

Technical
Report

September 2005

**JOINT FOREST PLANNING AND
MANAGEMENT IN THE EASTERN
PLAINS REGION OF KARNATAKA:
A Rapid Assessment**

Sharachchandra Lele

A. K. Kiran Kumar

Pravin Shivashankar

CISED

Centre for Interdisciplinary Studies in Environment & Development

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A Centre of Excellence promoted by the Institute for Social & Economic Change

ISEC Campus, Nagarabhavi, Bangalore - 560 072, India.

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EXECUTIVE SUMMARY

Background and study objectives

Over the past decade or so, “joint” forest management has emerged as the key concept through which afforestation and forest regeneration activities are being implemented in most parts of India. In Karnataka, Joint Forest Planning and Management (JFPM) was launched in 1993 and has been implemented with major financial support (grants or loans) from bilateral agencies. During 1997-2002, the Karnataka Forest Department (KFD) took up the implementation of JFPM in the non-Western Ghats region of Karnataka under the Eastern Plains Forestry and Environment Project (EPFEP) with a budget of Rs.598 crores. The bulk of this budget was a loan from the Japanese Bank for International Cooperation (JBIC). We conducted an independent rapid assessment of the JFPM activities carried out under this project in the northern and southern maidan region, which comprises the major portion of the project implementation area, during 2002. The objectives of the assessment were:

1. To rapidly assess the *quality of JFPM activities* in the northern and southern *maidan* (plains) region that contains about 70% of the JFPM villages covered by EPFEP;
2. To understand the factors determining the observed quality, including *policy-level factors, implementational factors* and *the socio-ecological context*;
3. To suggest ways in which JFPM policy and implementation could be modified to improve the quality of JFPM process and hence the outcomes.

Our assessment does not cover the transition zone (a distinct eco-climatic zone within the EPFEP implementation area characterised by higher rainfall and forest areas). The assessment also does not examine the cost-effectiveness of the JFPM activity. It also does not purport to be an assessment of the EPFEP as a whole, although the centrality of JFPM to

the EPFEP activities means that our findings are crucial to any assessment of the EPFEP.

Conceptual framework

The basic objectives of the National Forest Policy of 1988 include “maintaining environmental stability and restoring ecological balance” and “meeting the requirements of the rural and tribal populations”. These objectives have been adopted by the Government of Karnataka as well. They are elaborated in the EPFEP proposal as “ensuring sustained supply of biomass to the local communities and reducing poverty while managing forest and other common lands in an environmentally sustainable manner”. Participatory management is officially seen as the “fundamental instrument” through which such sustainable management will occur in areas used by local communities. JFPM is the particular form of participatory management that has been officially adopted in Karnataka, and its essential elements are spelt out in various Government Orders and official guidelines.

Most studies of participatory management programmes use a mixture of process and outcome indicators. In our framework, however, since JFPM is a process, assessing the quality of JFPM primarily means assessing the extent to which the *participatory process* has occurred in the manner it is supposed to. Assessing *outcomes*, i.e., progress towards the objectives of JFPM, is meaningful only where the process has been reasonably followed. We therefore adopt three levels of assessment criteria, two pertaining to process and one related to likely outcomes:

- a) Zero-th level: All activities in a potential JFPM area must be initiated through the JFPM process.
- b) Regular functioning:
 - Planning of forest management must be joint and thorough, i.e., involve all forest-dependent villagers and the KFD;

- Protection of forests must be joint and effective, with adequate support from the KFD;
 - VFC functioning must be representative, transparent, and democratic, with adequate voice for marginal communities;
 - VFC-KFD relationship must be somewhat equal.
- c) Likely future outcome: Where a reasonable JFPM process is under way, the silvicultural models and economic arrangements must be people-oriented, particularly benefiting the marginal communities, and must be ecologically sustainable.

Theoretically, the potential factors responsible for variations or shortcomings in the quality of JFPM could be broadly categorised into implementational, policy-level, and contextual factors. Implementational factors are the decisions taken and methods adopted by the implementing agency, including the manner of initiation and operation on the ground, the strategic decisions regarding choice of villages, choice of implementation partners, training of staff, and flexible interpretation of rules, as well as overall support to the JFPM process. Policy-level factors are the decisions regarding the framework for JFPM, including the extent and nature of produce sharing, the kinds of lands permitted to be brought under JFPM, the unit for identifying the local community, the clarity in the assignment of rights and responsibilities, the level of autonomy for the village-level committee, and the mechanisms used to monitor and enforce the jointly agreed upon activities. The socio-ecological context, such as the extent of dependence on the resource, the level of heterogeneity in the community and the presence of leadership, and the ecological conditions in the region would also affect the quality of JFPM, as they would influence the villagers' interest and capacity to participate. These three sets of factors would not act entirely independently, but in an inter-dependent manner.

To limit the enquiry, we note that the influence of policy-level decisions regarding the structure of JFPM and so on cannot be tested statistically, since the decisions apply to all areas where JFPM is implemented. We examined the policy-level factors on the basis of prior studies and analyses to see whether

policies currently in place would seriously cripple the JFPM process *at the outset*. We found that there definitely are serious lacunae in the JFPM policy that could potentially limit the quality of JFPM processes or the response from villagers to JFPM. But one major lacuna, viz., the restriction of JFPM to only "degraded" areas does not matter in the maidan region where virtually all forest lands qualify under this criterion. And the other lacunae, such as absence of mechanisms for ensuring KFD accountability, village-level autonomy, transparency or clarity on NTFP rights, are one-sided. That is, they do not prevent the implementing agency from addressing these problems if it so wishes. We also note that the contextual factors would come into play only where serious efforts at implementation have been made. In those situations, we focus on the effect of changing social hierarchy and varying economic dependence on the commons within the local community.

Study region and JFPM spread

The study region consists of the semi-arid northern maidan region comprising Bellary, Raichur, Gulbarga, Bidar and Bijapur districts (pre-reorganisation), and the dry southern maidan region comprising Bangalore rural and urban districts, Mandya, Tumkur, Kolar, Chitradurga, and the eastern part of Mysore district. Within these regions there is significant heterogeneity of rainfall, topography and the extent of forest and other common lands. On the whole, villages in the southern maidan region have significantly higher percentages of forest and other common lands compared to those in the northern maidan. The economies are primarily agrarian, with rainfed cropping being the traditional mode in the upland areas (where most of the common lands are located). But the spread of canal-based irrigation in the northern maidan and groundwater irrigation in the southern maidan has created pockets of highly irrigated agriculture. The level of socio-economic stratification is generally high, with only small pockets with large numbers of Scheduled Tribe households.

JFPM under the EPFEP started slowly, with the bulk of the VFCs initially being formed in the transition zone rather than the maidan region. From 1999 onwards, however, the pace of formation of VFCs picked up, and by December 2001, the KFD records showed 1722 VFCs in

the EPFEP region, of which 1139 were in the maidan region. As we write this report, this number has further increased to 3068, with 2123 of these being in the northern and southern maidan region. There is a higher concentration of VFCs in the southern maidan region, although the absolute number of VFCs in the northern maidan is also quite high.

Methodology

Given limited resources and time, we first conducted a rapid assessment to get a picture of the overall trend in JFPM quality in the region. We then chose a few villages where the JFPM process appeared to have progressed significantly and we conducted detailed case studies for understanding the interaction between implementational, policy-level and contextual factors. The sources of data we used were:

- a) A macro-level dataset provided by the KFD covering 1036 VFCs located in the maidan region. This contained information on the location of each VFC, date of its registration, name of VFC President, and so on. Of these, 659 VFCs could be identified and linked to revenue villages listed in the Census 1991 population and land-use database.
- b) Anecdotal information gathered from 10 regional and one state-level convention of VFC representatives, NGOs and KFD officials organised by some NGOs during late 2001, and also from unstructured interviews conducted by us with KFD officials at various levels.
- c) Data from mail-in questionnaires sent to NGOs working in the region. These resulted in responses covering 60 villages, including 27 from the maidan region.
- d) Information gathered from rapid field visits to 28 villages, consisting of 17 in the northern maidan and 11 in the southern maidan.
- e) Case studies of two VFCs (one each in the southern and northern maidan) considered to be "successful VFCs" by the KFD, and two other villages where JFPM had received an enthusiastic response from the local community. The case studies used focus-group discussions, key informant interviews, field traverses, and data from VFC records.

Quality of JFPM in the maidan region

Overall, the quality of the JFPM process leaves much to be desired.

- 1) The basic criterion that all afforestation activities in the JFPM zone must be preceded by the setting up of a VFC and must be guided by the JFPM process has been violated in a large number of villages. Very often the VFCs have been set up *after* plantation activities have been completed. In Kolar forest division, for instance, records for 37 out of 47 VFCs show the date of the Memorandum of Understanding (and often the date of VFC registration also) to be later than the date of plantation. In the northern maidan, there villages with so-called JFPM plantations but no VFCs at all. In Gulbarga territorial division, of the 93 villages where some plantation activities had been carried out under the EPFEP, only 37 villages had VFCs as of March 2002.
- 2) The majority of the VFCs in the study region are either dysfunctional or functioning only nominally, i.e., not meeting most of the criteria for a properly functioning VFC. In particular,
 - a) The quality of micro-planning in terms of villager participation and content is generally very poor. Villagers are not involved in the planning process, are not aware of contents of the micro-plan and do not have copies of the micro-plan and Memorandum of Understanding with them. (Of 54 villages covered by our mail-in questionnaire and rapid visits, 21 had not signed MoUs in spite of being more than a year old, and 26 of the remaining 33 did not have copies of the micro-plan or MoU. In 13 of 28 villages covered in rapid visits, villagers report not being involved in micro-planning at all.) There were many cases, especially in Gulbarga forest division, of this entire exercise being conducted in a cursory manner by NGOs from outside the region. These NGOs were contracted by the KFD only for this purpose. The tendency to impose pre-determined silvicultural models rather than to allow these models to emerge from the villagers was clearly visible. In many cases, the KFD effectively pre-empted the micro-planning process by assigning existing eucalyptus plantations (raised

under the Social Forestry project) to the VFC.

- b) Joint protection generally occurs only for parts of the resource use area, if at all, with passive support (not active involvement) of the villagers. KFD support oscillates between total subsidy for protection of *plantations* for the initial three years to very little support for villages that are actively protecting *natural forests*.
 - Secondary data indicate that in more than half of the villages, JFPM area amounts to less than half of the total available forest and other common lands. In practice, the areas actually under the control of the VFC are even less. In a large number of cases, even when Reserve Forest (RF) area is available in the village, it has not been assigned to the VFC.
 - In terms of people's involvement, of 54 villages covered by either the mail-in questionnaire or a field visit, 26 villages reported no JFPM activity, six reported active conflict between the VFC and the KFD, 19 reported passive support to KFD's protection efforts, and only three reported active villager involvement in day-to-day protection efforts.
- c) While VFCs cover a significant fraction of the village population on paper, their actual functioning is hardly democratic or transparent. Member enrollment is often reported to be contrived (with the village elite paying the fees on behalf of the rest) and is tied to the undemocratic method of constituting Managing Committees (MCs) through an understanding rather than a well-publicised, well-prepared, open election process. MC meetings either do not occur regularly or, in villages where JFPM is facilitated by NGOs, are held frequently but often not attended by KFD staff. MC decisions in any case tend to be controlled by VFC Presidents or members of the elite. At the same time, in several villages, members alleged that forest officials have taken signatures on so-called minutes of MC meetings that were never held.
- d) The VFC-KFD relationship is greatly lopsided in virtually all cases. Apart from the

fact that the JFPM structure and the limited approach to micro-planning seriously limit the autonomy of the VFC, KFD staff generally made no effort to comply with basic notions of partnership. Records and accounts are entirely controlled by the KFD. Registration and MoU signing proceeds at the KFD's own pace, and promises made even in registered micro-plans regarding lands to be assigned are not necessarily kept. Ambiguities about the share from pre-existing plantations have persisted on the ground even after being clarified at the policy-level. There is little response to requests for help in forest protection or in arresting outsiders engaged in extraction from JFPM areas. Where some officials have been supportive, the support evaporates after the official is transferred.

This overall trend is fully corroborated by several VFC representatives, NGOs and even frontline KFD staff.

- 3) In the four case study villages where the JFPM process has proceeded significantly, the outcomes observed or likely to occur are quite mixed, and relate to the way the JFPM process has evolved in each.
 - a) In Thondala, although the entire forest area is being strictly protected (and hence the VFC is considered a major success story by the KFD), only the village elite (particularly the VFC President) are actively involved, and the functioning of the VFC is not at all democratic. The main incentive to get involved seems to be the cash return from the eucalyptus plantation that covers most of the forest area. As a result, there has actually been a significant decline in access to the forest for fuelwood and fodder/grazing across all households and a steep decline in forest-based income for the marginal communities, forcing several landless households to emigrate from the village. Thus, sustainability of commercially valuable plantations has come at the cost of subsistence needs and incomes of the poorest.
 - b) In Kakkuppi, another case of successful JFPM according to KFD staff, there has been limited support amongst the villagers for JFPM—only about 25% of

- the households have become members, and the functioning of the MC is dominated by upper caste farmers. There is no active villager involvement in forest protection. A 100 ha mixed plantation has been raised, protected by a KFD-paid watchman. Fuelwood and grazing in the larger forest area continue in the same unsustainable manner as before. The VFC's main achievement is that it has managed to get a share in the royalties from auctioning of rights to NTFP collection. But this is in fact a regressive outcome, because the poor NTFP collecting households within the village get no preferential treatment in the auctions and see almost no increase in their incomes. On the other hand, the non-collecting members get a share in the royalties without putting in any effort.
- c) In Kanvihalli, in spite of a promising start and an enthusiastic response from the local community, channelled by NGOs already working in the village, JFPM has made little impact. The KFD has in practice only assigned a tiny 22 ha tamarind plantation to the VFC, leaving the vast (and degraded) forest area in the village out of the purview of JFPM. Thus, there has been no enhancement in the availability of fuelwood and fodder/grazing, or improvement in resource sustainability. In terms of income, as in Kakkuppi, rights for harvest of tamarind were auctioned by the KFD rather than being given free to the VFC. Due to community mobilisation by the NGO, however, the auction was won by a women's Self-Help Group within the village. This generated some income for a few households. But here again, the VFC's share in the royalty has remained in the control of the President, who is the richest person in the village (actually a non-resident) and who dominates the MC.
- d) In Adavimallapura, the entire community is actively involved in protecting the entire forest area used by them and the VFC functions in a democratic manner, with a rotating President. The forest is regenerating and incomes from NTFP collection have gone up due to a combination of limiting access to VFC members only, increasing the community's bargaining power vis-à-vis the wholesale traders, and keeping the NTFP collection process *outside* the formal records of the VFC! But the villagers have had to pay a significant cost in terms of conflict with neighbouring villages and outsiders who are extracting wood or grazing their livestock in the VFC's forest area. Unfortunately, the KFD has neither penalised the offenders caught by the VFC nor attempted to resolve the inter-village conflict that erupted as a result.
- In short, where subsistence and income needs are being met while ensuring resource sustainability, KFD support has been missing. The KFD appears to see success in situations in which the (non-forest dependent) village elite are co-opted into cooperating with the agenda of protecting pre-existing or new plantations by giving or promising them shares in profits, royalties or recognition. This results in regressive impacts on subsistence and livelihood needs, especially of the forest-dependent poor, and sustainability only of the commercially valuable resources, if at all, rather than the forest as a whole. Sustainable resource management acquires a very narrow form, viz., planting and protecting trees with large subsidies from KFD in the short-term, rather than ensuring overall regeneration of trees, grass and soils in ways compatible with local needs and with capacities to sustain the effort in the long run.

Causes of overall poor quality of the JFPM process

The overall trend of poor quality in the JFPM process is directly related to the implementational choices and approaches of the KFD. At the operational level, these include lack of groundwork in the villages (such as not forming promoters committees and little attention to awareness building), non-involvement of local *committed* NGOs in the process as long-term partners, and poor (or improper) training and directions to the frontline staff. Instead of having a clear understanding of the core concept of *joint* planning and management, the frontline staff generally see JFPM as an additional chore or a

hoop to be jumped in order to implement their basic work of creating plantations.

At the strategic level, the choice of villages was rather haphazard, and not focused on villages more likely to be forest-dependent and socially homogeneous. There was no systematic effort to implement JFPM in clusters so as to resolve the problem of overlapping rights of and hence conflicts with neighbouring villages (some efforts on these lines were reported in parts of Tumkur district). And the process of implementation was clearly driven by the unrealistic target set in the proposal to JBIC.

Organisationally, the KFD's delay in initiating JFPM in the initial years of the EPFEP increased the difficulty in meeting the promised numerical targets, resulting in further pressure to give core participatory processes the go-by. Internal policies and procedures for ratifying MoUs and micro-plans were also not streamlined. More importantly, the KFD failed to integrate JFPM into its regular mode of functioning, i.e., the operations of the territorial wing. Although the territorial wing implemented JFPM in forest lands while the Social Forestry wing did so in revenue lands, the concept of JFPM as a core process did not penetrate the mindset and functioning of the territorial wing or even, for that matter, of the Social Forestry wing.

Finally, the very act of taking a loan from a bank at 12% interest in order to implement the EPFEP has imposed very serious constraints and burdens on the JFPM process. The shift from conventional management to participatory management requires a sea change in the attitudes of local communities as well as KFD staff towards rights and responsibilities in managing forest and other common lands. This process of change is inherently slow and difficult and does not actually require large funds. Taking funds, and that too as a loan, imposed targets and narrowed down the silvicultural options at the outset. Senior KFD officials worried that if the JFPM process were followed painstakingly, the physical (plantation) targets could not be met. And they also believed that if the huge loan had to be repaid, planting commercially valuable species and getting a share in them was essential.

These lacunae in implementation suggest some fundamental divergence between the goals and processes of JFPM as articulated in official documents and the actual perceptions of the

KFD. Officially, JFPM is the fundamental process through which sustainable resource management is to be achieved, *instead of* the conventional approach of planting and policing. This includes allowing the community to set forest management goals within resource sustainability norms and with some assurance of larger ecological balance. In practice, however, KFD officials either believe that they know what is good for the community and hence can plant first and involve people afterwards, or that JFPM is simply a tool for implementing the KFD's forest management goals more effectively, or that JFPM is not really necessary at all. There is absolutely no long-term commitment to internalising the essence of participatory forest management. Even the shifts in attitudes and processes made during the course of the earlier Western Ghats Forestry Project do not appear to have been sustained nor the learning incorporated into the EPFEP.

Interplay between implementational, policy-level and contextual factors

In cases where the JFPM process has progressed to some extent, the influence of contextual and policy-level factors, even if mediated by implementational strategies, is visible. First, the inter-village conflicts point to the existence of overlapping *de jure* and *de facto* rights in forest areas. These situations are common on the ground but not recognised and addressed in JFPM policy.

Second, the non-assignment of eligible lands to the VFC, the lack of KFD support in protection of assigned lands and the control exerted by the KFD over VFC functioning point to the highly lop-sided distribution of rights and responsibilities between the KFD and the VFC. While VFCs are entirely at the mercy of the KFD, there is no mechanism that would enable VFCs to hold the KFD accountable, undermining the notion of joint management.

Third, the adverse impacts of "successful" JFPM on marginal communities point to significant intra-village differences in forest dependence and the simultaneous problem of intra-village hierarchies of power that preclude pro-poor decisions. The implementing agency is clearly not trained to or even interested in addressing this problem, as a hierarchical social setting often suits their goal of somehow getting people to "cooperate" in protecting plantations. At the policy-level, it is simply assumed that

all villagers are forest-dependent. An attempt is made to provide a voice to the marginalised communities by specifying the composition of the MC. But this attempt is inadequate. A mechanism for separating forest-dependent communities from others, and for ensuring that the benefits from JFPM flow to only those who put in efforts in protection and harvest and/or bear the opportunity costs of protection is urgently required. Simultaneously, the pressure on the KFD to generate revenues from JFPM and other forest lands, whether in the form of royalties for NTFP collection or from harvest of timber and softwood, must be removed.

Finally, the relative success of JFPM in villages with more homogeneous and ST-dominated communities, large forest areas and unirrigated agriculture suggests that JFPM implementation would have to be more carefully targeted.

Recommendations for policy and implementation

Our findings call into serious question the current approach towards participatory forest management being adopted not just in Karnataka but in many other states in India. This approach is based upon narrow notions of participation, little re-thinking of basic premises within the forest bureaucracy, large flows of bilateral and multi-lateral funds (usually loans) resulting in target rather than process orientation. Our findings also highlight the need to significantly restructure institutions of community management so as to avoid the imposition of elite preferences in the name of forest regeneration, given the differentiated and changing relationship between local communities and common lands.

Our specific recommendations for changes in JFPM policy are as follows.

- a) There must be clear, statutory provisions for ensuring that all lands used by the village or hamlet community are brought under the management of the VFC, and that this is done by properly resolving or pre-existing and overlapping *de jure* and *de facto* rights.
- b) The planning for management of these lands must be by the villagers, with the KFD's role being strictly limited to providing information on the sustainable-use norms for different ways of managing the lands.

- c) There must be clear, statutory provisions for ensuring that the partnership in JFPM is enforceable both ways. Villagers must be able to demand JFPM as a right if they demonstrate willingness to manage their forests, and VFCs must be able to force the KFD to meet its commitments towards joint protection, sharing of returns, and so on.
- d) VFC membership and/or benefits must be restricted to only those who are today willing to put their own physical labour into planting, protection, regeneration and harvesting of forest produce. VFCs must not have the right to extract royalties or otherwise make profits that can be distributed to all villagers just because they happen to live in that village.
- e) While giving all communities the option to take up the JFPM arrangement, there must be clear assessment at the policy level of the areas that are conducive for such arrangements and a time-bound process to shift to JFPM in such areas. Creating VFCs at the hamlet-level by default will also enable interested communities within villages to take up JFPM.
- f) The state government must clearly recognise that JFPM lands cannot be sources of revenue to the state, and hence must let go of all shares in forest produces generated from these lands. At the same time, the subsidies to be given in the form of free seedlings and planting support must be limited and targetted. Concomitantly, the practice of taking large loans for JFPM-based activities must be discontinued.

