities surrounding Mafungabusi forest reserve. The outcome of this process is not yet apparent.

⁶ In this regard, the development in 1995/96 of an NGO alliance for pursuing collaborative approaches to forest management is of importance.

References

- Forestry Extension Services Division. 1995. *Community Based Natural Resource Management Project, Pilot Forest Grazing and Wildlife Management Project in Mafungabusi Forest*. Zimbabwe Forestry Commission. Unpublished.
- Hobley, M. (forthcoming). *Participatory Forestry: the Process of Change in India and Nepal*.
- Judge, G. (ed.). 1975. *The Kalahari Sand Forests of Rhodesia: Management Report*. Forestry Commission, Bulawayo.
- Kothari, A., Suri, S. and Singh, N. 1995. *People and Protected Areas: Rethinking Conservation in India*. *The Ecologist* 25 (5): 188-194.
- Martin, R.B. 1994. *The Influence of Governance on Conservation and Wildlife Utilisation*. Paper presented at the conference on *Conservation Through Sustainable Use of Wildlife*, University of Queensland, Brisbane, Australia, 8 - 11 February 1994. Department of National Parks and Wildlife Management, Harare.
- Martin, R.B. 1994a. *Alternative Approaches to Sustainable Use: What Does and Doesn't Work*. Paper presented at the conference on *Conservation Through Sustainable Use of Wildlife*, University of Queensland, Brisbane, Australia, 8 - 11 February 1994. Department of National Parks and Wildlife Management, Harare.
- Matose, F.M. 1994. *Local People's Uses and Perceptions of Forest Resources: An Analysis of a State Property Regime in Zimbabwe*. Unpublished MSc Thesis submitted to the Faculty of Graduate Studies and Research, Department of Rural Economy, Edmonton, Alberta.
- Matose, F. and Clarke, J. 1994. *Who is the Guardian of the Indigenous Forests?* Paper presented at the conference on *Social Forestry Experiences in Southern Africa*, Kadoma, Zimbabwe, May, 1994.
- Matzke, G. 1993. *A Study of Livestock Use of Mafungabusi together with a Discussion of the Planning Implications for Resource Sharing Developments*. CASS Occasional Paper Series no. 53/93.
- Matzke, G. and Mazambani, D. 1993. *Resource Sharing Schemes for State Owned Land in Zimbabwe: A discussion of Conceptual Issues needing Consideration in the Development and Planning of Co-Management Regimes*. CASS Occasional Paper no. 54/93.
- Murombedzi, J.C. 1994. *The Dynamics of Conflict in Environmental Management Policy in the Context of the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)*. Unpublished Doctoral Thesis, Centre for Applied Social Sciences, University of Zimbabwe.

Saxena, N.C. (draft, February 1996). *Joint Forest Management in India: Empowering the People or another Development Handwagon?* LBS National Academy of Administration, Mussoorie.

Vermuellen, S. 1993. *The Availability and Use of Wood Along the Boundary of Mafungabusi Forest Area and Gokwe Communal Area, Zimbabwe.* Unpublished MSc Thesis in Tropical Resources Ecology, Department of Biological Sciences, University of Zimbabwe.

Acronyms

CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
DDC	District Development Committee
FC	Forestry Commission
FD	Forest Department
FPC	Forest Protection Committee
JFM	Joint Forest Management
NGO	Non Governmental Organisation
NTFP	Non-Timber Forest Product

Joint Forest Management and Resource Sharing: Lessons from India for Zimbabwe

This paper develops an analysis of the Joint Forest Management approach in India in relation to current and potential "resource-sharing" initiatives in forest reserves in Zimbabwe. Whilst noting major differences in forestry context between the two countries, there are a number of lessons for Zimbabwe which have been learnt the hard way in India. The authors discuss the influence of policy, the roles of local institutions and mediating NGOs, and the incentives for local involvement. Despite poor households deriving what may be crucial subsistence benefits from reserved woodlands, thus far the Zimbabwe resource sharing scheme has been premised on the state's need to improve forest protection. The paper concludes that a re-orientation is required towards greater community control through negotiation of rights and responsibilities of communities, the state and local institutions. An adaptive management approach is the key - with ways to monitor and learn from experience.

IIED's Forestry and Land Use Programme

The Forestry and Land Use Programme addresses needs for productivity, sustainability and equity in forestry and land use. Its research and capacity-strengthening work focuses at the national level in developing countries.

The International Institute for Environment and Development (IIED) is an independent, non-profit organisation which seeks to promote sustainable patterns of world development through research, services, training, policy studies, consensus building and public information. Established in 1971, the Institute advises policymakers and supports and collaborates with Southern specialists and institutions working in similar areas. IIED's work is undertaken with, or on behalf of, governments and international agencies, the academic community, foundations and non-governmental organisations, community groups and the people they represent.

ISSN 1026-6887

**Forestry and Land Use Programme
International Institute for Environment and Development
3 Ensligh Street
London WC1H 0DD. UK**

**Tel: +44 171 388 2117
Fax: +44 171 388 2826
e-mail: iiedforestry@gn.apc.org**

The logo for the International Institute for Environment and Development (IIED). It features the lowercase letters "iied" in a serif font, with a decorative flourish underneath that resembles a stylized bracket or a flourish.