- g) Funding agencies must recognise that JFPM is a process of social and institutional change that does not in itself require large funds, and that setting numerical targets for VFCs and physical plantation targets for such a process is counter-productive and inappropriate.

In other words, there is a need for the political system and the bureaucracy to take the concept and process of participatory management seriously. Otherwise, JFPM will remain a buzzword to be adopted when writing proposals to get external loans for meeting state revenue deficits, and might even generate socially perverse and environmentally marginal outcomes in many areas.

LIST OF ABBREVIATIONS

ACF	:	Assistant Conservator of Forests
CPR	:	Common Property Resources
DfID	:	Department of International Development, Govt. of United Kingdom
DCF	:	Deputy Conservator of Forests
EPFEP	:	Eastern Plains Forestry Project
FEVORD-K	:	Federation of Voluntary Organizations for Rural Development, Karnataka
GO	:	Government Order
JBIC	:	Japanese Bank for International Cooperation
JFM	:	Joint Forest Management (acronym used in most other states in India)
JFPM	:	Joint Forest Planning and Management (acronym used in Karnataka)
KFD	:	Karnataka Forest Department
LAMPS	:	Large-scale Adivasi Multi-Purpose Societies
MC	:	Managing Committee
MoU	:	Memorandum of Understanding (to be signed between VFC & KFD)
NGO	:	Non-governmental organization
NTFP	:	Non-timber forest products
PRA	:	Participatory Rural Appraisal (supposed to be carried out prior to generating the micro-plan)
RF	:	Reserve Forest
RFO	:	Range Forest Officer
SC	:	Scheduled Caste
SHG	:	Self-Help Group
ST	:	Scheduled Tribe
VDF	:	Village Development Fund
VFC	:	Village Forest Committee
WGFP	:	Western Ghats Forestry Project

CONTENTS

LIST OF ABBREVIATIONS	viii
ACKNOWLEDGEMENTS	ix
CHAPTER 1. INTRODUCTION	1
1.1 BACKGROUND	1
1.2 RATIONALE FOR AN ASSESSMENT OF JFPM IN THE EASTERN PLAINS REGION	2
1.3 OBJECTIVES AND SCOPE OF THE STUDY	3
CHAPTER 2. CONCEPTUAL FRAMEWORK	5
2.1 ASSESSING JFPM: THE NORMATIVE FRAMEWORK	5
2.1.1 <i>Goals of forest management in non-Protected Areas</i>	5
2.1.2 <i>Participatory management as the means</i>	6
2.1.3 <i>The concept of JFPM: content and procedures</i>	7
2.1.4 <i>Criteria and Indicators for assessing quality of JFPM</i>	10
2.2 UNDERSTANDING JFPM SUCCESS AND FAILURE: THE THEORETICAL FRAMEWORK	12
2.2.1 <i>Potential factors</i>	12
2.2.2 <i>Limiting the enquiry</i>	13
CHAPTER 3. DESCRIPTION OF THE STUDY REGION AND METHODOLOGY	15
3.1 THE MAIDAN REGION	15
3.2 JFPM SPREAD	16
3.3 METHODOLOGY	17
3.3.1 <i>Data sources for overall assessment</i>	18
3.3.2 <i>Detailed case studies</i>	20
CHAPTER 4. QUALITY OF JFPM IN THE MAIDAN REGION	21
4.1 JFPM AS THE MEANS FOR ALL FORESTRY ACTIVITIES	21
4.1.1 <i>Plantation activities but no VFCs at all</i>	21
4.1.2 <i>VFCs only after plantation activities</i>	21
4.2 FUNCTIONING OF JFPM	22
4.2.1 <i>Joint planning: non-existent</i>	22
4.2.2 <i>Joint protection—limited extent and form</i>	24
4.2.3 <i>VFC democracy—largely notional</i>	28
4.2.4 <i>VFC-KFD relationship—lop-sided</i>	30
4.3 LIKELY OUTCOMES OF PROPER JFPM PROCESS	31
4.3.1 <i>Brief description of case study villages and their JFPM process</i>	32
4.3.2 <i>Variable and skewed outcomes</i>	37
4.4 SUMMARY OF JFPM QUALITY: OVERALL TRENDS AND SUCCESS STORIES	39
CHAPTER 5. EXPLAINING JFPM QUALITY	41
5.1 EXPLAINING OVERALL TREND: IMPLEMENTATIONAL ERRORS OR FUNDAMENTAL DIVERGENCES?	41
5.1.1 <i>Operational, organisational and design problems</i>	42
5.1.2 <i>Fundamental divergences in perspectives and attitudes</i>	44
5.2 INTERPLAY BETWEEN IMPLEMENTATION, CONTEXT AND POLICY	45
CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS	48
ANNEXURE I: PRE-EXISTING LACUNAE IN JFPM POLICY IN KARNATAKA	51
ANNEXURE II: EFFECT OF CANAL IRRIGATION ON DEPENDENCE ON COMMON LANDS	54
REFERENCES	60

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CHAPTER 1

INTRODUCTION

1.1 Background

The debate on whether and how to involve local communities in the day-to-day management of the forests they use has a long ancestry in the South Asian region. The debate first emerged in an intense and public form following the British takeover of the bulk of the sub-continent's forests.¹ Although it had little impact on the overall thrust of colonial forest policy, the debate did result in community forestry being permitted in several small pockets across the region. These include the well-known Van Panchayats of Kumaon and the lesser-known Panchayat Forests of Madras Province and Forest Panchayats of Mysore princely state.² The debate virtually died out during first two decades in the post-independence period as state forest policy took an aggressively nationalist and welfare statist stance.³

The post-1970s period saw the emergence of the concept of "social forestry", primarily in response to perceptions of a rural biomass energy crisis. Bilateral and multi-lateral donor agencies pumped in large quantities of funding for implementing Social Forestry projects, including a major one in Karnataka during 1983-1991. But this forestry was social only in its stated purpose, not in its form or actual outcome. In spite of substantial achievement of the physical targets (i.e., area brought under plantations), the community woodlots created under social forestry failed to achieve their stated goal of meeting local biomass needs sustainably. This was mainly because of the lack of involvement of local communities in site selection and species choice, and the absence of sustainable local-level institutions that would continue to protect and manage the

resource created (see ODA, 1992; AOD, 1993; Nadkarni and Pasha, 1993).

The failure of social forestry projects sparked a revival in the debate on forest management policy and the role for local communities. Simultaneously, evidence began to emerge from different parts of the country about successful experiments or examples of community involvement, either with government support (as in West Bengal) or without (Orissa and Kumaon). Consequently, the Government of India's 1988 National Forest Policy document marked a clear shift in favour of local participation. Subsequently, the central government issued a circular to the state governments asking them to involve local communities in the regeneration of degraded forest lands (GoI, 1990). This concept of "joint forest management" (JFM) was then implemented under various JFM programmes by many state governments. By mid-2003, JFM programmes had been initiated by at least 22 states. According to one estimate, the area covered under such joint forest management programmes in India by 2000 was 102,500 sq. km, involving 36,000-odd village-level protection committees and amounting to 39% of the estimated open forest in the country (Murali *et al.*, 2000).

In Karnataka, the Government Order (G.O.) enabling Joint Forest Planning and Management or JFPM (as JFM is locally termed) was issued in 1993 (Government of Karnataka, 1993). This coincided with the initiation of the Western Ghats Forestry Project (WGFP) with a grant from the British bilateral aid agency (now termed Department for International Development, DfID).⁴ This linkage of project

¹ Guha and Gadgil (1989) give an overview of this process. Guha (1990) describes the internal debate within the British government. For details of the protests that occurred in Uttara Kannada district of Karnataka, see Nadkarni *et al.* (1989).

² For a history of the Van Panchayats, see Sarin (2001); for Forest Panchayats in Karnataka, see Shetty (1988).

³ In fact, this period is marked by shrinkage in the space for community management, as evidenced by the dismantling of the Village Forests of Karnataka (Shetty, 1988).

⁴ In fact, this was not a coincidence: the government passed the order only because DfID made this one of the conditions for releasing the grant for the WGFP (see the preamble of the 1993 G.O.).

funds with JFPM implementation also meant that JFPM activities during the period 1993-2000 remained almost entirely confined to the WGFP target area, viz., the heavily forested Uttara Kannada, Shimoga, and parts of Chickmagalur district. Subsequently, in 1997, the Karnataka Forest Department (KFD) launched the 5-year Eastern Plains Forestry and Environment Project (EPFEP). Of the total budget of Rs.598 crores for this project, Rs.508 crores came in the form of a loan from the Japanese Bank for International Cooperation (JBIC).⁵ The EPFEP covered 17 districts⁶ of the non-Western Ghats region of Karnataka. As per official figures, 3068 Village Forest Committees (VFCs) had been set up and 250,000 ha of land had been brought under JFPM through the EPFEP by March 2003.

1.2 Rationale for an assessment of JFPM in the eastern plains region

In January 2002, we decided to carry out an independent assessment of the quality of the JFPM process in the eastern plains region of Karnataka, specifically the northern and southern *maidan* regions. The need for such an assessment was felt for several reasons, most of them from the immediate debates on progress of JFPM in Karnataka, but also related to the larger debates on participatory management in the country.

The earlier phase of JFPM implementation in Karnataka, carried out under the WGFP, was the focus of much public debate (see Lélé, 2000) and came under critical scrutiny from a number of agencies, including non-governmental organizations (NGOs), researchers, and an Independent Review Committee set up by the donor agency itself (Correa, 1996; Mitra and Correa, 1997a; Saxena *et al.*, 1997; Mitra and Correa, 1997b; CAG, 2000). The overall assessment was that the performance of JFPM under the WGFP was quite mixed. The programme engendered significant interest from rural communities in the project area and

reduced the distance between the forest department, NGOs and local communities to an extent. But if JFPM was to make a serious dent in forest degradation or deforestation, and also benefit local communities significantly, much more needed to be done.

Meanwhile, the Government of Karnataka had already launched the EPFEP in 1997. In contrast to the Western Ghats project, the EPFEP proposal underwent very little public debate or scrutiny. And in January 2002, when we launched this study, no post-facto assessments were available either. We felt it was necessary to carry out such an assessment for several reasons:

- a) Any public project or programme needs to be assessed objectively. The EPFEP involves a much larger public investment than earlier projects (Rs.598 crores as against, say, Rs.83 crores in the WGFP), and that too mostly in the form of a loan, the repayment of which will burden future generations.
- b) There is a debate on about the progress of JFPM in the state as a whole, but this debate is inconclusive because of the lack of any systematic and independent evaluations of JFPM in the EPFEP region.⁷
- c) Policy discussions regarding JFPM in Karnataka have been based largely upon an understanding of earlier ground realities and JFPM experiences in the moist and heavily forested region of the Western Ghats. If participatory management of forested and other common lands is to be encouraged everywhere, the policy discussion must incorporate an understanding of the different ground realities in the drier, poorly forested regions of the eastern plains.
- d) This region of Karnataka is also different from any other region in India where JFPM-type programmes are being implemented, especially the central Indian forest belt of

⁵ This has been the trend across the country—the implementation of JFM has become tied to the receipt of large grants or loans worth hundreds of crores by state governments for forest sector projects from various bilateral and multilateral funding agencies. The World Bank alone has lent US\$460 million over the period 1992-2000 for such projects (Kumar *et al.*, 1999).

⁶ After the EPFEP was proposed and initiated, a reorganisation of district boundaries took place in Karnataka. However, many of the project documents and most secondary data (such as Census 1991) are organised only according to the old districts. Therefore, when we refer to districts, we mean the old (pre-reorganisation) names and boundaries.

⁷ E.g., in December 2001, at a state-level convention on participatory forest management in Bangalore, representatives of Village Forest Committees and members of NGOs painted a very dismal picture of JFPM under the EPFEP. On the contrary, the Project Director of EPFEP at KFD who attended this convention, while admitting that there had been delays and difficulties in getting the project off the ground, insisted that enormous progress had been implementing JFPM.

Madhya Pradesh, Chhattisgarh, Orissa, Jharkhand and parts of West Bengal, Andhra Pradesh, Gujarat and Rajasthan. This entire belt is characterised by a majority tribal population, high poverty, large tracts of forests rich in timber and commercially valuable non-timber products (such as *tendu* leaves and *sal* seeds) and significant levels of dependence of the local population on forests for income. In contrast, the northern and southern *maidan* region of Karnataka has a very small percentage of tribals, poverty levels varying from high in the north to low in the south, large areas of highly developed agriculture, and scattered forests not very rich in non-timber products. Understanding how JFPM functions under these *prima facie* unfavourable conditions would therefore contribute to the larger debate on participatory management of forest and other common lands.

1.3 Objectives and scope of the study

The objectives of this study were:

1. To rapidly assess the quality of JFPM activities in the drier portion of the EPFEP implementation area, i.e., the northern and southern *maidan* regions;⁸
2. To understand the factors determining the observed quality, including policy-level factors, implementational factors and the socio-ecological context;
3. To suggest ways in which JFPM policy and implementation could be modified to improve the quality of JFPM process and hence the outcomes.

The conceptual framework underpinning notions of quality of JFPM and factors influencing the quality is outlined in the next chapter. The study region and the methodology adopted are described in Chapter 3. Our findings are presented in chapters 4 and 5, and the implications of these findings are discussed in the concluding chapter.

Regarding the scope of the study, three clarifications are necessary. First, given our limited resources and our interest in looking at JFPM implementation in *prima facie*

unfavourable circumstances, we did not attempt to cover the entire 17 districts in which the EPFEP was implemented. We chose to focus on the northern and southern *maidan* region, which is in fact conventionally understood as the “eastern plains” or *maidan* region and is said to consist of 12 districts (pre-reorganisation). *A priori*, it is possible to argue that the potential for JFPM success is higher in the transition zone than in the *maidan* region, because the transition zone has higher forest area and richer forests. Thus, our findings cannot be blindly extrapolated to the entire EPFEP region. Nevertheless, given that nearly 70% of the total number of VFCs set up under the EPFEP are in the northern and southern *maidan* regions, our assessment clearly covers a major portion of JFPM activities under the EPFEP.

Second, we do not examine the cost-effectiveness of the achievements. From our perspective, JFPM is essentially a process of institutional change, i.e., changing the assignment of rights and responsibilities between the KFD and the local communities and changing mindsets in both these actors from mutual distrust to mutual cooperation. As such, it is not at all clear that large funds are required to bring about such a change. Nor is it clear how one would evaluate the cost-effectiveness of any such changes, especially when JFPM activities are less than five years old. No doubt, when a large loan has been taken to support a project, there would be a temptation to ask whether the project has generated adequate streams of revenues or at least a capacity for future revenues so as to repay the loan. However, asking such a question would be to miss the point of JFPM. Indeed, in the end, we are forced to question the wisdom of the very strategy of taking large loans to support institutional change.

Third, this study is not meant to be an assessment of the EPFEP *project* as a whole. Of the objectives listed in the project proposal submitted by KFD, at least one objective, viz., “to preserve ... ancient monuments of archaeological importance” seems to be independent of JFPM. Similarly, several supporting activities such as setting up of Management Information Systems and Geographic Information System and research

⁸ Which account for about 70% of the Village Forest Committees set up under EPFEP (see Table 2).

are related to capacity-building of the KFD and are not directly connected with JFPM. These features are not covered by our study.

At the same time, to the extent that JFPM was considered to be an integral part of the project implementation strategy and objectives, separating the project from the programme becomes difficult. The EPFEP was supposed to use joint planning and management as its fundamental instrument (Principal Chief

Conservator of Forests, 1996, p.5). Moreover, the proposal document identified "re-orientation of [its] approach from traditional forest management practices [to] participatory process of planning and management" as one of the four project objectives (*Ibid.*, p.4). Our assessment of the quality of JFPM activities carried out under the project would therefore have major implications for any assessment of the project itself.



CHAPTER 2

CONCEPTUAL FRAMEWORK

Underpinning our enquiry into the success and failure of JFPM is a conceptual framework that contains both a normative and a theoretical component. The former pertains to our notion of what is “good” or “successful” JFPM. The latter pertains to what we think are the major factors likely to influence success. In this chapter, we present the details of both these components of our conceptual framework. It is particularly important to clearly delineate the normative framework and the rationale behind it, so as to avoid a situation where “success and failure” are judged on the basis of a completely different set of norms from those assumed by the implementing agency itself.

2.1 Assessing JFPM: the normative framework

If one is to assess the performance or quality of JFPM, one needs to first identify the goals of forest management and the objectives of the JFPM process, and then develop criteria and indicators for assessing the extent to which the (process) objectives have been achieved. Instead of imposing an external set of objectives and process criteria, we trace the evolution in official thinking on forest management goals and strategies, and deduce the objectives, criteria and indicators for evaluating the quality of JFPM from them.

2.1.1 Goals of forest management in non-Protected Areas⁹

As stated in the introduction, the colonial and post-colonial Indian government considered revenue generation and production of industrial raw materials as the main goals of forest management. However, the National Forest Policy of 1988 revised these goals and made “ensuring environmental stability and maintenance of ecological balance” the primary aim of forest policy. But it also gave priority to “meeting the requirements of ...the rural and

tribal populations”. Indeed, the policy states that the local needs “should be the *first charge* on forest produce” (emphasis ours). Local needs primarily mean the fuelwood, fodder, small timber and minor forest produce required for *self-consumption*, but the policy also emphasises the need to protect forest-based livelihoods. And “ecological balance” would refer to the local, regional and global ecosystem services provided by forests, including soil and water conservation benefits, micro- and macro-climate regulation, and wildlife habitat. It would be reasonable to suggest that in, non-Protected Areas, the objective of meeting local needs would be given as much or more importance as that of ensuring ecological balance.

All recent documents of the Government of Karnataka and the KFD echo these revised priorities. For instance, the preamble to the Government Order on JFPM states that “forest management programmes need to be reoriented in such a manner that they respond to the rural community’s needs” (Government of Karnataka, 2002). The EPFEP proposal document is even more explicit. It states the objectives of the EPFEP as:

- **Ecology:** To preserve the unique and ecologically sensitive areas of eastern plains, including ancient monuments of historical, archaeological and cultural importance, and to increase an understanding of their value among the common masses.
- **Environment:** To attempt environmentally sound management of land, water and other natural resources [including] rehabilitation and protection of natural forests.
- **Social and Economic:**
 - a) To ensure the sustainability of the living

⁹ That is, areas that are not classified as “National Parks” or “Wildlife Sanctuaries” or other categories under the Wildlife Act, where biodiversity or wildlife conservation are to be given highest priority.

standard of the people and assuring sustained supplies of bamboo and other forest products to support rural occupations;

- b) To reduce poverty and augment income-earning capacity of poor people, by providing sustained employment through land reclamation, afforestation and other allied activities (Principal Chief Conservator of Forests, 1996, p.4).

2.1.2 Participatory management as the means

There could, of course, be different ways of organising forest management to achieve the twin goals of meeting local people's needs and maintaining ecological balance. Even in areas where human presence and dependence on forests is very high, it is theoretically possible to do so in a top-down manner, i.e., where forests are planted, protected and harvested entirely by a professional forest department, which then supplies the local communities with the products they need. This was initially attempted several times by the British but they were never successful. Ultimately, the British government simply de-reserved (or left un-reserved) some forest patches and gave all local communities free access to them or, in a few cases, assigned specific patches to specific individuals or groups. After independence, the Indian government continued with this policy. As mentioned earlier, even the Social Forestry programmes of the 1980s were social only in their stated goals, not in their means.

However, the absence of any appropriate institution for managing these forest and other common lands¹⁰ and the inadequate area assigned for such open-access use in many cases resulted in these forests declining very rapidly. The problem then spread, especially in the post-independence era, even to the Reserve Forests and social forestry plantations. In other words, the conventional top-down approach was a failure. As the preamble to the latest version of the JFPM GO in Karnataka states:

It has been the experience over several decades that damage to the forests due to various forms of biotic interference, viz., illicit cutting, grazing, fire and encroachment has increased over the years. In spite of several measures like increase in staff, communication network and increased intensive patrolling, etc., the desired results have not been achieved. ... Further, the plantations raised on C & D lands, gomaal lands, tank foreshores ... have been disappearing due to various reasons". (Government of Karnataka, 2002).

It has been argued by many that the foremost amongst these "various reasons" for forest disappearance or degradation is precisely the top-down approach that alienates local communities—not from the use but from the management of the forests (Nadkarni *et al.*, 1989). This argument has now been accepted by the government, at least on paper. The process of acceptance started with the National Forest Policy statement of 1988, which said that "people's participation" should be sought. It gained momentum after the 1990 circular from the Government of India asking states to enable people's participation in degraded forest lands.

A reading of the GOs on JFPM in Karnataka clearly indicates that the state has adopted joint management as *the* approach to managing degraded forest lands. The EPFEP document authored by the KFD goes a step further. In addition to the three objectives mentioned above, it includes a fourth and last one:

- **Reorientation:** To ensure sustainable use of land and other natural resources by setting up participatory process [sic] of planning and management. This calls for re-orientation of approach from traditional forest management practices.

The document goes on to add that "[JFPM] is the fundamental instrument by which sustainable management of resources [is] to be achieved" (Principal Chief Conservator of Forests, 1996, p.5, emphasis ours).

Even if one allows for the possibility that JFPM

¹⁰ We consider forests as part of common lands. "Other common land" refers to grazing lands, tank bunds, tank foreshores, roadsides. These are typically under the control of the Revenue Department. Note that the JFPM GO allows these other common lands to also be assigned to VFCs. Indeed, the 1993 GO categorically states that "a comprehensive scheme of Joint Forest Planning and Management for people's participation in planning, development, protection and regeneration of degraded forests and other Government wastelands has been prepared..." (emphasis ours).

may not really be an appropriate instrument to meet the first objective of preserving ancient monuments of historical, archaeological and cultural importance, and that JFPM might really be irrelevant in remote areas with large forests and very sparse population,¹¹ it is clear that, in the EPFEP, JFPM is the stated means through which the twin goals of meeting local needs and maintaining the ecological balance are to be achieved in all areas where people use forest lands to a significant extent.

Note that this immediately yields a zero-th level criterion for evaluating the quality of JFPM in the EPFEP, viz., all activities in such villages must be implemented through the JFPM process, i.e., after joint planning with the villagers. In other words, any progress made towards (say) increasing the availability of biomass products for meeting local needs that bypasses the JFPM process would be tantamount to violating the very concept of JFPM.¹²

2.1.3 The concept of JFPM: content and procedures

What then is the nature of participatory management of forests in general and JFPM in particular? Broadly speaking, participatory management means bringing local communities into the process of forest management by linking their rights of extraction to responsibilities of protection and sustainable use. More specifically, it means the forest and other public lands being used by rural communities would cease to be an open-access or purely state-controlled resource and become clearly defined patches to which specific village communities would have *exclusive and assured access* within the framework of sustainable forest management. These patches would then be governed or managed by local-level *institutions* that will democratically decide how to use these lands, regulate the behaviour of their own members and also protect the patches against outsiders with help from the forest department. The villagers would also have greater rights over the forest products than before, as an incentive for becoming involved in forest protection. In

the new situation, the department's role would be to ensure that norms for sustainability or "maintaining ecological balance" are followed by the villagers, to help in protection against violators from outside, to provide technical input and critical financial support, and so on. Most of these broad features of participatory forest management are embodied in the official position on people's participation in forest management in Karnataka.

The concept of *joint* (planning and) management is, however, a more specific version of participatory management. Adopting this concept, as the Government of Karnataka and most other state governments in India have done, means taking the position that to ensure sustainable use of forests by the local community, it is necessary that the forest department be involved in both the planning of forest use and (through one of its officials) in the day-to-day operation of the village-level institution. This is embodied in the structure for JFPM prescribed in the GO through stipulations that all village-level forest management plans must be prepared by a forest official *in consultation with the community* and that the local-level forest official (usually Forester) will be the ex-officio secretary of the Village Forest Committee (VFC), i.e., the village-level institution. At the same time, as the official JFPM Guidelines in Karnataka state, the village-level institution is "not an extension of the KFD but a self-governing body" and that "people's involvement is at the centre of JFPM activity, with the FD playing a supportive role" (KFD *et al.*, 1996, p.11).

The general criteria for a properly functioning joint management system are therefore clear, viz.,

- a) Whether joint planning of resource use by the villagers with KFD support is taking place,
- b) Whether joint protection of all resource areas by villagers with KFD support is taking place,
- c) Whether the village-level institution is

¹¹ These areas would correspond to what KFD calls Zone I (ecologically sensitive and wildlife potential areas).

¹² It would constitute a return to the earlier concept of top-down Social Forestry, where plantations were created by the department, but the local communities had no sense of ownership over them because they were not involved and so these plantations eventually were degraded.

functioning in a representative, democratic, and transparent manner, with relative autonomy from but also support from KFD.

Of course, the devil lies in the details. What exactly constitutes joint planning—a plan made by a forest official and presented to the villagers for ratification or a plan made by villagers that is ratified by KFD? And what does a plan made by villagers mean anyway—should it reflect the interests of the majority or of the marginal sections, of all village residents or only of those who are forest-dependent? What does joint protection mean—villagers doing protection by turns, villagers appointing a paid watchman amongst themselves, or the forest department paying for the watchman? What does democratic functioning mean—participation by all villagers in all decision-making or decision-making by a set of elected representatives? What does playing a supportive role exactly mean—providing help when requested or making large funds available from lending agencies for particular kinds of activities (identified *a priori*)?

The various JFPM GOs (Government of Karnataka, 1993; 1996; 2002) and official guidelines (KFD *et al.*, 1996; KFD and FEVORD-K, 2001) spell out the answers to some of these questions. For instance, they specify that the democracy will be essentially a representative one—an elected Managing Committee (MC), headed by a separately elected President, will take most decisions. Indeed, the orders go beyond the notion of a simple democratic setup and specify a particular composition for the MC that would give more voice to the marginalised sections of society.¹³ This is clearly to ensure that the needs of the marginalised sections are given prominence in defining local needs and managing the forest for them.

Regarding joint planning, the official guidelines say that the management plan will be jointly prepared by the secretary (who is a KFD official) along with other MC members, after a

series of meetings involving KFD officials and the VFC members, and involving PRA techniques and other participatory methods.¹⁴ Regarding joint protection, the orders and guidelines are not entirely clear. On the one hand, the MC members are given specific powers (and responsibilities) to apprehend forest offenders and to prevent forest encroachment, illicit felling, poaching, etc. On the other hand, the GOs say that the VFC shall “assist the Forest Department in planning, protection, conservation and development ... as per the approved management plan”, thus leaving the specific role unclear. The exact responsibilities of the KFD in the joint protection arrangement are not entirely clear, except to say that it shall meet initial costs of raising plantations and costs of maintaining them for the initial 3 years.

The GOs and guidelines also spell out in detail several other aspects of JFPM, broadly covering initiation and operational procedures. Initiation procedures include who should form a VFC and how, how the villagers should approach the KFD for the registration of a VFC, who in the KFD is supposed to respond, and how the first MC should be constituted. Operational procedures include how VFC accounts should be operated and maintained, how minutes should be maintained and how frequently elections should be held. Whether operational procedures are followed or not can be considered a supplementary criterion of JFPM quality, although they should not be equated to the essential features of joint planning, joint protection, or democratic functioning spelt out above. The initiation procedures, on the other hand, are more in the form of guidelines for those implementing JFPM; the implementing agency has significant latitude in deciding what process to adopt. It would be more appropriate to consider the initiation process actually adopted by the implementing agency as a component of the overall implementation strategy, which is a factor that can influence the quality of JFPM.

¹³ The JFPM G.O. of 2002 stipulates that out of the 10 elected members in the Managing Committee other than the President, there should be at least two belonging to Scheduled Castes or Schedule Tribes, two landless labourers and two village artisans or NTFP collectors. Moreover, there must be at least five women amongst these 10 members. The earlier orders were somewhat less stringent, but nonetheless clear in their provisions for disadvantaged groups. Note that these conditions are less about achieving the ultimate goals of JFPM and more about bringing in the additional concern of social justice.

¹⁴ The GOs actually say that forest officials will prepare the plans and present them to the villagers for approval/modification. However, since the official guidelines were published after the first and second GO, and since the process outlined in these guidelines seems clearly more meaningful and in the spirit of “joint” planning, we use the guidelines as the norm.

Finally, the GOs also spell out the scope of and limits to JFPM activities. For instance, JFPM can be taken up in legally defined forest lands as well as in other public lands (such as *gomaals*). JFPM can only be taken up on lands with canopy cover less than 25%. Till June 2002, JFPM did not give rights to communities over old natural growth, only over the timber produced from trees planted and protected by them (leaving rights over old eucalyptus or acacia plantations unclear), and that too at 50% of final profits. These and many other features of JFPM constitute factors that will significantly influence JFPM functioning because they will influence the willingness of people to form or participate in VFCs, the ability of the VFCs to function smoothly and to restrain insiders and outsiders from misusing the forests, and so on. But as such they are not the norms that *define* the functioning of JFPM.¹⁵ They may *explain* the quality of JFPM functioning and are hence pertinent to our theoretical framework.

In conclusion, two points need to be kept in mind. First, participatory forest management in general is a *process* through which the ultimate goals of forest management are sought to be attained. The question of quality or success can therefore be posed at two different levels: (a) is JFPM actually occurring in the form it is supposed to in the target areas, and (b) is this form of JFPM actually resulting in progress towards the ultimate goals of forest management, i.e., meeting local needs while ensuring ecological balance? The latter question amounts to testing the core assumption on which JFPM rests, something that should certainly be done. But one cannot answer this question *until* it has been ascertained that JFPM is in fact occurring in the way it is supposed to. Moreover, the process of shifting from conventional management to JFPM and generating the desired benefits is a slow one—regenerating a degraded forest takes time, and even fast-growing plantations need at least 5-8 years to mature. It would therefore be premature to look for major changes in flows

of products, benefits, or ecological services from the JFPM areas. One can at best look for some indications as to whether the kind of practices and processes are in place that will make the achievement of ultimate goals likely. Thus, *the primary focus of our assessment is on the first question, viz., assessing whether the manner in which the JFPM process is occurring the way it is supposed to.* Where we look at intermediate outcomes, it is only to throw some light on what the limitations of the process might be.

Second, as pointed out above, JFPM in Karnataka (and even JFM in other states) is a very specific version of participatory forest management. There are questions whether this particular interpretation of participatory forest management is actually correct, i.e., whether the notions of democracy and autonomy that JFPM embodies are meaningful and adequate *in and of themselves*.¹⁶ There are many who argue that participatory forest management should not be seen as a means to an end but rather as an end in itself. According to them, what is actually needed is grassroots democracy in resource governance (e.g., Rahul, 1997; Sarin *et al.*, 2003). We ourselves have argued that the current format of JFPM in Karnataka does not constitute truly participatory forest management (Lélé, 1998; 2001b) and that a fairer balance must be struck between the needs of local communities and the concerns of offsite stakeholders through a radically different institutional arrangement (Lélé, 1999; 2002). Similarly, one could be critical of the fact that ecologically sensitive areas (what the KFD calls Zone I) or Wildlife Sanctuaries and National Parks are excluded from participatory management. But applying these external notions of participatory forest management to an assessment of the operation of JFPM in the field would be unfair or misleading. We have therefore tried to stay scrupulously with the internal notion of participatory forest management that is embodied in the official definition of JFPM. In effect, we are taking the position that the

¹⁵ Admittedly, the boundary between defining characteristics or norms of joint, democratic management and the conditions that ensure it is a fuzzy one, difficult to apply in every case. For instance, the specification that elections should be held with a certain frequency can be seen both as a condition that helps ensure democratic functioning or as essential to calling an institution democratic.

¹⁶ Note that this is a different concern from the concern that these particular notions of democracy etc. *and* the other conditions that define the programme may not help achieve the ultimate goals of forest management. The latter concern about the appropriateness of the means can be empirically tested.

current definition of JFPM in Karnataka—which does not have devolution of control over resources as its goal, which does not incorporate broader institutional linkages or innovative financing mechanisms for ecosystem services and which is not applicable to Zone I forests—still has the *potential* to be participatory, economically viable and ecologically sound to make this assessment meaningful.

2.1.4 Criteria and Indicators for assessing quality of JFPM

In light of the above, we formulated criteria for assessing the quality of JFPM at three levels:

- a) Zero-th level: All activities in a potential JFPM area must be initiated through the JFPM process.
- b) Regular functioning: Planning of forest management must be joint, i.e., involve all forest-dependent villagers and the KFD and cover all needs; protection of forests must be joint, with adequate support from the KFD and cover all resource use areas; VFC functioning must be internally democratic and transparent with adequate voice for marginal communities; VFC must have a semblance of self-governance and the KFD must be supportive.
- c) Likely future outcome: Where a reasonable JFPM process is underway, the silvicultural models and economic arrangements must be people-oriented, particularly benefiting the marginal communities, and must be ecologically sustainable.

The term “likely future outcome” is used because the actual outcome is not easy to assess in when the assessment is carried out only two-three years after implementation, as in this case.

For each criterion, we attempted to identify indicators which are closely related to the criterion but for which data could be gathered even through a rapid assessment.¹⁷ The list of criteria and indicators is given in Table 1. Not all indicators under categories a, b and c could be assessed through a rapid assessment

methodology, and some of those assessed do not yield much insight if more fundamental criteria (such as the zero-th criterion) are not met. Thus, several key indicators, and of course the indicators on likely future outcome, could only be assessed through case studies. Details are given in the chapter on methodology (3.3).

We should note that we have not explicitly included one indicator of JFPM activity that is commonly included in most assessments, viz., whether returns from the felling of plantations have been shared with the VFC. The JFPM process is so young that newly planted or protected patches could not be ready for felling at the time of our assessment. On the other hand, where VFCs have been assigned pre-existing (usually 10-20 year old) plantations, whether the returns from the felling of these plantations have been shared with the VFC can hardly be seen as an indicator of the JFPM process. The share, if given, is no different from “seed money” in that it is simply a premature inducement to the villagers to cooperate, not the fruits of the JFPM process itself. The same is true of employment generated through plantation operations—this cannot be a sustained source of income anyway. So we discuss the role of such premature inducements in the analysis of implementation strategies and their influence.

It is important to note the difference between our assessment approach and that adopted by many other assessments of joint forest management programmes. Typically, most assessments use a mixture of process and outcome indicators, where each indicator is assumed to be independent of others (see, e.g., Ravindranath *et al.*, 2000; Sudha *et al.*, 2004). In such a framework, if a programme scores low on process indicators (i.e., has poor participation) but high on outcome indicators (e.g., shows substantial standing biomass of trees in protected patches), it is concluded that the performance of the programme is a mixed one. In more extreme cases, assessments may focus exclusively on the outcome, whether socio-economic (such as income impacts) or biophysical (such as survival rates in plantations). From our perspective, however,

¹⁷ For instance, how much autonomy the VFC has would normally require continuous observation of VFC functioning, or at least building of a long oral history. However, whether the minute book and fine book are kept in the village is a good indicator of this autonomy.

Table 1. Criteria and Indicators for assessing the quality of JFPM

LEVEL	CRITERIA	INDICATORS
Zero-th or outset	<ul style="list-style-type: none"> JFPM process must be the channel for all forestry activities 	<ul style="list-style-type: none"> Do VFCs exist at all in villages where afforestation has taken place? Were VFCs formed and MoUs signed prior to plantation activities?
Regular Functioning	<ul style="list-style-type: none"> Planning must be participatory and thorough 	<ul style="list-style-type: none"> How many villagers participated in micro-plan preparation? Do villagers know the contents of micro-plan? Does the micro-plan cater to all the needs of the community?
	<ul style="list-style-type: none"> Protection must be joint and effective 	<ul style="list-style-type: none"> Are villagers directly protecting/regulating the use of their common lands? Is the KFD providing support for protection? Is the entire resource-use area being protected/regulated?
	<ul style="list-style-type: none"> VFC functioning must be representative, democratic and transparent 	<ul style="list-style-type: none"> What fraction of village households have become members? Are women and members of SC/ST communities members of the general body? Are representatives of the marginalised communities elected to the MC? Was a democratic election held for selecting the President and MC members? Are MC & GB meetings held frequently enough? Does the President have inordinate say? Do marginal communities have a voice in the MC's decisions?
	<ul style="list-style-type: none"> VFC-KFD relationship must be somewhat equal 	<ul style="list-style-type: none"> Do villagers know the contents of the MoU? Where are the passbook, minute book, fine book kept? Does the KFD member attend MC meetings regularly?
Likely future outcome (where a reasonable process is under way)	<ul style="list-style-type: none"> Silvicultural models must reflect people's needs 	<ul style="list-style-type: none"> Is the choice of species and silvicultural practices likely to alleviate fuelwood and fodder scarcity? Are silvicultural practices conducive to enhancing NTFP production?
	<ul style="list-style-type: none"> Economic returns must rise sustainably and must be distributed fairly 	<ul style="list-style-type: none"> Have NTFP prices obtained by collectors gone up substantially? Will timber resources yield substantial returns per capita? Are the arrangements for sharing returns fair?
	<ul style="list-style-type: none"> Management must be sustainable and ensure other ecological services 	<ul style="list-style-type: none"> Are extraction levels being curtailed and methods being modified to ensure long-term sustainability of the resource? Are indigenous species being regenerated so as to ensure biodiversity conservation?

assessing outcomes is pointless if the process has been a non-participatory one, because then one is not assessing the outcome of JFPM at all but of a conventional afforestation programme.

2.2 Understanding JFPM success and failure: the theoretical framework

Along with an assessment of the quality of the JFPM process in the study region, we hoped to get some insights into the reasons behind the quality achieved (or not achieved). Of course, this study was not planned on the lines of large-scale econometric analyses, where hypotheses are framed *a priori* and then tested statistically with data from a large sample. Nevertheless, even to think of the likely reasons, to organise them and their inter-relationships and to prioritise amongst the reasons, one needs a theoretical framework. In our theoretical framework, we divide the factors influencing quality of JFPM into three broad categories: implementational, contextual, and policy-level. We outline below the possible range of factors in each category and then indicate how we have chosen the factors that seem more relevant for this study.

2.2.1 Potential factors

By *implementational* factors, we mean those aspects of the JFPM process where the implementing agency has to take the initiative and implement certain steps or procedures, not just as laid down in the GO, but including all the supporting activities that may be needed to implement the GO properly. To distinguish these from policy-level factors, we include here only those processes where the implementing agency has some room or discretion to chalk out its own course or make its own decisions. Similarly, we exclude those that are considered sacrosanct and hence are part of the indicators of JFPM quality.

These factors are present at different levels. At the field level, they include the initiation procedures adopted (effort in awareness building, involvement of village-level promoters committee, involvement of local NGO) and the manner of interaction with the VFC (speed in responding to VFC requests for registration, in identifying the area they wish to protect, in providing protection support, etc.). But behind the manner of implementation in the field is a whole set of decisions regarding

the design of the implementation phase (such as choice of villages, sequencing of activities), the efforts in training the staff in the concept and process of participatory forestry, the attention shown to social issues such as gender and to variation in ecological conditions, the flexibility shown in the interpretation of the rules, the quantum and manner in which financial support is provided to VFCs, and so on. How important these factors can be and how they can influence the functioning and outcome of JFPM has been discussed extensively in the literature on participatory resource management in general (e.g., Agarwal, 2001; Sundar *et al.*, 2001) and also highlighted in the analysis of KFD performance in the WGFP (FEVORD-K, 1991; Mitra and Correa, 1997b; Saxena *et al.*, 1997).

It could be argued, however, that much of the implementation process is already pre-determined by the rules and regulations laid down by the Government in the GOs. Certainly, *policy-level* decisions can critically influence the local community's willingness to participate and can help sustain their interest, as they determine the conditions or boundaries within which communities and the KFD can operate. These conditions include the kinds of lands permitted to be brought under JFPM, the unit for identifying the local community, the magnitude of economic incentives created (by giving shares in the forest products obtained from these lands), the clarity in devolution of rights and responsibilities, the extent of autonomy given to local communities, the security of tenure for the new stakeholders created, the mechanisms created for ensuring implementation of the agreement or for conflict resolution, and so on. There is an extensive literature on collective action, CPR management and decentralized natural resource management in general (e.g., Arnold and Stewart, 1989; Bromley and Cernea, 1989; Ostrom, 1990; 1998; Lélé, 2002) and joint forest management in particular (Lélé, 1999; Andersen, 1995) that stresses the importance of these factors and the manner of their influence.

At the same time, a third set of *contextual factors* would also influence the quality of JFPM, viz., the socio-ecological characteristics of the region (or even specific location) in which JFPM is implemented. Extensive research on the commons has suggested that success in setting

up community-level natural resource management institutions is significantly influenced by the extent of dependence of the community on the resource, the capacity of the community to act collectively (which is in turn influenced by their level of economic and social homogeneity), the presence of leadership (either internal or through an NGO) and other forms of social capital, the rate of regrowth of the resource and the economic value of the species occurring in the forests and so on (e.g., Arnold and Stewart, 1989; Deb and Malhotra, 1993; Lise, 2000).

2.2.2 Limiting the enquiry

Several points need to be noted about this framework and how we operationalise it. First, although we have presented these factors as distinct categories and variables, their effects are not independent (and hence additive) but rather inter-dependent. Implementational strategies can be so chosen or policy-level choices so made as to suit a particular socio-ecological context, thereby overcoming certain socio-ecological constraints. For instance, the kinds of structure that would be necessary for VFCs to function democratically in regions with (say) socially and economically homogeneous communities would be different from the structure needed to ensure democratic functioning of VFCs in regions with a high degree of social inequities. Moreover, the factors act sequentially. As we mentioned in the section on assessment criteria, process leads to outcome. If implementation quality is not adequate, it will simply not be possible to understand the influence of contextual factors and policy-level choices. Methodologically, this means that even if we had a large sample, using a simple multi-variate analysis approach would have been inappropriate.

Second, the list of potential factors identified above is obviously too large to be used in an empirical assessment, particularly a rapid one. One has to reduce them by making some *a priori* judgement about what factors may matter. At the level of the broad categories, we began by asking whether the norms and structure laid down for implementing and operating JFPM through policy-level decisions are so narrow or ill-conceived or so poorly fitting the socio-ecological context that there is no possibility of achieving proper JFPM, no matter how committed and competent the

implementing agency is. Our analysis of the lacunae in JFPM policy draws upon our own earlier work and that of other assessments (Lélé, 1995; 1998; 2001b; Saxena *et al.*, 1997) and is presented in detail in Annexure I. Two key points emerging from this analysis are relevant to this assessment, viz.,

- a) one important lacuna in JFPM policy, viz., the restricting of JFPM to only areas with less than 25% canopy cover, does not constrain JFPM in the eastern plains region because the forests in this region are naturally sparse and mostly below this canopy cover limit, and
- b) most other lacunae are one-sided, i.e., errors of omission that would adversely affect communities attempting to set up JFPM if the KFD was *not* supportive of JFPM, but would not come in the way if the KFD seriously wished to initiate and support JFPM. For instance, GO does not specify any mechanism for making the KFD accountable to or its actions transparent to the VFC. But the KFD could very easily implement internal policies or procedures to ensure such accountability and transparency. Similarly, the orders are sufficiently vague on the question of rights to NTFPs that the KFD could in practice allocate them to the VFCs if it so wished.

Hence we limited our enquiry to trying to identify any additional lacunae in JFPM policy that can be directly related to the observed JFPM process. We had to do this inductively from field observations rather than deductively, partly because policy-level factors apply uniformly across the region and hence no comparison of two different policies is possible.

In trying to prune the list of potential implementational and socio-ecological factors, we tried both to limit the variation in the context and to use prior knowledge of the context. We limited our enquiry to the northern and southern maidan regions, so as to limit the variation in eco-climatic conditions. Given what we know about the eastern plains region, we identified two contextual factors that could be of particular significance on JFPM operation, viz., the level of economic dependence on common lands and the level of stratification and social hierarchy within the community. We then tried to examine the effects of these two factors through case studies.

Third, it should be noted that causal explanations are always hierarchically organised—there are proximate causes and deeper or ultimate causes. For instance, in the above framework, we seem to present the socio-ecological context as a given. But there are deeper or higher-level factors that shape the context, including policies on agriculture, irrigation, and land reform, as well as structures and processes in society. Similarly, the policy-level decisions on JFPM are the product of the political system, and one could ask why particular decisions with particular limitations and implications have been adopted. Implementational decisions are likely to be influenced not just by how well-trained forest officers are, but also more fundamentally by the extent to which the agency as a whole and the individual staff have understood and accepted the JFPM paradigm and committed themselves to such a participatory process (e.g., Jeffery *et al.*, 2001). This, in turn, could be related to the socio-political context in which the staff

operate (e.g., Joshi, 1999) and from which they originate.

Any study performance stops at some level in the causal chain, both due to practical constraints and theoretical assumptions about where significant room for intervention and change lies. In this study, we looked for the causes of shortfalls in JFPM functioning in the manner of implementation, the JFPM policy, and the socio-ecological context. By doing so, we assumed that the actors behind implementation and policy are distinct and have some freedom to act, even if this freedom is circumscribed by deeper socio-political factors. Similarly, although there are fundamental questions about the adequacy of the current model of JFPM itself, we kept them outside the purview of this assessment. We assumed that the current model has sufficient scope to bring about significant local participation in forest management. But some of these larger issues have been touched upon at the end of the assessment.



CHAPTER 3

DESCRIPTION OF THE STUDY REGION AND METHODOLOGY

3.1 The *maidan* region

The 17 districts covered by the EPFEP are conventionally classified into three eco-climatic zones (see Figure 1).¹⁸ The eastern parts of Shimoga, Chickmagalur, Belgaum, Mysore, and Hassan districts and most of Dharwad district are considered to be the *transition zone* (between the moist hilly region of the Western Ghats and the dry flat plains). Bangalore rural and urban districts, Mandya, Tumkur, Kolar, Chitradurga, and the eastern part of Mysore district are considered to be the dry *Southern Maidan* or southern plains zone, and Bellary, Raichur, Gulbarga, Bidar, and Bijapur districts are said to constitute the semi-arid *Northern Maidan* or northern plains. Conventionally, only the northern and southern plains are together called the eastern plains. The use of this term for all three zones by KFD creates some confusion. We have sought to obviate this by referring to our study area as the *maidan* region.

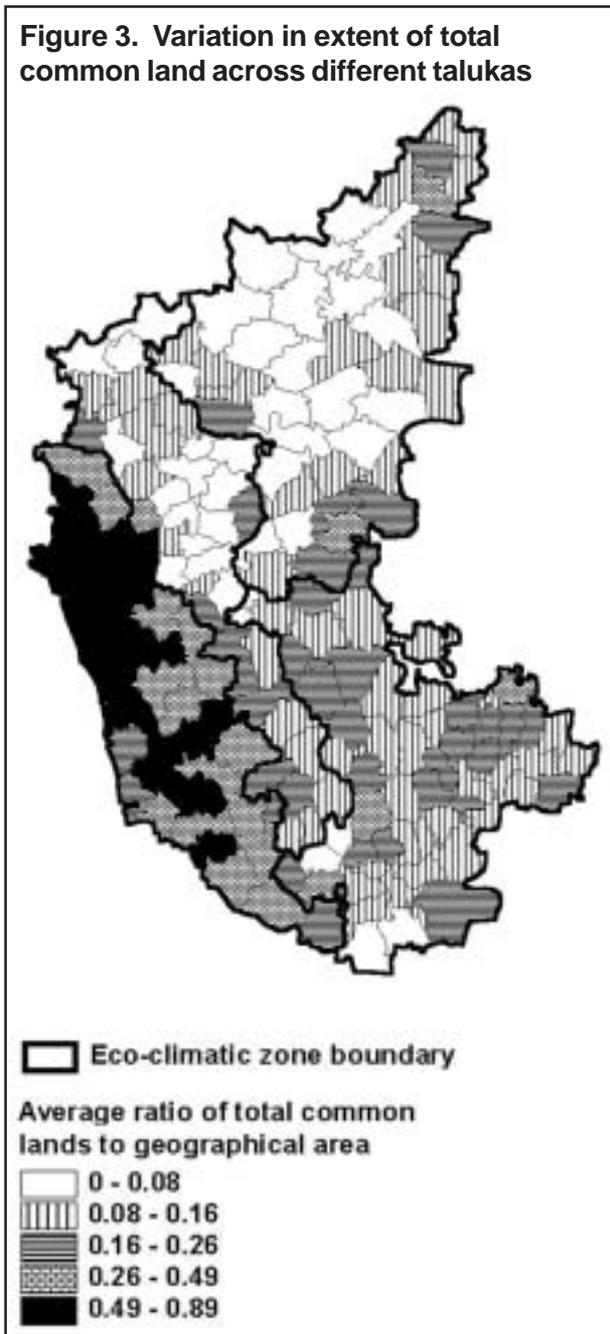
Some of the main features of the *maidan* region may be summarised as follows:

- The maidan region as a whole is much drier than Western Ghats (see Figure 1), and much less hilly. The southern and northern maidan zones broadly correspond to somewhat higher and lower rainfall respectively. There is, however, significant climatic diversity and also variation in soils within each of these zones.
- Although the overall forest cover is far below that in the Western Ghats region, there are many pockets with significant forest cover (although in various stages of degradation) in the *maidan region*. Due to a combination of climatic and historical factors, the extent of forests and grazing lands is generally much higher in the southern maidan (ranging from 5% to 40% of the geographical area of a taluka) than in the northern maidan (where it ranges from 0% to 15% at most). Figure 3 indicates the taluka-wise distribution.¹⁹
- Not all of this forest or uncultivated land is legally classified as forest. In particular, a significant fraction of the southern maidan region is classified as non-forest public lands, whereas the public lands in northern maidan villages (where they exist) are largely classified as legal forest lands.
- The economies are primarily agrarian. The cropping pattern depends primarily upon whether there is irrigation or not. In irrigated areas, the main crops are paddy, along with crops of chilly, onion, tomato, vegetables, sunflower, tur, groundnut, and tobacco. In rainfed areas, the main crops are ragi, maize, jowar, pulses (tur and groundnut), and cotton.
- Although the climate is dry to semi-arid, many talukas within this region have a high degree of irrigation—see Figure 4. In fact, the figures indicated in our map are an underestimate because the irrigated area has increased significantly since the 1991 census.
- The level of socio-economic stratification within the village communities is higher in the maidan region as compared to the Western Ghats (although the Western Ghats region is far from homogeneous); overall poverty levels are also higher, especially in the northern maidan.

¹⁸ Several different ways of classifying Karnataka into agro-climatic or eco-climatic zones have been proposed. We follow the zonation adopted by Nadkarni (1990). It should be noted that there often is substantial variation in agro-climatic conditions within a district, especially those districts that straddle the transition between Western Ghats and the eastern maidan areas (Shimoga, Chickmagalur, Belgaum, Hassan, Mysore). So the district-level categorisation is necessarily a crude one.

¹⁹ These figures are based upon 5-fold land-use statistics obtained from the 1991 Census. These numbers have often been found to be closer to the legal than the physical situation. For e.g., significant fractions of the non-forest common lands have actually been encroached for cultivation, but these do not generally get acknowledged as cultivation.

Figure 3. Variation in extent of total common land across different talukas

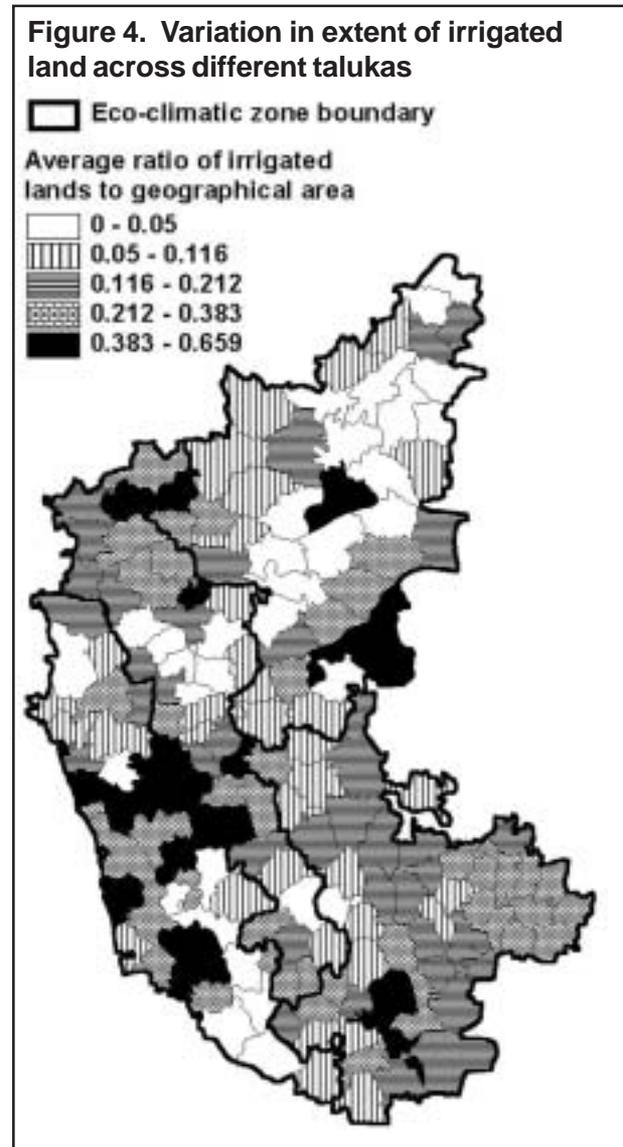


3.3 Methodology

Given the large number of villages in the maidan region in which JFPM had been implemented and the limited resources available to us, it was necessary to design a methodology that would give an accurate picture of the overall trend and would take into account some of the key factors influencing this trend. Although there is a belief that a large population can be assessed only using a large sample (10% sampling would require studying 110 VFCs!), several points need to

be noted. First, the size of the sample required to assess the overall trend in a population depends critically on the extent of variation in the population—lesser the variation, smaller the sample required.²⁰ Second, an alternative or supplement to large random samples is a small, purposively chosen sample that helps understand a particular aspect. Third, not all the causal variables can be assessed through statistical analysis anyway. For instance, the policy-level conditions are the same across

Figure 4. Variation in extent of irrigated land across different talukas



²⁰ For instance, if one draws a sample of 30 VFCs from a large population of VFCs (1000-plus would certainly be considered large), and one finds that only three of these 30 (10%) are successful by some measure, then one can be 95% confident that the proportion of successful VFCs in the larger population is not more than 24%. It does not matter that one has sampled only 30 VFCs out of 1000-plus (Crow *et al.*, 1960, sec 2.3 Test for proportion).

Karnataka, and so it is not possible to demonstrate through statistical comparison that a particular constraint (say insecurity of tenure) leads to reduction in JFPM success. One can only say this inductively from observations in the field or deductively from well-established findings in the literature on community management of natural resources. Similarly, if implementation effort is obviously lacking, one cannot really test the role of various socio-ecological factors, since these will come into play only after a serious effort is made in implementing JFPM across a large number of villages.

Keeping the above possibilities in mind, we first put together information from various sources to establish *the overall trend* in JFPM implementation in the region. We found that a systematic study of all potential factors influencing JFPM success was not really possible, because the overall trend was that of very lackadaisical implementation. We therefore chose a small subset for detailed case studies in a few villages where the JFPM process appeared to have gone significantly ahead to understand the interaction between implementational, contextual, and policy-level factors. The details of data sources, samples, and methods used for assessing the broad trend and the micro-level case studies are given below.

3.3.1 Data sources for overall assessment

The macro-level dataset consists of the following components, hierarchically organised in terms of breadth of coverage:

- Macro-level dataset on JFPM implementation in the EPFEP provided by the KFD (Bangalore office), combined with Census 1991 village-wise dataset: This comprises a list of VFCs with information on their location, date of registration by the DCF, name of the VFC president, date of approval of management plan, date of MOU signing, and the extent of plantations (old/new) and natural forest protected. We got two versions of this dataset. The older one (31 Dec 2001) was in computerised format, while the later one (31 May 2002) was in hard copy format only. Although both datasets were found to have inaccuracies and also inconsistencies with respect to each other, they were valuable as they provided basic information on almost the entire population of VFCs that existed around the time our study began. The computerised dataset contained a list of 1722 VFCs in all, of which 1036 were from the maidan region. We linked this dataset to the computerised village-wise database of Census 1991, which includes details on population, village area and 5-fold landuse. Since the VFCs are not always set up at a revenue village level, we were able to match only 659 of the 1036 VFCs with the villages in the Census data (others being named after hamlets).
- Division-level datasets on EPFEP plantation activities: For some of the forest divisions, we were able to obtain reports pertaining to the plantation activities carried out under EPFEP. The data included plantation date, silvicultural model, size, and name of village or VFC.
- Anecdotal information from state-level regional conventions and one-to-one interviews: An Oxfam consultant investigating the question of JFPM sustainability in Karnataka organised 10 regional (i.e., district-level) consultations and a state-level consultation in late 2001. Several NGOs, VFC members and in many cases some KFD personnel from the particular region participated in these consultations. The proceedings of these consultations were available to us, and we used them to cull out specific statements made by NGO representatives, VFC representatives, and KFD officials regarding the status of JFPM in their village or region. In addition, unstructured interviews were held with senior KFD officials in Bangalore who are dealing directly with the JFPM component in the EPFEP, as well as with several frontline staff.
- Mail-in questionnaire data: Multiple copies of a simple two-page questionnaire was mailed to 50 NGOs working in the EPFEP region. We received responses from 13 NGOs spread across nine districts, giving information on a total of 60 villages (including 33 from the transition zone). It may be noted that in all but seven cases (those in Kolar), the data corresponded to villages where JFPM had been promoted by that particular NGO. Hence these data constitute a significantly biased sample, where JFPM-initiation processes have been much more conscientiously followed than in villages where VFCs had been promoted

by the KFD. This factor is kept in mind when drawing conclusions from this dataset.

- Rapid field visits: Rapid (one-day) visits were conducted in a randomly chosen sample of 28 villages which, according to KFD records, had a VFC that was at least a year old. Of these, 17 were in the northern maidan and 11 in the southern maidan. The latter were all taken from Kolar district, as this district has the highest number of VFCs in the entire maidan region. In these visits, basic information on the JFPM activity in that village (on lines similar to the information sought in the mail-in questionnaire) was collected from the VFC President or members of the Managing Committee.

The distribution of the total set of VFCs (as per the KFD computerised dataset) and the samples obtained from the mail-in questionnaire and the rapid field visits is given

in Table 2. The list of villages covered in the rapid field visits is given in Table 3.

The main data that were reliably available from each source were as follows. The macro-level dataset provided information on the kinds of villages brought under JFPM, the area brought under JFPM in each village, and the dates of key JFPM milestones (registration, micro-planning, signing of MoU). The division-level plantation data gave information on the choice of silvicultural models and, when compared with the macro-level dataset on VFC formation, indicated the sequencing of activities. The records of regional consultations and our discussions with various individual provided both anecdotal information and a broad impressionistic picture of the functioning of JFPM. The mail-in questionnaire provided cross-checks on all the parameters obtained from the macro-level dataset and additional information on the composition of the village

Table 2. Distribution of the VFC population and VFC sample in the study

Eco-climatic region	District	Total Number of Villages	Number of VFCs in Dec 2001	Number of VFCs by March 2003	No. of VFCs covered in mail-in questionnaire	Number of VFCs covered in rapid visits
Northern Maidan	Bellary	617	99	187	2	5
	Bidar	609	39	103	0	0
	Bijapur	1253	49	137	0	0
	Gulbarga	1378	78	92	0	4
	Raichur	1506	102	101	5+8	8
Southern Maidan	Bangalore Urban	728	16	40	0	0
	Bangalore Rural	1883	84	211	0	0
	Chitradurga	1478	131	292	1	0
	Kolar	3321	253	407	7	11
	Mandya	1478	57	153	0	0
	Mysore	1563	85	162	0	0
	Tumkur	2718	146	238	3	0
Transition Zone	Belgaum (eastern)	945	135	312	2	Not covered
	Chickmagalur (eastern)	554	22	31	9	Not covered
	Dharwad	1366	147	266	15+6	Not covered
	Hassan	2068	240	278	0	Not covered
	Shimoga (eastern)	567	39	58	2	Not covered
Total for Northern Maidan		5363	337	620	15	17
Total for Southern Maidan		13169	772	1503	11	11
Total for Maidan region		18532	1139	2123	26	28
Total for entire EPFEP		24032	1722	3068	60	Not covered

community, number of general body members vis-à-vis village population, number of women members in general body and in the Management Committee, number of meetings held, some aspects of VFC-KFD relationship, villager participation in micro-planning, and level of people's participation in forest protection. The data from rapid field visits (which generally did not overlap with the villages for which mail-in questionnaire data were available) provided information on all these indicators and a few more details on the quality of the process as compared to the mail-in questionnaire.

3.3.2 Detailed case studies

To complement the rapid assessment, which is expected to reveal the main trend in the way JFPM has been implemented, we conducted case studies in villages, both to understand more details of the process of JFPM operation and the reasons for its operating in certain ways. Ideally, these would be villages of differing socio-economic characteristics where the JFPM process had proceeded significantly. Since the overall trend was one of poor implementation, however, it became very difficult to identify such villages. For instance, we had originally hoped to study the influence of the changing degree of dependence on common lands on the community's incentive to participate in JFPM. Since there are no secondary data that indicate dependence on common lands, we hypothesized that the introduction of canal irrigation would drastically reduce this dependence. We tried to identify villages with contrasting levels of canal irrigation *and* having JFPM committees and significant areas of common lands. While finding JFPM villages with no canal irrigation

and high common land area was easy, finding those with high levels of such irrigation was very difficult. Those we identified turned out not to have a functioning VFC. We did conduct a study of the influence of canal irrigation on dependence on common lands, the details of which are given in Annexure II. But the effects of this differing dependence on JFPM remains at a speculative level.

We therefore abandoned any idea of choosing villages with specific variations in socio-ecological conditions, and attempted to simply study the process in some villages that are deemed to be "successful" JFPM villages by the KFD or that have at least seen by us as having some significant JFPM activities. We asked the KFD staff in one division in the northern maidan and one in the southern maidan to indicate villages where they felt JFPM had been successful. They pointed us to Kakkuppi village in Kudligi taluka of Bellary district and Thondala village of Kolar taluka in Kolar district respectively. To these, we added Adavimallapura VFC and Kanvihalli VFC from Harapanahalli taluka of Davanagere (earlier Bellary) district, where community involvement was also seen to be quite high and where JFPM had been implemented for three years or more with some degree of seriousness due to the efforts of the local NGO. (Kanhalli was also one of the villages we chose for our study of common-land dependence.) In all these villages, we held in-depth discussions with various sections of the community regarding their experience with the JFPM process. We also interviewed the KFD frontline staff associated with these villages. A list of all villages covered in rapid visits and/or detailed studies is given in Table 3.

Table 3. List of villages visited in field visits

District (new district)	Taluka	Village
Bellary	Hospet	<i>Papinayakanahalli</i>
Bellary (Davanagere)	Harapanahalli	Kanhalli, Komaranahalli, Adavimallapura
Raichur	Raichur	<i>Arsigera</i>
Raichur	Manvi	<i>Hira Hanagi, Pathapur, Narbanda</i>
Raichur (Koppal)	Gangavati	<i>Banderhal, Gaddi, Udamkal, Arhal</i>
Gulburaga	Shorapur	<i>Machgundal, Devargonal, Laxmipura, Benkanhalli</i>
Bellary	Kudligi	Kakkuppi
Kolar	Bagepalli	<i>Chinnobaiahgaripally, Puttaparthy, Gurraladinne, Booragamadagu</i>
Kolar	Chintamani	<i>Puligundlapalli, Naravamakalapalli</i>
Kolar	Kolar	Thondala, Nayakarahalli
Kolar	Sreenivasapura	<i>Mulagollapalli, Sunnakal, Burgamakalapalli</i>

Notes: 1. Village names are spelt as per Census 1991 tables for consistency.
2. Villages in bold are those chosen for detailed case studies.

CHAPTER 4

QUALITY OF JFPM IN THE MAIDAN REGION

We describe in this chapter both the overall trends observed in quality of JFPM in the maidan region as well as the specific observations from the case studies. For the first two sets of criteria identified in Table 1, viz., the zero-th level criterion and the regular functioning of JFPM, we draw primarily upon the larger dataset described in section 3.3.1, using some data from the case studies to illustrate our findings. We then present an assessment of likely outcomes when JFPM processes have proceeded significantly, which is based upon the case studies.

4.1 JFPM as the means for all forestry activities

Given that the EPFEP project document states that “JFPM [is] a fundamental instrument by which sustainable management of resources and benefits are to be achieved”, one would expect that the JFPM process would necessarily precede all afforestation activities under the EPFEP—what we call the “zero-th criterion” for participatory management. Indeed, the project document goes so far as to say that “as the whole project is fundamentally based on involving the local people in the creation, management and protection of forests, the planning process begins at the grassroots level” (Principal Chief Conservator of Forests, 1996, p.11). However, allowing for the fact that the EPFEP activities included those areas that are earmarked for wildlife conservation or archaeological protection (which by and large have a low human population density and fall under plantation models 1-2),²¹ one would apply this criterion to those villages where people use forests to a significant extent and are therefore potential JFPM villages. We tested this criterion using data from the plantation information obtained for one division each from

the northern maidan (Gulbarga division) and southern maidan (Kolar division) for both Territorial and Social Forestry areas. The findings are not heartening.

4.1.1 Plantation activities but no VFCs at all

The JFPM process seems to have been completely bypassed in a number of locations in the northern maidan. In Gulbarga territorial division, of the 93 villages where any plantation activities have been carried out under the EPFEP, only 37 villages had VFCs as of March 2002. The situation in Gulbarga Social Forestry division was even worse: only six of 42 villages had VFCs. The situation in Shorapur Range, which we verified in the field, exemplifies this problem: of 22 villages in which plantations had been raised since 1998, only five have registered VFCs, and only three of these had signed MoUs. And our discussion with the RFO in Shorapur suggested that the department had no plans to form VFCs in the remaining 17 villages to manage the plantations.

The situation in the southern maidan is much better in the sense that VFCs do at least exist (whether formed before or after) in virtually all the villages where plantation activities have been carried out.

4.1.2 VFCs only after plantation activities

The situation in terms of sequencing of activities is, however, disturbing in *both* regions. Across Gulbarga division, one can see that the dates of plantation activities are prior to the dates of VFC registration and MoU signing in most VFCs. Shorapur Range is typical. Here, even in those five villages that have plantations raised under EPFEP and have a VFC, the raising of plantations *preceded* VFC

²¹ In EPFEP terminology, silvicultural activities fall into 13 plantation models, including purely natural regeneration (model 1), natural regeneration with gap-filling (model 2), various intensive plantation types (models 3-7), and various small plantation types (strip, foreshore, roadside, urban, etc.: models 8-13). Taking a conservative approach, we ignore locations where models 8-13 have been implemented as being irrelevant to JFPM. Under the term “any silvicultural interventions” we include models 1-7, whereas under “any plantation activity” we include on models 3-7.

formation in three of them. The same pattern is observed in other ranges of this division.

The same problem occurs in Kolar division also, which represents the highest density of VFCs in the southern maidan. In Kolar territorial forest division, we were able to match the plantation register data with the official VFC data for 47 villages. Of these, in 37 villages (i.e., more than 78%) the date of the MoU (and often date of VFC registration also) is later than the date of plantation. Overall, in about half the VFCs in Kolar division, VFC registration and MoU signing occurred *after* the plantation activity had already been initiated. Although it may be argued that VFC formation and micro-planning could actually have taken place much before the registration and MoU signing date (the latter being dictated by bureaucratic procedures), our rapid visits showed that this could not be the main explanation—we found many examples of VFC formation itself having started after the plantation activity had already begun.

Box 1. Non-existent VFCs

In Raichur district, we came across the phenomenon of non-existent VFCs, i.e., villages listed in the KFD database as having a registered Village Forest Committee, but where the villagers are not aware of any such committee being formed. Three out of four villages visited by us in Gangavati taluka and two out of seven visited in Manvi taluka had this problem. Even though this may not be a general phenomenon, its existence is part of the overall pattern of a lackadaisical approach towards JFPM implementation.

In short, although the VFC formation process has been carried out at least in the southern maidan, overall there is strong evidence to suggest that the zero-th criterion has been violated extensively, that JFPM is not preceding and guiding afforestation activities. Perhaps the most telling indication of JFPM *not* having become the fundamental instrument for forest management is the fact that even after forming a VFC in Benkanahalli village in Shorapur taluka, KFD raised another plantation in the village without consulting the villager, claiming that since the plantation was funded by a different agency (i.e., not JBIC), it did not fall under JFPM!

4.2 Functioning of JFPM

Even if one ignores the fact that plantation activities preceded VFC formation and micro-planning in many cases, we find that *majority of the VFCs in the maidan region are either dysfunctional or function only nominally*. That is to say, they either do not meet at all or meet very infrequently, and in any case they do not take or implement any significant decisions regarding the protection or management of their common lands. This finding is substantiated by all sources of information.

Box 2. Comments by VFC representatives on JFPM functioning

- *“We do not understand why VFC has been formed, because no VFC meetings have been held, nor has there been any contact with KFD, while the department has been planting trees on its own without any involvement of the villagers” [VFC members from Yadgir area in regional consultation in Gulbarga]*
- *“VFCs exist only on the stone boards erected outside the plantations” [VFC representative in regional consultation in Belgaum]*

At the very outset, there are several VFCs that seem to exist only in the KFD records—villagers declare that they are unaware of the very existence of such a committee in their village (see Box 1). Furthermore, many VFC representatives who attended the state-level conventions organised by NGOs during late 2001 indicated that their VFCs existed only in name (see Box 2). Most important, several KFD officials themselves who participated in these regional consultations admitted that only a fraction of the VFCs officially set up were actually functioning VFCs in any sense (see Box 3).

Data from our mail-in questionnaire and rapid visits substantiate this overall impression, while also indicating the nuances and variations. We present the findings for each set of criteria and indicators pertaining to regular JFPM functioning.

4.2.1 Joint planning: non-existent

In JFPM, joint planning is termed as “micro-planning” and is a key step in the process.

This is the activity in which the local community is supposed to identify their resource use areas and come up with a plan for managing them in ways that lead to resource regeneration and meet their own priorities (short and long-term) while also meeting sustainability norms. It is also the stage at which villagers can indicate the extent to which they can take up managerial responsibilities for the resource, and identify the areas in which they wish to do so. The micro-plan forms the basis for the Memorandum of Understanding (MoU) between the KFD and the VFC, and is supposed to be attached to the MoU document. Conducting of a PRA (Participatory Rural Appraisal) exercise is not a requirement as per the GO, but it is a step introduced by the KFD in the guidelines specifically to facilitate the planning process.

Box 3. Comments by KFD frontline staff on level of JFPM functioning

- *ACF Hassan: "Of about 150-170 VFCs formed in Hassan Circle, less than 50 are active."*
- *ACF Kolar: "Of the 106 VFCs in the district, only about 20-22 are working well."*
- *ACF Gulbarga: "54 VFCs have been registered in Gulbarga, but the micro-planning and MoU process is yet to be completed for many of them."*

(Statements made in regional consultations with NGOs.)

Unfortunately, the quality of micro-planning and MoU signing process left a lot to be desired in most VFCs. First, one has to recognise that when plantations take place first and micro-plans are made afterwards, the micro-plans have little value. Second, in our sample of 54 villages from mail-in questionnaires and rapid visits, 21 villages (39%) reported not having signed the MoU, even though all VFCs were more than a year old. Third, of the 33 villages where MoUs had been signed, in 10 villages (30%) the micro-planning exercise had not been conducted (or at least the villagers were not aware of it). And finally, even in villages where it had been conducted, in most cases villagers were not aware of the contents of the micro-

plan or the MoU. Furthermore, in 26 out of 33 (i.e., 79%) cases villagers did not have copies of the micro-plan and MoU²² with them, which does not suggest a very participatory and open planning process.

Moreover, of the 28 villages that we covered in rapid visits, villagers in 13 villages said they were not involved in the planning exercise (the majority of these being the villages in Kolar division) whereas eight villages reported being involved in the process to some extent (the remaining either did not have a VFC or could not clearly answer this question.) This is not a very encouraging proportion. And many of those who reported being involved in the process did not know the contents of the micro-plans nor did they have copies of it!

Similarly, the PRA exercise became just another hoop to be jumped through, rather than a way of generating a common understanding of the resource management issues and concerns in the village. Indeed, in Gulbarga district, the PRA and MoU work for all VFCs was sub-contracted by the KFD to an NGO from Mysore (TARDO). In several Gulbarga villages, we were told that representatives from this NGO showed up for one day in that village and finished the PRA exercise with the help of about 15-20 villagers, with or without the presence of the KFD personnel. Across many villages, we found the micro-plans to be identical, the only difference being in the names, dates and village statistics (none in the activities planned).

In terms of content, the lack of availability of the micro-plan with the villagers made it difficult to ascertain the quality of the micro-plan in the rapid assessment. Even if we had the micro-plans, ascertaining whether the plan caters to all the needs of a particular village, i.e., fuel, fodder, and NTFPs for both subsistence and livelihood would not be an easy task. Nevertheless, on the basis of what we know about the region (and also what our case studies showed), the choice of silvicultural models often does not reflect the needs on the ground. The silvicultural model chosen in the vast majority of cases (as observed from our mail-in survey, rapid visits, or even from the KFD data) is one of tree plantations only, with various combinations of species but a ubiquitous presence of the exotic softwood

²² The MoU is supposed to have the micro-plan attached to it, because the MoU is an agreement to implement the micro-plan.

Acacia auriculiformis. Given the importance of livestock in the region, it is virtually impossible that if villagers had been involved and had been given some autonomy in the planning process, they would not have opted for bringing at least some of the common land under rotational grazing or under some form of fodder development.

In fact, the EPFEP proposal not only identifies a set of seven silvicultural models²³ to be followed in JFPM areas but even estimates the total areas under each, which suggests that silvicultural models for a particular area had been decided *a priori* rather than being allowed to emerge from the micro-planning process. This was corroborated repeatedly by frontline staff. As an RFO put it:

Silvicultural models are being prescribed from top, with little reference to the ground conditions. We ourselves [the frontline staff] don't have any say in the matter. So how do you expect the VFC to have any say?

KFD has gone a step further in pre-empting the micro-planning process. In a large number of villages, especially in the southern maidan, the KFD has used the eucalyptus plantations that were raised under the Social Forestry scheme back in the 1980s as the starting point for JFPM activities. Ostensibly, the motivation for this is to increase the incentive for villagers to participate in JFPM by generating quick returns for the VFC from these plantations, which are ready for felling. But this effectively pre-empts most of the discussion about how to manage the forest and other common lands to meet the villagers' needs, or at least strengthens the notion that JFPM is about planting of exotics for earning cash income.²⁴ How this has a very skewed impact on the village community is seen from our case study of Thondala village, which is discussed in the section on outcomes.

4.2.2 Joint protection—limited extent and form

Traditionally, villagers have been used to treating most forest and other common lands

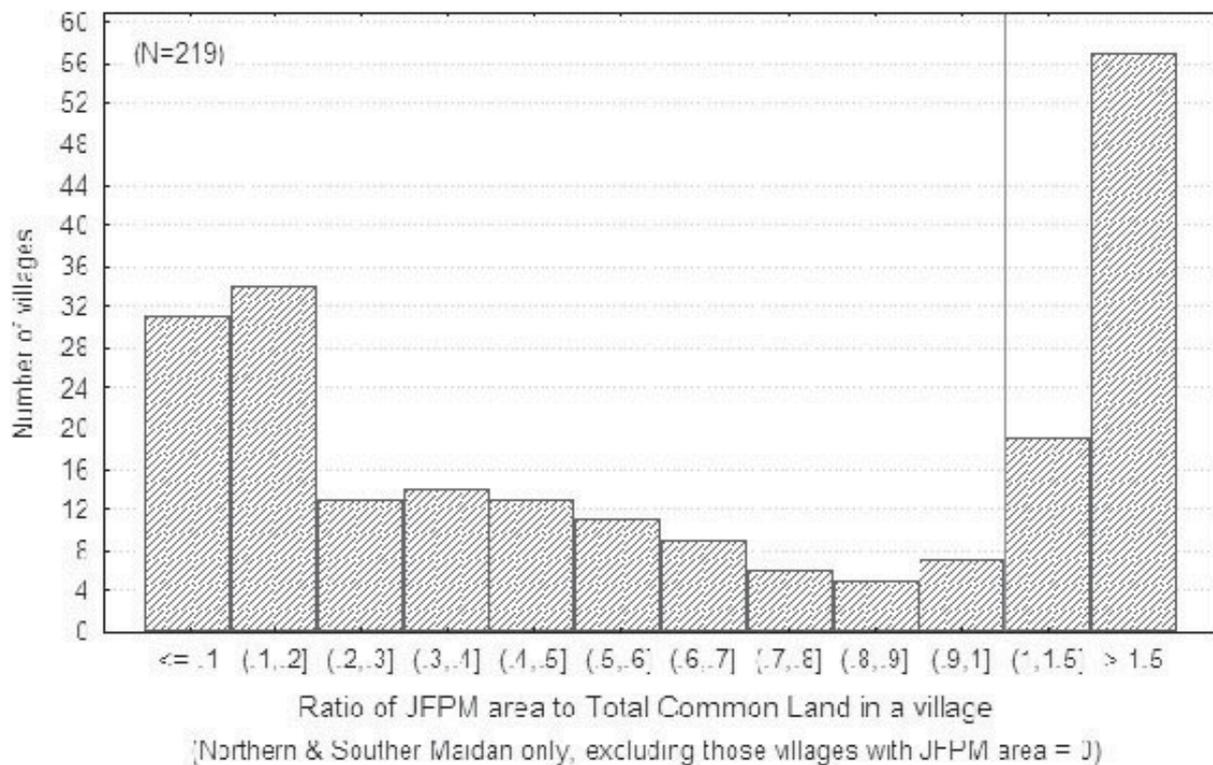
as open access resources from which they can harvest products but towards which they have no responsibility. In order to change this approach, JFPM attempts to increase the incentive for protection, to remove the problem of free-riders by giving exclusive control to particular communities, and then to put the primary responsibility of protection on the VFC. The idea is that villagers should and will be willing to protect the resource that they draw benefits from. Joint protection here means that the VFC will be helped by the KFD where necessary. Note that if villagers are to have a sense of ownership over the resource and if they are to truly internalise some of the costs of their resource extraction, then they must bear most, if not all, of the cost of protection. If protection costs are heavily subsidised, the situation would revert back to one where villagers perceive forest resources as free goods. This point has been made repeatedly in the literature on participatory forest management in general and even in the context of JFPM in the Western Ghats (Saxena *et al.*, 1997, p.80). Note also that a heavily subsidised arrangement cannot work in perpetuity or across the board—KFD can subsidise the protection only in those villages that come under some heavily funded project and only for the project duration. This was the experience under Social Forestry as well as WGFP.

Thus, the question of whether joint protection of all resource use areas is taking place has to be assessed using three indicators: whether the entire resource-use area is being protected, whether villagers are actively involved in protection, and whether the KFD is providing adequate support. In our rapid assessment, the situation on all these counts is generally poor. JFPM usually covers only a fraction of the resource-use area. In the vast majority of cases, villagers are not actively involved in protecting JFPM lands, and KFD support oscillates between total subsidy for protection for initial three years through paid watchmen for plantations to very little support for villages that are actively protecting natural forests. The details are given below.

²³ It should be noted that the natural regeneration models (models 1 and 2) are not supposed to be used in JFPM areas.

²⁴ The Social Forestry programme was heavily criticised for having completely ignored people's actual needs, by planting eucalyptus trees on what in most cases were village grazing lands.

Figure 5. Distribution of villages in terms of fraction of common land given for JFPM



Extent of resource use area that is protected and managed

We find that JFPM activities (where they exist) are largely in the form of small plantations. The bulk of the common land—whether legally forest land or revenue land—usually remains unprotected. This can be seen even from the KFD’s own dataset. Excluding the villages that report zero JFPM area on the assumption that those data are incomplete, we found that in 105 out of 219 villages for which we were able to match Census data, JFPM area was less than 50% of the total available forest and other common lands as given in the Census dataset.²⁵ The histogram in Figure 5 indicates the overall situation. And this situation prevails in both the northern and the southern maidan. The numbers in the sample of villages for which we obtained data from rapid visits or mail-in questionnaires are even worse. Of 28 villages in which JFPM activity was going on, only 8 had an official JFPM activity area that covered more than 50% of their common lands.

Furthermore, there seems to be a bias against handing over forest lands for JFPM, even when they exist in the village and are being used by the villagers. Secondary data show that, for instance, in Kolar division, of the 31 villages that had VFCs and also had non-zero JFPM areas and non-zero RF areas, at least 17 VFCs had not been assigned the RF lands. Moreover, these figures probably overestimate the actual extent of forest areas handed over to VFCs on the ground. In our field visits to 28 villages, for six villages the KFD dataset showed that substantial RF areas have been assigned to the VFC. But in three of these six villages, the situation on the ground was rather different. In one village (Kanvihalli), the VFC was completely unaware of having been assigned any RF land and was not protecting it either (see Box 4). In two other villages (Booragamadugu and Sunnakal), the people reported that this notionally assigned natural forest area is not actually being protected under JFPM but continues to be used as before.

²⁵ Note that in the maidan region, particularly the southern maidan, large fractions of common land are non-forest lands such as gomaals, and it were these lands that were brought under plantations under the earlier Social Forestry project. The JFPM GO permits bringing these lands under JFPM.

Finally, it should be noted that assigning of natural forest area to the VFC in itself generates only limited benefits unless the major livelihood benefit from natural forests, viz., the economic value from commercially valuable NTFPs, also becomes a right of the VFC members. This has not happened at all, as explained in our later discussions about outcomes.

all the VFCs in the sample being more than a year old.

- b) **KFD activity but no villager cooperation:** In six cases, villagers acknowledged that KFD had taken up plantation activities under JFPM or even assigned natural forest to the VFC, but they indicated that they were not even cooperating with KFD in protecting the

Box 4. Missing most of the wood for a few trees



Degraded RF in Kanvihalli (left), not covered in JFPM, which is restricted to pre-EPFEP tamarind plantation away from village

Kanhalli village has 1867 acres of notified RF area, all of which are clearly degraded as the photograph below shows. Yet, the VFC has been given only a Tamarind plantation of about 50 acres raised on a patch of revenue land far away from the main settlement (but close to the KFD Forest Rest House), which is being protected by a watchman employed by the KFD. Although the KFD records claim that, in addition to this plantation (which had been created prior to the EPFEP), 100 ha of plantations created under the EPFEP and 200 ha of natural forest have been given to the VFC, we found no evidence of this on the ground during our week-long investigation.

People’s involvement in protecting JFPM lands

Although the core concept in JFPM is people’s participation in the protection of the forest and other common lands they use, this is not at all the case in the maidan region. In the 54 villages covered by either a mail-in questionnaire or field visit, the level of villager involvement in JFPM fell into four broad types, summarised in Figure 6 and described here.

- a) **No activity:** In 26 villages there was no JFPM activity. This includes five villages where VFCs were non-existent on the ground, and 21 other villages where VFCs existed, their Management Committee had met a few times, but no concrete activity had been taken up under JFPM, in spite of

plantations because of certain problems or conflicts. These problems were of various kinds, including the failure of the KFD to penalise persons caught by the VFC for illegal extraction, conflict with the KFD because plantation was done in an area that had been encroached by some villagers for cultivation, and failure of the KFD to share proceeds from the harvesting of a pre-existing plantation.

- c) **Passive involvement:** In another 19 villages, villagers agreed to the KFD posting a paid watchman to carry out the protection activity, which was limited to the JFPM plantation area. Kakkuppi village, which was identified as a success story by the KFD, falls in this category—a watchman

protects the new plantation, but the large area of natural forest assigned to the VFC remains unprotected. Kanvihalli, which we identified as a village in which there was significant awareness about and interest in JFPM, is also in this category—villagers themselves are not involved in any protection of the JFPM area.

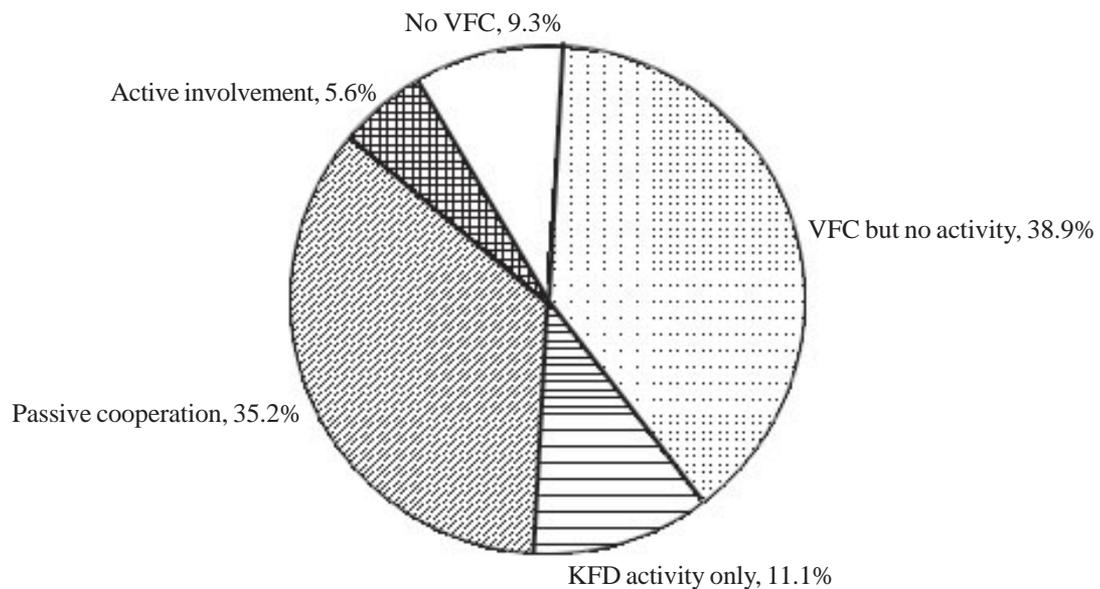
- d) **Active involvement:** In only three cases were villagers actively involved in protecting their JFPM area, i.e., they (or some of them, with the mandate of the VFC) were actually patrolling the forest, catching offenders from outside the village, and regulating the use of the JFPM area by the VFC general body itself. These are Thondala in Kolar taluka, and Komaranahalli and Adavimallapura in Harpanahalli taluka.

In terms of regional variation, the northern maidan region has a very large number of completely inactive VFCs. The southern maidan region has a large number of VFCs in the passive involvement category as they have been induced to cooperate through the promise of early returns from pre-existing plantations. The cases of active *non*-cooperation or conflict are probably distributed across both regions

in small numbers. The distribution of the few cases of active cooperation is probably similar across the northern and southern maidan.

It is important to note, however, that there are two sub-types within the active involvement category. Adavimallapura and Komaranahalli are cases of protection of large areas of mostly natural forest by highly homogeneous communities motivated by their high dependence on the forests for fuelwood and fodder for self-consumption and also for NTFPs for income. Virtually all the households of the village or hamlet are involved in the protection activity. In contrast, Thondala is a case where a few (powerful) individuals from the village are ensuring the protection of a large eucalyptus plantation. The majority of the villagers are not in favour of the activity, nor are they involved in the protection. The primary motive for protection on the part of those involved seems to be the expected cash return from soon-to-be-harvested eucalyptus plantations (that are a legacy of the Social Forestry project). There is perhaps also motivation from some notion of environmental conservation. The bulk of the protection effort comes from a few households, particularly the

Figure 6. Extent and nature villagers’ participation forest protection under JFPM



Information from mail-in questionnaire and field visits (N=54)

Note: “No VFC” refers to those villages where KFD records showed a VFC but it was not found on the ground.

President, and there is a significant amount of dissent within the VFC about whether such stringent regulation on villagers' use of the forest/plantation should be imposed.

Is KFD helping the villagers in protection?

The nature of the KFD support seems to follow two contradictory models. On the one hand, it spends substantially for protecting its plantations. Where new JFPM plantations have been made, the KFD automatically appoints a watchman to protect the plantation for a period of three years. This seems like an extreme, even perverse, form of support, because it is not only financially unsustainable but also goes against the very spirit of joint protection and undermines any sense ownership the villagers might have otherwise developed towards the JFPM area.

On the other hand, where villagers have attempted to protect large areas of natural forest, KFD has been much less supportive, and occasionally antagonistic. For instance, villagers in Komaranahalli and Adavimallapura complained that they did not receive timely and adequate support from the KFD officials. On several occasions, the VFC members had caught persons from outside the village stealing cartloads or firewood or timber, but the KFD officials did not take action against these persons. In fact, VFC members got threatened, embroiled in false police cases and even physically attacked by these persons. But local KFD officials did not support them until several NGOs brought pressure from higher levels. The level of KFD support seems to vary dramatically depending upon the individuals in charge; there is no guaranteed support. Not only in Adavimallapura, which is NGO supported, but also in Komaranahalli and Thondala, which are both KFD-initiated VFCs, villagers are upset that the KFD has not rewarded the VFCs or shared the proceeds from the confiscated forest produce when VFC members have caught timber or fuelwood smugglers. Although there is no explicit provision in the JFPM G.O. about rewarding the VFC or sharing of confiscated produce, clearly such an approach would have generated more support and goodwill.

4.2.3 VFC democracy—largely notional

In the rapid assessment, we were able to assess three dimensions of VFC functioning:

whether the VFC was representative, whether Presidents and the MC were elected democratically, and whether VFC meetings were being held frequently enough. Note that the significance of these figures is somewhat limited, because there are many VFCs (21 out of 54 in the rapid assessment) where meetings have taken place but there has been no concrete JFPM activity, making the meetings rather irrelevant.

As per the JFPM GO (pre-June 2002), one male and one female adult person may become a member from each household. By that measure, the general body of the VFC should have twice as many members as there are households in the village. We used 1991 Census data on the number of households to estimate the extent of enrollment, and found it varied dramatically: from 10% to more than 100% of the potential members. Allowing for increases in the number of households since 1991, the enrollment is generally quite high (between 50% and 100%). Broadly speaking, the enrollment seems to be higher in the southern maidan region than in the northern maidan region. Interestingly, there appears to be no difference in enrollment in NGO-supported villages as compared to KFD initiated villages. On the other hand, in several villages that we visited, it was reported that membership fees had been paid by somebody on behalf of most of the other households, and in turn that person got the President's post. Thus, enrollment seems to have little meaning in terms of actual involvement.

The level of women's enrollment is rather low. For the 31 VFCs for which data were available, the average percentage of women members in the general body was 19% (including one all-women VFC, viz., Papanaikanahalli). The level of enrollment by members of the SC/ST community could not be reliably assessed.

Even though enrollment figures may be reasonably high, the process of election of MC members has not been followed at all. In most KFD-initiated villages, we were told that the MC and the President are selected by a small group of villagers whom the KFD official consults. KFD officials corroborated this. They justified it by saying that "we are not supposed to play politics within the village, we must let the villagers decide who they want to have as VFC President". It is certainly true that

intervening in the complex power equations within a village community is a tricky affair. Even the VFCs that had been set up by NGOs or with guidance from NGOs are not free from elite domination. But precisely because village-level decision-making is susceptible to elite domination whereas JFPM is supposed to be truly democratic, the GOs specify that a democratic election process must be followed. But this part of the JFPM process has been bypassed in almost all cases.

With regard to the frequency of MC meetings, the rapid assessment revealed one interesting feature—that in villages where NGOs were involved in implementing or facilitating JFPM, the average number of meetings was much higher than in villages where the KFD had implemented it. In the latter cases, the average was just 3-4 meetings of the MC over a two-year period, which is certainly inadequate. There were also many reports of the KFD staff taking signatures of MC members on blank sheets of paper for creating minutes of meetings that had never really been held. The data on the number of General Body Meetings (GBMs) held had some problems (i.e., some unbelievably high figures), but in this case too many VFCs had never held a GBM.

As noted above, however, many of the VFCs (whether NGO-promoted or KFD-promoted) which report a significant number of meetings in our mail-in questionnaire survey also report no JFPM activity as such! Similarly, the figures on women or SC/ST representation in the general body or in the MC are neither meaningful if there is really no JFPM activity, nor do they (or the number of meetings) really tell us whether the decision-making process in the MC is reasonably democratic. Hence, the quality of the democratic process and the voice for marginal communities is really addressed only in the case studies.

The case study villages, although chosen as representatives of successful or well-functioning VFCs, varied significantly in the

level of internal democracy. At one extreme, Thondala VFC is essentially run by the President, who comes from the richest family in the village and nominated himself to the President's position. A GBM was held only once in the beginning. MC meetings were held three times in the first year and then no meetings were held till a visit by the Project Director of the EPFEP in 2002. In any case, the MC does not function democratically. The President has imposed a complete ban on fuelwood extraction and stringent limitations on grazing, despite protests by landless households and even objections by land-owners from his own caste group. The villagers do not have access to the VFC accounts, about which there is much debate.²⁶

The functioning of the MC in Kakkuppi village also showed the control exerted by upper caste groups. Although the VFC President was from the Valmiki community, the MC was dominated by members of the Lingayat community. This MC had proposed to buy some large vessels for use in community events using the funds for the so-called entry-point programme. When asked whether these vessels would be available to members of Scheduled Castes also, the MC members did not give any response. In Kanvihalli, the VFC President is also one of the richest persons in the village.²⁷ He functions in a highly unaccountable manner. For instance, he had not deposited the royalty amount obtained two years previously from the auction of rights to tamarind collection into the VFC's bank account. The functioning of the MC also shows the influence of the caste system: the MC meetings are sometimes held in the local temple, in which members of the Dalit community are not permitted to enter. Nevertheless, because of the efforts of the local NGO, one can see greater involvement of women, including those from the Valmiki (ST) community.

On the other hand, villages like Adavimallapura and Komaranahalli are exceptionally democratic in their functioning. The main

²⁶ MC members claim that the VFC account should contain Rs.2000 from the seed money (Rs. 3000 having been used up for the purchase of chairs and tables), Rs.20,000 from the net proceeds of the auction of 100-acres of old and degraded eucalyptus plantation, Rs.2000 being the VFC share in the auction of wood confiscated from unauthorised felling by persons from neighbouring villages, and Rs.250 in fines imposed on their own villagers for flouting the protection norm. But the President insists that there is less than Rs.5000 in the account.

²⁷ In fact, being a lawyer, he does not actually live in the village but in Harappanahalli town but, due to his clout in the village, his "non-resident" status had to be overlooked.

reason seems to be a very homogeneous community to begin with (all but one households in Adavimallapura are from a single community—Valmiki; Komaranahalli is also dominated by this community). To what extent these VFCs have been able to voice to women's concerns in their functioning is something we could not assess.

4.2.4 VFC-KFD relationship—lop-sided

The JFPM GO and guidelines categorically state that the VFC is meant to be self-governing and “not an extension of the Forest Department”. At the outset, however, it is necessary to recognise that the ability of JFPM to achieve this pious intention is seriously compromised by several choices made in the GO itself. For instance, having the forester as ex-officio secretary of the VFC, vesting of all authority to recognise and de-recognise VFCs with the DCF without any guidelines as to how this authority should be exercised, and also giving the KFD the sole right to decide which lands to assign to the VFC are arrangements that fundamentally tilt the balance of power in favour of the KFD. Thus, in many ways, the VFC is subject to the discretionary powers of the KFD officials. Of course, it would still be possible for KFD to internally adopt an approach that would reduce this one-sidedness. This has not happened at all. The KFD-VFC interactions were found to be completely one-sided in virtually all the VFCs. We have already mentioned the lack of transparency and participation in the so-called micro-planning exercise, and the fact that, in most villages, the silvicultural model is presented as a *fait accompli*. But the lop-sidedness is apparent in several other indicators as well.

First, the attendance of KFD staff in VFC meetings was reported to be poor across the region. On the whole, the KFD officials attended meetings more frequently when local NGOs were involved in JFPM, as the NGOs were able to prompt or pester the officials and also approach senior officials in case of continuous non-attendance. But this again shows that the frontline KFD staff on their own were not serious about the JFPM process.

Second, only in two out of 28 JFPM villages visited by us did the passbook and minute-book remain in the village. In 22 villages, these records were always in the custody of the Forester (and in the remaining four villages, there was really no VFC). Also, as mentioned earlier, in many cases the villagers don't have copies of the MoU.

Box 5. Kanvihalli: enthusiastic community but unenthusiastic KFD

Kanvihalli VFC started out very enthusiastically in 1999, naming itself “*Navilu kunidhava Grama Aranya Samithi*” (“Dancing peacock VFC”) to highlight their commitment to complete protection for wild peacocks. In the first year, villagers did *shramdaan* (voluntary labour) to create fire lines within the RF, even though the RF had not been assigned to them. They strongly protested against a forest guard who had indulged in tree felling in the RF, and eventually got him dismissed. They got KFD to stop cactus plantations and proposed planting of tamarind trees. They participated enthusiastically in the micro-planning, according to which they were to be assigned 325 ha of forest area. But the response from the KFD to most of their suggestions and demands was negative. Eventually, only a 25 ha tamarind plantation was assigned to the VFC.

Third, while some individual officers were supportive of communities who wanted to protect their forests,²⁸ in most cases the officials were not responsive even when local communities took the initiative to protect and apprehended timber/firewood felling (as in Komaranahalli and Adavimallapura), or made specific suggestions for JFPM activities (as in Kanvihalli). They were neither open to suggestions from the community during the planning process nor accountable to the community for the promises made in the plan and the MoU—whether they were about planting to be taken up, timely release of seed

²⁸ KFD always touts the example of the Range Forest Officer named Kenchappa at Komaranahalli who was instrumental in getting the local youth club involved in protection and in Komaranahalli becoming a model VFC in many ways. But it should be noted that all this occurred before the commencement of the EPFEP, and that after the transfer of that Guard, the Komaranahalli VFC has not had a smooth ride.

money, or prompt sharing of returns from felling of plantations.

For instance, in Thondala village, even after assigning the entire eucalyptus plantation within the village boundary to the VFC, the KFD continued to auction the rights to harvest eucalyptus leaves (for oil extraction) from all eucalyptus plantations in the Range. For three years after VFC formation, the contractors who had won the auction came to Thondala and harvested leaves in spite of protests from the villagers and the VFC President, who argued that green leaf extraction would affect the growth of the eucalyptus trees. In the fourth year, however, the VFC President was able to prevent the contractors from harvesting from this particular plantation.

Similarly, although the KFD shared the returns from a 100-acre degraded patch in Thondala that was cleared so as to enable a new JBIC plantation to be taken up, now (when the remaining almost 800 acres of good plantation

is coming up for harvest) the KFD officials insist that income from old plantations cannot be shared with the VFC and that sharing can be done only in new plantations. This was reported to us even after the June 2002 GO had been issued, which clearly mentions a 50% share for the VFC in the net profits from harvest of pre-JFPM plantations.

4.3 Likely outcomes of proper JFPM process

If one wants to understand whether, or to what extent, the process of JFPM is generating the desired outcomes (broadly, meeting local needs while maintaining ecological balance), it would be necessary to see the outcome in villages where the JFPM process has proceeded significantly. In presenting these outcomes, we begin by summarising the key features of these villages and the manner in which JFPM has proceeded in each village. We then describe the observed outcomes

Table 4. Characteristics of case study villages and basic data on JFPM process

Feature	Thondala	Kakkuppi	Kanvihalli	Adavimallapura
Total village area	619 ha	1917 ha	1716 ha	~340 ha (hamlet)
Forest area	398 ha	1031 ha	781 ha	240 ha ²⁹
Population (1991)	538	1928	1848	~500
Caste composition	10 ST, 20 SC, 80 Vokkaliga	~130 Valmiki (ST), ~200 Lingayat, 22 others	43 SC, 140 Valmiki (ST), 80 Kuruba, 60 Lingayat	~ 90 Valmiki (ST)
Irrigated area: total cult. Area	37%	2%	2%	~2%
JFPM start	Aug 1998	24 Nov 2000	25 Aug 1999	Mar 2000
Initiated by	KFD	KFD	KFD & NGO jointly	Initiated by KFD, subsequent support from NGO
JFPM area	398 ha (entire RF): ~40ha open, ~40ha degraded plantation, rest dense mature eucalyptus plantation	1029 ha of RF + 100 ha plantation (in RF)	Only 20 ha Tamarind plantation on revenue land	~240 ha of forest area in various stages of degradation

²⁹ This is the resource use area of Adavimallapura hamlet, which is part of a larger revenue village (Nichawanahalli) with much greater total forest area.

following the criteria that had been outlined in section 2.1.4.

4.3.1 Brief description of case study villages and their JFPM process

A few key features of these villages are given in Table 4. It is worth noting that all the villages have large forest area, and that three of the four villages have very little irrigated agriculture and a high ST fraction. (Not surprisingly, the village with low ST fraction is also the village with a significant area of irrigated agriculture.) JFPM was initiated in different ways, and the youngest VFC was 1.5 years old (Kakkuppi) whereas the oldest VFC was 4 years old (Thondala) at the time of our field visit. We present below brief narrative on each village and its JFPM process.

a) *Thondala*

Thondala is a village in Kolar taluka of Kolar district with a large area of RF land. Most of this land is covered with a eucalyptus plantation that was raised under the Social Forestry project in the mid-1980s. Till 1998, the villagers had free access to this plantation and most of the households met their fuelwood needs from it. Given the small size of the village population (97 households in 1991), the villagers perceived the plantation as a virtually unlimited resource. In fact, around 50 households (the poorest in the village) made a living by cutting fuelwood and selling it in nearby Kolar town or selling small eucalyptus poles to other farmers. The villagers also grazed their cattle, sheep, and goats in the forest/plantation patch, as did the villagers from four other neighbouring villages. As a result, the poorer Thondala households collected significant quantities of dung from the forest. The poorer households also earned significant wages from various plantation-related activities taken up by the KFD. In short, Thondala was a typical case of a village with surplus forest area, engaged in heavy but unsustainable use of the forest resource, living off the natural capital raised in the form of plantations.

In 1998, KFD officials began the process of VFC formation. Originally, they proposed a single VFC to cover Thondala and neighbouring Nayakarahalli villages. But the two villages got into a squabble over who should hold the president's position. So eventually KFD had to form two separate VFCs. In each village, the

president ("elected" without any election) is a male from among the richest households in that village.

The President of the Thondala VFC is Shri. B. M. Ramappa, about 45 years of age. He believes that the goal of JFPM is to protect the forest (actually plantation) at all costs, so that it will yield "environmental benefits" such as more rainfall and wildlife and also lead to higher cash returns from the sale of timber. He believes that this can be achieved only by stopping all use of the Thondala forest (i.e., eucalyptus plantation) by villagers—no fuelwood, no grazing, not even collection of twigs or dry leaves. He has taken enormous pains to implement this vision almost single-handedly. He personally patrols the plantation area by traversing the periphery on his own motorcycle every day (see photograph in Figure 7). He has managed to stop the eucalyptus leaf-oil contractors from extracting eucalyptus leaves from the plantation. He has persuaded



Figure 7. President of Thondala VFC, Mr. Ramappa, patrolling the eucalyptus plantation allotted to the VFC

his villagers to stop extracting even deadwood, and to limit grazing to 40ha on a hilltop where the plantation had failed anyway. Thondala VFC members have even caught sandalwood smugglers seven times in the last four years at significant risk to life and limb and handed them over to the KFD.

The Thondala RF is today a dense grove of eucalyptus trees interspersed with smaller saplings of regenerating indigenous tree species. Villagers report that the presence of wildlife (deer, wild boars, hares) has increased significantly over the past four years—to the

extent that they feel they need to resume wild boar hunting to protect their crops. About 100 acres are now under a new plantation of Ficus and Tamarind. The VFC has been showcased by the KFD. The EPFEP Project Director visited the village in 2002 and felicitated the President. The VFC President's name has appeared in local newspapers and he has even been interviewed on a local TV channel.

But the picture appears much less rosy when one actually meets the villagers. Several households express outright opposition to the VFC's policies, and even the support of the MC members is eroding. The major grouse is that the strict protection of the plantation has imposed enormous hardship for the poorer households, who depended exclusively upon the forest for fuelwood and grazing and even for income from fuelwood headloading. While the middle farmers have been able to adapt to the situation by using mulberry twigs from their own lands, the poorest families (including the 30-odd SC/ST families) have been very badly affected as they do not have access to agricultural waste. The extent of the impact can be gauged from the fact that more than 20 families that were making a living from fuelwood sale have emigrated from the village!

The livestock activities of all households have been badly affected. Traditionally, the villagers had a system of communal grazing, where four persons would take the livestock of the entire village for grazing. But with grazing now restricted to 40 ha (to which livestock from neighbouring villages also come) several households have stopped sending their cattle for open grazing. This has affected the livelihoods of the graziers who traditionally took all village livestock into the forest for grazing. And of course, the large and small ruminant populations have dropped to about half of what they were four years ago.

Even the income that some villagers were earlier earning by working as wage labourers in KFD activities has stopped—the felling and planting activities that were carried out under the JBIC project (after the formation of the VFC) have all been carried out using heavy machinery and outside contract labour. And there seems to be no certainty of the VFC getting its share in the profits from the felling of the eucalyptus plantation, which is now mature, or of the individual members actually

receiving a share, due to lack of transparency in VFC accounts (see sec.4.2.3). Thus, most of the villagers we met are greatly agitated by this experience with JFPM and said that they plan to petition the KFD to “cancel” their VFC.

b) Kakkuppi

Kakkuppi is the largest of several villages on the fringe of Kakkuppi Reserve Forest in Kudligi taluka of Bellary district. Although most of the RF land falls within Kakkuppi village boundary, neighbouring villagers also have customary rights to the RF for collecting fuelwood and grazing their livestock. Although the majority population belongs to an upper caste community (Lingayat), there is a significant fraction of households from an ST community (Valmiki). The main source of livelihood is agriculture (even for the STs, although their landholdings are generally much smaller than those of the Lingayats), but the large forest area provides an opportunity for some households to supplement their income from NTFP collection. Till the implementation of JFPM, the NTFPs harvesting rights were auctioned by the KFD, and the contract typically went to some town-based contractors who employed some households from Kakkuppi at subsistence wages for NTFP collection. Of course, the forest is also the major source of fuelwood and grazing.

The JFPM process in Kakkuppi was initiated by the KFD in late 2000. The numerically large ST community managed to get their representative made the President of the VFC, but the MC is dominated by members from the Lingayat community (mostly large landholders). The MC meets generally once a month, although the KFD person only seems to attend half of these meetings. Not all the households have joined the VFC—only about 100 of the nearly 400 households have done so. The reasons for not joining the VFC seem to be no perceived gain from the activity in the case of medium and large landholders, whereas the poorer families indicated that they felt rather intimidated by a committee that is dominated by the village elite.

The VFC has been assigned virtually the entire RF area within the village boundary, plus some non-forest land. But the VFC has not taken on the question of regulating wood extraction and grazing in the RF area. One reason is that several other villages adjoining the RF have traditionally collected fuelwood and grazed

their animals in Kakkuppi RF; regulating their activities would not be an easy task. Second, a major source of pressure on the RF is the extraction of fuelwood for brick-making by many individuals in Kakkuppi and other villages, which has been going on for the past 10 years or so. Most of these are large landowners and highly influential, and allegedly had even influenced the KFD staff to turn a blind eye towards this activity. Limiting fuelwood extraction within sustainability limits would require confronting this powerful lobby.

Instead, JFPM in Kakkuppi has focused on two relatively non-controversial activities. First, an area of 100 ha of land has been brought under a new mixed species plantation. The plantation is being protected by a KFD-appointed watchman, a person from a neighbouring village. Planting itself did not generate any significant employment opportunities, because most of the work was done by heavy machinery and contract labour brought in by the KFD from outside.

Second, the VFC has been given enhanced NTFP rights in the RF. This has been achieved in a peculiar manner. Conventionally, the KFD would auction the NTFP harvesting rights for the entire Range (or parts of it) at one go (separate auctions for each product). Now, the KFD conducts separate auctions just for the Kakkuppi RF, and shares the net proceeds of the auction with the VFC. Thus, in 2000, rights to the extraction of gum from *Acacia catechu* (Khair) and *Anogeissus latifolia* (Dindal), fruits of *Syzigium cumini* (Jamun), *Annona squamosa* (Sitaphal) and *Tamarindus indica* (Tamarind), beedi leaves from *Diospyros melanoxylon* (Tumri/Tendu), and leaves of *Butea monosperma* (Palas) were auctioned. The total royalty of Rs. 15,000 thus generated was, after deducting Rs. 300 as auctioning costs, split 50:50 and so Rs. 7,350 were transferred to the VFC's account by KFD. Only jamun and sitaphal harvesting rights were won by persons from Kakkuppi; all the other rights were obtained by outsiders, who would employ persons from Kakkuppi or elsewhere, paying subsistence wages only. Although there was a debate within the MC about whether the auction should be restricted to only persons from Kakkuppi, it was decided to allow outsiders to bid because "contractors from the town can bid a much

higher royalty amount, thus generating higher profits for the VFC". Interestingly, the families in Kakkuppi who actually engage in NTFP collection are unhappy. In the earlier system, the contractor had rights over the entire Range but he could not prevent villagers from harvesting and selling the NTFPs. Now, the VFC has committed that in return for receiving the royalty amount, it will prevent any illegal extraction and sale of NTFPs. One MC member warned that this situation would result in a major conflict in the coming years.

c) *Kanvihalli*

Kanvihalli village is similar to Kakkuppi in several ways. It has a large RF area that has been a traditional source of fuelwood and grazing for several neighbouring villages. It has a large fraction (in fact, majority) of Valmiki households. And, as in Kakkuppi, the agricultural land holding is highly stratified, with a significant fraction of the agricultural land being owned by a few upper caste families. Due to the degraded state of the forest (compared to Kakkuppi), however, extraction of NTFPs for sale is not a significant activity. About 20 households from Kanvihalli and a few households from a neighbouring Lamani tanda are involved in it for a few months in a year; the quantities involved are very small. Most of the forest use is for meeting household fuelwood needs and grazing of livestock.

Kanvihalli has the added advantage (from the point of view of setting up participatory forest management institutions) of having had a history of community management till 1954, under the Panchayat Forest system of erstwhile Madras Province. Villagers admitted to having indulged in uncontrolled extraction and sale of firewood to nearby towns when the Panchayat Forest system was dissolved following the amalgamation of Bellary district with Karnataka state and the passing of a Karnataka Forest Act in the 1960s.

The JFPM process was initiated in Kanvihalli jointly by the KFD and an NGO working in the village (REACH). As described earlier (see Box 5), the process evoked an enthusiastic response from the villagers. However, the VFC has only been assigned a 20ha tamarind plantation that had already been raised on revenue lands adjoining the site of the Forest Rest House, quite far away from the village settlement. It is protected by the KFD

employee who is assigned to take care of the Rest House.

The main activity under JFPM has been the management of the tamarind plantation's yields. In spite of the plantation having been assigned to the VFC, the KFD conducted an open auction of the tamarind harvesting rights in 1999. Luckily, due to efforts of the NGOs, a women's self-help group (SHG) from Kanvihalli won the auction with a bid of Rs.3,100/- as the royalty amount for two years. The SHG paid KFD a royalty, and the KFD claims to have transferred half of it to the VFC, but the VFC President is apparently still to deposit this amount into their bank account. The SHG actually barely made a profit out of this activity, since the women had to then guard the distant plantation for several months and could not get timely payment from the wholesale merchant to whom they sold the harvested tamarind.

In 2001, when the first contract expired, the KFD again called for an auction without notifying the VFC. The VFC members, particularly the women's SHGs, protested vehemently and forced the KFD to defer the auction and to hold it at the village rather than in the Forest Rest House, which was far away from the village. The auction was then held in January 2002, but again outsiders were permitted to bid, and some merchants from Harpanahalli won the bid. The SHGs did not pursue the matter vigorously, because they felt the delay in the auction (and the illegal extraction that occurred in the interim) had reduced the likely yield anyway. Again, the VFC's share in the royalty is yet to reach the VFC accounts.

Regarding the larger forest area, the VFC members say that neither has the KFD given them control over it, nor has the KFD even taken any action against the illegal felling and removal of timber that keeps occurring in it, in spite of being informed about it several times by the VFC.

d) Adavimallapura

Adavimallapura is a hamlet of Nichawanahalli revenue village. This hamlet is in the heavily forested part of this village, and rather remote and inaccessible—the nearest bus stop is five km away. Adavimallapura hamlet is socially quite homogeneous, consisting almost

entirely of households belonging to the Valmiki community. Virtually all households own some agricultural land, and disparities in landholding are not very high. Although agriculture is the main occupation, only one crop is possible, and a majority of the households depend upon NTFP collection as a supplementary source of income. And all households depend heavily on the forest (which is in a better condition than that in Kanvihalli) for fuelwood and for grazing their animals. Traditionally, the resource-use area of Adavimallapura residents has been about 600 acres (240ha) of the total RF that falls within the revenue village boundary.

JFPM was initiated in Adavimallapura by the KFD in March 2000, although the process has been supported by an NGO (REACH) subsequently. The VFC has almost equal representation from women and men, and they have taken a rather unique step of rotating the President's post every year to make functioning more democratic. The MC maintains meticulous records of its meetings, and also copies of all correspondence with KFD.

The idea of JFPM received an enthusiastic response from the community. They saw it as a means to strengthen their control over the forest and to reduce the depredations into their traditional use area by people from other hamlets and villages who have degraded their own forests. Their particular concern has been the widespread harvesting of *Anogeissus latifolia* (*Dindal*) trees for agricultural purposes, since dindal trees also yield gum, which is one of the major NTFPs being extracted by the Adavimallapura residents.

Back in 1984, before JFPM was introduced, the KFD had conducted a campaign to evict illegal cultivation in forest land. After evicting the encroachers, the KFD planted trees on it. This plantation failed, was replanted in the 1990s, but failed again and the land is now largely barren. The KFD records show that this plantation has been handed over to the VFC, but the VFC members categorically deny this and point out that there is nothing there anyway.

The VFC did receive a cheque for Rs.5,000 as seed money, but the cheque reached them late and lapsed before it could be deposited. Requests to the KFD to reissue the cheque

have not met with any success. In any case, the main focus of VFC activities has been on stopping removal of wood by outsiders. They have actively patrolled the forest boundary, and repeatedly caught persons coming with bullock carts and even tractors to carry away the felled wood. But these efforts have not received support from the KFD; in fact, they have backfired on the villagers. On 14 October 2001, they caught persons from neighbouring Arasigere village with 15 cartloads of fuelwood and timber being removed from the forest. They called the KFD officials and handed over the persons and the illegally felled wood to them. But these persons were let off by the KFD without any fine and without confiscating the wood. Instead, a major conflict erupted between residents of Arasigere and Adavimallapura, resulting in physical confrontations, allegations and counter-allegations,

complaints to the police, and so on. Subsequently again, VFC members report that they have apprehended timber smugglers only to see them let off by the KFD and then receive threats from the group involved in this smuggling. Nevertheless, the VFC members believe that their efforts have resulted in an overall decrease in the felling of wood in their forest area. Efforts to limit grazing by outsiders have met with lesser success, because (as compared to felling wood in cartloads) livestock grazing is seen as much more of a necessity.

The villagers not only extract NTFP but also market them collectively. A few years ago, they even went all the way to Dharwad to sell their NTFPs to wholesale traders. Returns from NTFP sales are given back to individual collectors in proportion to the quantity collected. But the villagers have consciously kept the NTFP-related transactions outside the

Table 5. Brief summary of the JFPM process in the case study villages

Criterion	Indicator	Thondala	Kakkuppi	Kanvihalli	Adavimallapura
Zero-th Criterion	VFC before other activity	Yes (but SF plantation already existed)	Yes	Yes (but tamarind plantation already existed)	Yes
Planning	Micro-plan done jointly	Only a few participated	Only a few participated	No	Yes (but not implemented)
	JFPM coverage	Entire forest land	Entire forest land	Only 24 ha plantation	Entire forest land (<i>de facto</i>)
Joint protection	Villager involvement	Some are very active	By KFD watchman only	By KFD watchman only	Active involvement
	KFD support	Yes, for new & old plantation	Yes, for new plantation	Yes, for tamarind plantation	No
VFC Functioning	Open election for MC	No	No, but some negotiations took place between communities	Yes, but President was elected "unopposed"	No, but VFC President rotated every year
	Frequent meetings	No	Yes	Yes	Yes
	Voice for marginalised	Nil	Limited	Significant	High
	NGO involvement	No	No	Yes, intense	Yes, but limited

official VFC affairs. They fear that linking the two would result in a decrease in their incomes, as the KFD would somehow demand for a share in the returns. It should be noted that although the KFD auctions NTFP harvesting rights for the entire forest in the range to outside contractors, the villagers have (probably due to their remote location) traditionally not had to compete with any outsiders in NTFP harvest and have sold the produce wherever they wish. They do face difficulties in finding good prices for gum, as the market seems to be monopolised by one person in the taluka town. But after their efforts to reach the Dharwad market, this person has been giving them higher prices.

A summary of the JFPM process in the four villages is given in Table 5.

4.3.2 Variable and skewed outcomes

The narrative of JFPM processes in each village has indicated the direction JFPM has taken in each case and the outcomes so far. Since these are still the first few years of JFPM in these villages, it is possible that the process could take different turns in the coming years. Moreover, it is also not possible to separate outcomes from processes entirely. For instance, income for the VFC may increase but may not translate into income for the members if the VFC is mismanaged. Nevertheless, we shall try to summarise the likely outcomes and then highlight any commonalities across the case studies and generalisability to the larger region.

In terms of availability of fuelwood and fodder/grazing, the outcome so far in the four case study villages is negative in one case, negligible in two cases, and somewhat positive only in one case. In Thondala, the VFC's complete ban on wood extraction and reduction in grazing area has negatively affected the availability of fuelwood and fodder/grazing for subsistence use within the village. And it is unlikely that strict protection today will yield benefits tomorrow, because what is being protected (a eucalyptus plantation) is something to be sold for cash returns when it matures (and will most likely be replanted with

a similar commercial crop). The 40 ha of ficus and tamarind plantation may result in some increase in fodder availability for small ruminants, but that would take a long time to fructify. In Kakkuppi, the VFC does not or is unable to regulate fuelwood and grazing activities in the forest area, so in effect there has been no change in fuelwood availability and nor grazing resources or practices. In Kanvihalli, the larger RF area from which the villagers meet these needs was not brought under JFPM, and so it continues to degrade due to uncontrolled extraction. Only if the KFD hands over control of this area to the village could there be some likelihood of reversing this trend. But it is also possible that the VFC will then enter into a phase of conflict with outsiders who have been extracting fuelwood and some other products from that forest. In Adavimallapura, the availability of fuelwood to the villagers has increased somewhat, given that they have been able to reduce outside depredation. But fuelwood was not a scarce commodity here to begin with. Grazing resources are much scarcer than fuelwood in virtually all the villages, but JFPM has not been able to redress this problem at all. Note that these effects are not evenly distributed across the community. Whoever has large landholdings and/or irrigation (e.g., the elite in Thondala and Kanvihalli) has access to agricultural waste and thus is much less dependent on the forest area for these subsistence needs.

The question of changes in incomes also cannot be discussed separately from that of distribution of the income. The outcome is highly varied; mostly insignificant in the early years but with potentially very different results later. In Thondala, as yet the outcome has been negative, as some households lost incomes but nobody has gained any income so far. It is possible that, in the near future, when the already mature plantation is harvested, a large income could be generated for the VFC. Note, however, that after this round of felling, they will not get any income till a new plantation is taken up and matures, i.e., at least 15 years from now. Note also that the cash income from felling of the plantations will go to all members

³⁰ Prior to the 2002 JFPM GO revisions, 50% of the royalties (minus auction expenses) came to the VFC. Of this, half had to be deposited in a Village Forest Development Fund and used only for forest development activities. The remaining, which amounts to 25% of the royalties (minus expenses), could be shared as dividend.

of the VFC regardless of their contribution to protection and (more important) regardless of the opportunity cost they incur in terms of foregone grazing and fuelwood!

In Kakkuppi, there is a decrease in incomes for the NTFP collectors themselves, except perhaps in the case of those two (lower value) products for which the auctions were won by one of the collectors from Kakkuppi itself. Further, there is no sign that the flows of NTFPs will increase. In Kanvihalili, one women SHG (about 20 women) saw marginal gains in income, but these came almost *in spite* of the process! In both cases, the VFCs stand to gain from the share they get in the royalty amounts, but given the small amount and the onerous conditions imposed by the GO on its disposal,³⁰ the gains to individuals are hardly significant. For instance, in the case of Kakkuppi, the VFC share in the royalty was about Rs.7,500, of which only Rs.3750 can be distributed as dividend, which amounts to Rs.37.50 per member household (at the current membership level of 100) or even less if all 400 households become members. Note also that, under the current arrangement, this share would go to all members regardless of their contribution in terms of NTFP harvest or protection effort. In other words, the non-collectors (typically the better-off households) get cash benefits (their share in the royalty) for NTFP extraction done by the collectors (typically the poorer households). In other words, as in the case of returns from softwood plantations, the VFC replaces or joins the KFD in capturing the economic rent or surplus from the public land resource, and the NTFP collectors are almost where they were in terms of returns to their efforts.

In Adavimallapura, the villagers may see further increases in yields of NTFPs if their protection efforts bear fruit. But whatever increases have occurred in *returns* from NTFPs are a result of the marketing initiative of the villagers, the fact that their forest is *de facto* not subject to the KFD auctioning process, and because they have kept the NTFP collection and sale activity outside the formal VFC operations! The increases are also flowing in proportion to the efforts of the collectors because of this separation.

Across all VFCs, hardly any wage income was generated due to JFPM activities. This is partly

because the quantum of labour required for these activities is small compared to the number of households, and partly because even here the KFD often made use of labour-saving machinery and outside labourers.

In terms of sustainability of resource use, it has already been pointed out that the forests of Kakkuppi and Kanvihalili continue to degrade as before and that Adavimallapura has been able to arrest this trend to some extent, although at significant cost in terms of disputes with neighbours and outside smugglers. Thondala has seen the regeneration of the eucalyptus plantation, but sustaining this resource would mean having to invest in replanting after the felling takes place. In terms of biodiversity enhancement, Thondala has seen some increases, but they will be become significant only if the plantation gets converted into natural forest, which means sacrificing the quicker economic returns obtained from eucalyptus. In Kakkuppi and Kanvihalili, there has been no change in the biodiversity status, whereas Adavimallapura may see increases if the protection efforts are sustained and strengthened.

This discussion of outcomes is summarised briefly in Table 6. One may draw some broader conclusions about the pattern of outcomes observed by relating them to the manner of JFPM process. It appears that the four villages represent three somewhat distinct modes of JFPM implementation. Thondala represents (perhaps in an extreme form) the mode in which the KFD uses the potential cash benefits from pre-existing softwood plantations to generate interest amongst the villagers. Kanvihalili and Kakkuppi, in different ways, represent the mode in which community support is sought by giving them a share in NTFP royalties. Whereas Adavimallapura represents a situation where a community is on its own mobilised to get involved in forest management, and the KFD provides just recognition but little support.

Under the current dispensation, all three modes have serious limitations in their capacity to meet the objectives of satisfying local needs while maintaining ecological balance. In particular, grazing needs seem to get short shrift in all of them, although for different reasons. Furthermore, the plantation-based mode and the NTFP-royalty based mode both

Table 6. Summary of likely outcomes in case study VFCs

Level of Analysis	Criterion	Thondala	Kakkuppi	Kanvihalli	Adavimallapura
Outcome	Meeting subsistence needs	Less than before	As before	As before	More than before
	Generating income	Currently no, but may get large income from felling	No significant change	Slight increase from Tamarind plantation harvest	Significant Increase in NTFP returns
	Distribution of benefits	Highly skewed: Landed benefit, many landless had to emigrate	Skewed: VFC benefits, NTFP collectors get same wage or lesser wage	Women SHGs benefit, but VFC splits profit with KFD	All households get increased benefit due to increased NTFP harvest & price
	Resource sustainability	High: All extraction is regulated	Low: No regulation of villager extraction	Low: No regulation of villager extraction in larger RF area	Medium: Extraction of wood is regulated, not grazing
	Biodiversity	Currently, some increase, but situation will change drastically after felling of eucalyptus	Increase unlikely	Increase unlikely	Likely to increase

create sharp tradeoffs within the local community. Softwood plantations can generate large incomes in an episodic manner but they severely compete with the ability of the forest to provide continuous flows of fuelwood and fodder or grazing material that are particularly required by the poorer sections. Similarly, attempting to generate cash incomes for the VFC by sharing the royalties from NTFP contracts essentially results in co-opting the non-NTFP collecting elite into extracting rent from the poorer NTFP collectors. And sustaining the resource is generally a very difficult proposition, at least partly because VFCs do not seem to have clear powers and support to deal with violators, except in cases like Thondala where the co-optation of the village elite has made some difference.

As we said earlier, this sample of VFCs is far from typical of the overall trend in JFPM in the maidan region. This sample was meant to represent the more successful or at least

reasonably functioning VFCs, which are a minority in the overall. The findings regarding the outcomes can, at best, be extrapolated to this minority of perhaps a few tens of VFCs. We will discuss in Chapter 5. how these outcomes might be explained in terms of the interplay between implementation approach, socio-ecological context, and policy-level factors.

4.4 Summary of JFPM quality: overall trends and success stories

The overall picture of JFPM in the maidan region is rather disappointing. The fundamental notion of JFPM was violated in many villages, as plantation activities under the EPFEP preceded VFC formation. Even otherwise, joint planning was invariably notional, the exercise conducted either by the KFD staff or their sub-contractors with minimal villager participation, and circumscribed, apparently, by pre-determined silvicultural models. Large

fractions of the lands being used by villagers are left out of the purview of JFPM. While many villages have no significant JFPM activities at all, villager involvement in the other villages is usually passive support for protection of the KFD plantations that is actually carried out by watchmen hired by the KFD for a limited duration.

VFC functioning is haphazard, ranging from no meetings at all to many meetings without any significant decisions. MCs have been constituted in an ad-hoc manner, usually not democratically elected. Marginal communities have very limited voice in the process. At the same time, the VFCs are not treated as proper partners by the KFD. Villagers are generally clueless about the contents of the micro-plan or MoU, and decisions regarding silvicultural models, flow of seed funds, and NTFP auctions are generally taken unilaterally by the KFD. Within this trend, there are some regional variations—the picture is generally slightly better in the southern maidan, in that there are less of the dysfunctional kind and more of the passively cooperating VFCs. Even though our sample is small, there is so little variation that the reliability of the conclusions is quite

high. Moreover, these findings are also corroborated by comments by the KFD staff and VFC members in public meetings in different parts of the region.

In the minority of cases where JFPM has proceeded to a significant extent—including the so-called success stories—the outcomes are actually rather mixed, and in some ways even retrogressive. In these cases, JFPM is being equated with returns to the entire VFC membership from plantations and/or from NTFP royalties, rarely with ensuring subsistence needs of fuelwood and grazing first and then enhancing incomes of the poorest. Village elite are attracted to this mode of JFPM, whereas the marginalised communities are left in the lurch. Sustainable resource management acquires a very narrow form, viz., planting and protected trees with large subsidies from the KFD in the short-term, rather than ensuring overall regeneration of trees, grass, and soils in ways compatible with local needs and capacities to sustain the effort in the long run. Where communities show interest in interpreting JFPM in this larger sense, the support from the KFD has been rather lukewarm.



CHAPTER 5

EXPLAINING JFPM QUALITY

How does one explain the kind of limitations we observed in the JFPM process and outcomes? We find that the explanation for the overall trend is directly related to implementational factors at various levels. In cases where some minimal implementation has taken place, the outcomes involve a more complex interplay between implementational, contextual and policy-level factors. We therefore discuss these two levels separately.

5.1 Explaining overall trend: implementational errors or fundamental divergences?

The eastern plains region is a diverse and challenging one as far as implementing participatory forest management is concerned. The JFPM policy also imposes certain constraints on what the implementing agency can do on the ground. But even though the KFD's actions are circumscribed by these constraints, it still has significant autonomy and room to design and implement JFPM in a way that would match with the concept of JFPM as outlined by the KFD itself.³¹ Unfortunately, the observations from the rapid visits as well as details elicited in the case studies clearly indicate that there are major flaws in the way JFPM has been implemented on the ground by the KFD. The symptoms of poor implementation effort are very clear from the major lacunae we reported above, including:

- a) Widespread examples of "plantation first, VFC afterwards",
- b) Many cases of VFCs set up but no activity, or delays of up to 1-2 years in signing of the MoUs,
- c) Micro-planning process being generally very perfunctory and non-participatory,
- d) Silvicultural models are pre-defined rather than emerging from micro-planning processes,
- e) Only parts of the total resource use area are covered under JFPM, usually 20-50 ha plantations only,
- f) Lack of information to the villagers about the MoU, lack of transparency in the management of VFC accounts and minutes, and frequent non-attendance of VFC meetings by KFD staff,
- g) Confusion on the ground about the nature of VFC rights over commercially valuable NTFPs and over plantations that preceded VFC formation.

Understanding *why* the process was so poor is, however, not an easy task. We have separated the analysis into two levels. At one level, one may assume that the KFD as a whole (and particularly the officials in charge of JFPM) is generally committed to the concept of JFPM as outlined earlier, and that shortcomings are due to mistakes made in operational, organizational, and design decisions. But these

³¹ Evidence for the existence of such implementational autonomy comes from various examples of initiative taken by enterprising KFD officials to implement JFPM in its true spirit in different locations. In the WGFP, KFD officials in Gersoppa Range of Honnavar division in Uttara Kannada district organised NTFP collectors from several villages into a special Range-level user group and gave them exclusive harvesting rights to Dalchini instead of auctioning these rights to private contractors or simply giving them to the VFCs (Shivannagowda and Gaonkar, 1998). In Kundapura division of erstwhile Dakshina Kannada district, a forest officer set up VFCs in a large number of villages without resorting to the use of any funds or seed money. He enabled VFCs to regulate headloaders coming from coastal towns into and also set up a mechanism to resolve the bureaucratic delays being experienced by villagers in meeting their domestic needs for timber (K N Murthy, ex-DCF, Kundapura, personal communication). Even in the maidan region, the case of Komaranahalli (one of the villages we covered in our rapid visits) is well known as an example of what the initiative of a committed Range Forest Officer can achieve. Several years prior to the initiation of JFPM in this region, this RFO motivated the local youth club members to begin protecting the forest within their village boundary against outside poachers, and to reap the benefits in terms of NTFP harvests. Without implying that these initiatives were perfect or successful on all fronts, one can infer that there is enough room within the structure of JFPM to facilitate moves towards more people-oriented and participatory forest management. More examples of innovativeness shown by KFD officials are given in Saxena *et al.* (1997, p.191).

mistakes are too many, too simple, and too glaring to be explained in this manner. Thus, one has to go to the next level of questioning this very assumption and asking whether the real problem lies in a fundamental difference between what we have defined as the goals of JFPM and the beliefs or views of the implementing agency, particularly its senior staff, which ultimately shape the implementation of the programme on the ground.

5.1.1 Operational, organisational and design problems

At the operational level, there are obvious shortcomings on three counts: groundwork, training, and NGO involvement. The quality of the groundwork where KFD itself set up the VFC was generally very poor. No promoters' committees were formed and very little effort seemed to have been devoted to awareness building. Typically, the whole process from informing the villagers about JFPM to electing an MC, for which the guidelines provide 45 days, is completed in a few days, sometimes even in one day! As a result, villagers in these villages have very little knowledge about the meaning of JFPM, the rights and responsibilities of the VFC, the rules for functioning of the VFC, etc. This has been substantiated by a JBIC-commissioned study in four randomly selected villages across the EPFEP region (Ogilvy Public Relations Worldwide, 2002).

The poor groundwork, along with the overall trend of perfunctory micro-planning and slipshod VFC operations, in turn suggest that the frontline staff were not well versed in the core concept of joint planning and had very little capacity to make the rather radical change in their role that the shift to JFPM entails, viz., from planting and policing to facilitating and regulating. Most of the frontline forest staff we encountered lacked an understanding of the notion of autonomous village bodies managing their forest and other common lands, the role of micro-planning, the notions of democratic and transparent functioning of the MC and the processes to be followed to ensure

it, etc. They saw nothing wrong in planting first and forming VFCs afterwards, in covering only small parts of the total common lands of the village, in MoUs not being available to the villagers, or in VFC Presidents being selected by a small group rather than democratically elected by the entire adult population of the village. Our observations regarding inadequate capacity of frontline staff are corroborated strongly in two different ways. At one of the regional consultations organised by NGOs, several persons who had been appointed by the KFD as "community organisers" spoke of their very limited understanding of JFPM and said that this was true of the 1000-odd such community organisers hired temporarily by KFD. The study commissioned by JBIC also made this point (Ogilvy Public Relations Worldwide, 2002).³²

Recognising that a proper implementation of JFPM involves radical attitudinal changes both in the KFD and in the local community, the JFPM GO, the Guidelines and even the EPFEP proposal itself stress the importance of involving NGOs in the process wherever possible. The KFD itself has repeatedly acknowledged that the involvement of NGOs in the Western Ghats region was quite beneficial to JFPM implementation. Independent assessments of NGO-initiated VFCs vis-à-vis KFD-initiated VFCs in the WGFP also show that the quality of JFPM process is better in the former (Bhat *et al.*, 2000; Saxena *et al.*, 1997; Mitra and Correa, 1997b). We also found that, in VFCs set up by local NGOs, the level of understanding of the villagers about the concept of JFPM, the specific rules in the GO, etc. was much better.

Unfortunately, in most of the maidan region, the KFD did not see it fit to use genuine, socially committed local NGOs for JFPM implementation. On the contrary, at least in Gulbarga division, they used NGOs from outside the region just to conduct PRAs, prepare micro-plans, and get MoUs signed (see 4.2.1). They played no role in the JFPM process subsequently! This was also reported in the

³² The official response to this criticism, including the Ogilvy report, has been to point out the large number of training programmes conducted, the large number of officials and VFC persons trained, the large amount spent on training, etc. One can question some of the details, such as the amount spent (Rs.1.5 crores by Aug-2001) as against the budgeted amount (Rs.9.4 crores) or the scheduling of training (most of which occurred in the period 1999-2001, rather than in the formative years of the project). But the real issue is that if one goes by the level of understanding regarding the concept and the process of JFPM prevailing in the frontline staff and VFC members, the quality of the training was clearly not adequate.

regional consultations in several other regions—persons with no expertise or track record in community organisation were forming NGOs and getting contracts for conducting PRAs, preparing micro-plans and getting MoUs signed. In other words, these NGOs were seen as contractors, not partners who would work with the villagers at least throughout the formative years of the VFC.

Similarly, there are obvious problems in the strategy for implementation. To begin with, the choice of villages could certainly have been better. Using existing secondary data, villages with a higher extent of common lands (in absolute and per capita terms),³³ with less irrigation and with a greater proportion of ST communities could easily have been chosen to increase the probability of high forest dependence and social homogeneity. But this did not happen. In the sample of 659 VFCs for which Census data could be matched, 92 villages (i.e., 9%) have no common lands at all, 307 villages (i.e., 30%) have total common lands of less than 50 ha, and another 151 (i.e., 14%) have between 50 and 100 ha. In relative terms, in addition to the 92 villages (9%) with 0 area, another 451 (44%) have less than 0.1 ha per capita. The choice of villages in terms of social composition was similarly haphazard.

Moreover, there was no systematic effort to implement JFPM in clusters. Clustering is essential to avoid the problem of one village protecting its forest at the cost of its neighbours and to resolve at the outset problems of overlapping rights to the same forest patches, as in Adavimallapura. The need for a clustered approach had been highlighted in the review of the WGFP; but this strategy was not systematically adopted here, although some efforts on these lines were reported in parts of Tumkur district.

Again, after the experience with WGFP, the KFD should have been wary of committing to the creation of 3000-plus VFCs. In the WGFP, the KFD had difficulty in meeting a much smaller target. Knowing that the maidan region is a

more difficult region to work with, and that the WGFP experiment itself was not an unqualified success by any means, the KFD should have set much more realistic targets.

Organisationally, there are many shortcomings. The delay in initiating the project activities (very little work was undertaken during 1997-1999) meant that there was enormous pressure in the latter half of the project period to meet project targets in terms of VFCs to be set up, resulting in processes being given the go-by. The KFD also failed to work out smooth internal procedures for ratifying MoUs and micro-plans. Thus, there were long delays, often up to a year, between the formation of the VFC and its registration with the DCF.

A more important organisational lacuna is the failure to integrate JFPM into its regular activities. If JFPM is really to be "the fundamental instrument by which sustainable management of resources and benefits are to be achieved" (Principal Chief Conservator of Forests, 1996, p.5), then it must be integrated into the day-to-day operations of the frontline forest staff, i.e., the operations of the Territorial Wing of the KFD.³⁴ This point had been made during the independent review of the WGFP (Saxena *et al.*, 1997, p.221). Nevertheless, the KFD implemented JFPM in the maidan primarily through its Social Forestry wing, which traditionally worked only on revenue lands. The implementation on Reserve Forest lands was left to the discretion of the territorial officers (primarily the DCFs for the particular Forest Divisions), for whom the main objective was plantation rather than JFPM per se. At least one senior KFD official admitted that this lack of integration of JFPM into the territorial wing seriously limited the implementation of JFPM, which always remained a side activity, rather than the fundamental instrument it was supposed to be.

Finally, the very act of taking a loan from a bank (JBIC) at 12% rate of interest in order to implement the EPFEP, even though it provided substantial funds, imposed very serious

³³ While some of the zeroes can be explained by the fact that occasionally, a VFC is assigned land that administratively lies in the neighbouring revenue village, this explanation cannot be valid for so many zeroes. It appears that many VFCs have been assigned tiny areas of tank bunds, foreshores and roadside plantations only, lands that are not included in the secondary data on common lands.

³⁴ Or, alternatively, the Social Forestry wing would have to be transformed into a JFPM wing *and given charge of all forest lands* in the zone where JFPM has to be implemented.

constraints on the JFPM process. To the extent that JFPM, if seriously implemented, involves a sea change in the attitudes of KFD staff as well as local communities towards the rights and responsibilities in managing common lands, this is a process of social change that is bound to take a long time and sustained effort. On the other hand, funding from JBIC was obtained by committing to the setting up of a very large number of VFCs (3000) and bringing a very large area under plantations (1,89,500 ha). As the Chief Conservator of Forests (Development) said, "If we follow the JFPM process so painstakingly, how will we meet the *physical* targets set for the project?" (emphasis ours). And if the loan has to be repaid by revenues generated by KFD, these plantations have to generate those revenues. As the Chief Conservator of Forests (Social Forestry) bluntly stated, when presented with our observation that too much emphasis was being given to commercially value softwood species, "What is wrong with planting commercial species? We have to repay a Rs.500-crore loan with interest at the rate of 12%! Where do we generate the revenue to do this?"³⁵ This amounts to admitting that they have taken a plantation-focused and revenue-oriented approach, and have blamed it on the loan taken.

5.1.2 Fundamental divergences in perspectives and attitudes

The above explanations only raise more questions than they answer. The KFD is known to be one of the most technically competent forest departments within the country.³⁶ This is supported by the evidence regarding the quality of the technical inputs to the JFPM (or more correctly to the EPFEP) process. The quality of seedlings and saplings supplied, the quality of work in preparing the land for planting, the protection provided, the suitability of silvicultural models to ecological characteristics of the sites, and so on have been reported to be fairly high. The department also had gained significant experience in JFPM implementation from the WGFP. The findings of the independent review of the WGFP are well known to the KFD, as also the large number of other studies on the JFPM experience in Karnataka and elsewhere. Yet

this technically competent, well-informed and JFPM-experienced department has taken a series of strategic decisions that fly in the face of all that has been learnt from past experiences and studies. For instance, it has been repeatedly pointed out that JFPM involves radical changes in attitudes amongst KFD staff and local communities, and that this process is bound to be a slow one that cannot be speeded up by throwing money at it or setting targets for the number of VFCs to be set up per year. And forest management that has maintaining the ecological balance and meeting local needs as its main objectives obviously cannot generate a stream of revenues for the state. Surely then, the KFD should have thought carefully before designing a target-oriented, loan-based project? Similarly, why did it take the decision to implement JFPM through both the territorial and SF wings, in spite of recommendations to the contrary having been clearly made in the independent review of the WGFP?

It seems, therefore, that there are some deeper issues involved here. The reason for JFPM having taken the course it has in the maidan region seems to be rooted in a *fundamental divergence* between the very purpose of JFPM as articulated in official policy documents, orders, guidelines, and project proposals (and therefore adopted by us in this assessment), and the actual perceptions of the vast majority of KFD officials at all levels. Official forest policy defines maintaining ecological balance and meeting local needs as the two highest priorities, and the policy pronouncements on JFPM describe it as the means through which these objectives are to be achieved (*instead of* the conventional approach of planting and protecting in a top-down manner). The approach of the KFD staff in practice diverges from this in various ways. Even those who accepted the need for a participatory process seem to see it simply as a means to achieve pre-determined goals. The approach is that very much that of the Social Forestry phase, viz., to create plantations first on the assumption that "we know what is good for

³⁵ Remarks made during our presentation of findings to senior KFD officials in May 2003.

³⁶ Based upon our discussions with various senior forest officials in the Centre and other states.

local communities and larger society”, and then to expect people to take over responsibility for protecting these plantations. Thus, concept of participation is diluted to the point where they do not see anything wrong in “plantation-first, VFC-afterwards”. Or, worse, the revised policy objective of managing forests to meet people’s needs has not been internalised. JFPM is simply seen as a tactic to ensure the survival and growth of plantations that meet the KFD’s revenue generation needs in areas where top-down policing is not working well.³⁷

Others do not see the need for even such limited notions of participation. A statement by the then DCF of Kolar division is very telling. He said that the KFD’s job was to plant trees on common lands so as to meet the enormous demand for fuelwood; this the KFD had successfully done. “Of course, people will cut down plantations in order to meet their fuelwood need, and KFD will have to keep replanting them”, he added. Similarly, when we presented our findings to senior KFD officials in May 2003, the CCF-Development said that the physical targets set in the EPFEP could not be achieved if one were to wait for VFC formation and micro-planning to be completed in each case! Clearly, neither of these officials actually believe that JFPM can be a “fundamental instrument of sustainable forest management”, as stated in the EPFEP proposal.

Another clear illustration of the lack of any long-term commitment on the KFD’s part to changing its overall approach was found in one of our case study villages (Benkanhalli in Shorapur taluka). Here, although the VFC had been formed in 1999, another plantation had been raised with funds from a different (Centrally-sponsored) scheme, and for which the RFO said VFC consultation was not necessary because it was not under the JBIC project! Similarly, the KFD justified the sub-contracting of the PRA work to an NGO on the basis that its (KFD’s) staff were too busy with other activities!

One of the seniormost KFD officials put KFD’s perception very succinctly:

Our fundamental goal is forest conservation. Our main job is to plant and protect the forest, and to catch and punish the offenders. If, after this, we have time to spare, we will take up JFPM.

This divergence between KFD perceptions and the essence of JFPM as laid down in state policy and orders is perhaps the deeper explanation for the overall pattern of poor implementation of the JFPM process. Nevertheless, in individual cases where implementation has taken a somewhat more serious form, we can explore the role of socio-ecological context and the manner in which JFPM is structured at the policy level in influencing the outcomes.

5.2 Interplay between implementation, context and policy

The case studies provide some interesting insights into the interplay between implementational, contextual, and policy-level factors in influencing the outcome of JFPM processes. They enable us to derive some recommendations for policy and implementation for the context presented by the maidan region.

First, if one starts with the village that was closest to the essence of participatory management, viz., Adavimallapura, it is not surprising that the VFC entered into conflicts with neighbouring villages. The existence of overlapping rights, both *de jure* and *de facto*, on RF and other common lands between neighbouring hamlets and villages, and even between settled communities and nomadic ones, have been long recognised as a potential source of conflict when setting up JFPM-type arrangements. The problem here is somewhat similar to the existence of prior *individual* rights in some forests and common lands in the Western Ghats region, which has been discussed in Annexure I. Unfortunately the JFPM policy in Karnataka does not pay any attention to these possibilities. It assumes that only residents of a particular village have rights on the lands within their own village boundary. The most it does is to suggest that VFCs could be formed at the hamlet-level if necessary

³⁷ Many villagers have noticed and commented upon this. As the President from Mysore District said (in the Regional Consultation): “KFD should stop treating VFCs as coolies and start treating them as partners in forest management”.

(recognising that a village as a unit might be too big to be practical). What is actually required is a careful (independent) process of recognition of existing rights and of re-settlement or re-assignment of rights in forest and common lands down to the hamlet scale, and including rights of nomadic communities.

Second, the implementational failure in Adavimallapura is that the KFD did not provide adequate support to the community in their protection efforts, did not take action against those removing cart-loads and tractor-loads of wood from the forest (or try to resolve the conflict properly if the outsiders did have legitimate rights). The policy failure here is that there is no robust mechanism by which a VFC can force the KFD, its supposed partner in joint management, to actually discharge its responsibilities. The powers of enforcement are all one-sided. Part of this has to do with the lack of statutory support for JFPM (see Annexure I). But even in a statutorily laid down arrangement, it would be important to have mechanisms that will ensure the KFD's compliance with its responsibilities (rather than depend entirely on the VFCs going to courts for dispute resolution).

The same policy defect also partly explains the process in Kanvihalli, viz., the VFC not actually getting control of all the RF land that the community uses, even when these lands fit the criterion of being degraded. There is no systematic, statutory procedure laid down for determining which lands can be assigned to the community and making sure that they do get assigned unambiguously and publicly within a reasonable time-frame. Too much discretion has been given to the KFD in this matter.

Third, the question of intra-village hierarchies has received very little attention from either policy-makers or the implementing agency (or, for that matter, analysts and activists). The experience in Thondala and Kakkuppi and even Kanvihalli shows that socio-economic hierarchies, coupled with strong differences in nature of forest dependence, have a strong influence on the process and outcome of JFPM. Broadly speaking, in the maidan region, the village elite are not dependent on common lands for income, and not much for self-consumption either. Therefore, at the outset, they would have little interest in regenerating

the commons. However, they also do not wish to lose control over the processes of development or implementation of government programmes in the village. And if the programmes offer some opportunities for gain—either hard economic gain or indirect political gain, they will exploit those opportunities. If JFPM is a programme that generates gains for them without their really putting in any hard physical labour, they would of course participate in such a programme, and use their status in the village to influence the directions the programme takes in ways that benefit them. So, for instance, if JFPM offers a choice between managing common lands to meet grazing needs versus managing them to generate cash returns from softwood plantations, the elite would certainly prefer the latter. Similarly, if the JFPM policy is vague about how to generate and distribute returns from NTFP sale, the elite will insist that the returns go to the VFC as a whole rather than specifically to the NTFP collectors, who are almost invariably the poorer households.

Clearly, the implementing agency has not confronted the question of intra-village hierarchy. Rather, it has gone along with this hierarchy, ostensibly because “we do not want to play politics within the village” but also because the preferences of the elite converge with the preferences of the KFD—whether it is planting of trees or of extracting royalties from NTFP collectors. This is not surprising. Given the weak commitment that the KFD has to the concept of villager participation and also given the social and educational background of the KFD staff, it is only to be expected that the KFD does not want to get involved in complex questions of what the notion of “the local community” means. Or to recognise that, by default, it *is* “playing politics” anyway!

The problem again is better located as being at the policy level. In the current framework of JFPM in Karnataka and in most other states as well, the mechanism for providing a voice to the marginalised is limited to stipulating the composition of the MC. The framework does not directly address the question of who forest management is for. Is it for those who are dependent on the forest and are willing to put in efforts to regenerate them, or for everybody in the village? It makes a simple assumption that all villagers are equally forest-dependent, which is known not to be the case. As a result,

even though JFPM is branded as a “user-group approach”, the VFC general body is open to virtually everybody regardless of their relationship with the forest. We have argued elsewhere (Lélé, 1999; 2002) that, since VFCs generate economic returns, this arrangement ends up mixing an economic function with a regulatory function, which is a very risky arrangement in a heterogeneous community. Solutions to this problem could be various, depending upon the context. But there has to be some rule whereby the VFC cannot make any profit, it can only ensure that the economic returns flow back to those who put in efforts in protection and harvest, in some proportionate manner. This approach underpins the concept of co-operative societies, and has been operationalised in the context of tribal forest co-operatives (called LAMPS in Karnataka). Forest cooperatives are not supposed to share profit equally amongst all members, they are supposed to ensure highest possible returns to the efforts of the collectors.

An associated policy-level problem is that there is no clear decision regarding the revenue to be generated for the state from JFPM areas. As mentioned earlier, if the objective of forest management now is maintaining ecological balance and meeting local needs, there is no room here for revenue generation. Therefore, the entire concept of the KFD sharing in the profits, whether from plantations or in royalties from NTFPs, should be called into question. This is not to say that the KFD’s costs in planting or protection must not be recovered, at least partly, from the community that benefits economically from these efforts. But the mechanisms and rates for this must be very different. Again, the LAMPS case proves that this is in fact politically and administratively quite feasible. The Government of Karnataka recently effectively

abolished the concept of royalty to be paid by the LAMPS to the KFD for getting NTFP extraction rights, by stipulating that the royalty would be a flat Rs.100 per LAMPS per year (for LAMPS that typically cover an entire taluka).³⁸ Some KFD officers have called for a similar approach to NTFP policy under JFPM (Shivannagowda and Gaonkar, 1998). Of course, such a policy revision would also require that government revisit the policy regarding funding JFPM-type programmes through massive loans.

Finally, the villages covered in the case studies, although not exactly success stories, do seem to indicate some correlation between having a large forest area, low irrigation, and an ST community on the one hand and being interested in JFPM on the other. Although the sample is way too small for us to draw the conclusion that only such villages would be interested in JFPM, our other case study (Annexure II) does corroborate that dependence on common lands declines when rainfed agriculture is replaced by irrigated agriculture in a major way. This suggests that both at the policy level and in implementation, there is a need to address the question of “what does one do if villagers are not interested in JFPM because they are not dependent on common lands?” Part of the answer may lie in the fact that, even in such villages, the marginal communities continue to depend on the commons. If JFPM can be restructured so as to limit its scope to only such communities (rather than the entire village population), it could even become a second land reform whereby resource-poor households get compensatory rights on public land resources. Part of the answer may also lie in making JFPM a statutorily available but still *voluntary* approach, to be taken up only if the community shows enough interest, on the lines of the Van Panchayats of Uttaranchal.³⁹



³⁸ This is not at all to suggest that LAMPS are perfectly designed institutions. Far from it (see Lélé and Rao, 1996). Among other defects, LAMPS suffer from the reverse problem—they do not have any clear responsibilities nor powers to carry out forest management in any way.

³⁹ Although it is supposed to be voluntary even today, adoption of a target-oriented approach by KFD has made it not really so in practice, as we have shown above.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

In summary, the quality of JFPM in the northern and southern maidan regions of Karnataka leaves much to be desired, and is a far cry from the stated goal of making "JFPM the fundamental instrument through which sustainable forest management is to be achieved". In a large number of villages, the process has been undermined at the outset by the taking up of silvicultural activities without going through any participatory planning. Even otherwise, there are a large number of VFCs that do not function at all or function only perfunctorily. The jointness and content of the planning is rather poor and the nature of "jointness" in protection varies from antagonistic or meaningless to a passive acceptance by communities of KFD-subsidised protection of KFD-subsidised plantations. Where the VFCs function at all, they rarely do so democratically and transparently, and are not much more than an extension of the KFD.

Examples of "successful JFPM" are really examples of KFD success in co-opting the village elite to ensure the smooth planting and protection of KFD-designed plantation activities (or the protection of already planted ones), generally covering only a fraction of the total common land used by villagers. Often, this has come at the expense of the subsistence and livelihood needs of the poorer sections. On the other hand, where villagers have mobilised to protect their forests, the KFD support is weak if not hostile. The essence of JFPM, viz., a situation where communities are in a genuine partnership with the KFD in managing and protecting their entire resource use area, is entirely absent. The real challenges in operationalising this concept, such as how to ensure the proper articulation of the needs of diverse groups within the village, how to ensure that these needs are reconciled in a fair manner through a democratic process, and how to engage villagers in forest management when their dependence on these resources might

be low and/or declining, remain to be addressed.

Ten years ago, the World Bank's own evaluation of the Social Forestry project it had funded in Karnataka concluded that:

The [Social Forestry] project achieved its physical targets.... The project, however, did not alleviate fuelwood shortages; the poverty groups which provided an important part of the rationale for the project, were addressed only marginally, effective community participation in project implementation was not attained; and institutional development of the implementing agency to improve its capacity to work collaboratively with villagers, failed to occur....Project sustainability is rated as unlikely on social and institutional grounds.

It is indeed tragic that, in spite of spending Rs.80 crores on the WGFP and Rs.586 crores on the EPFEP and the notional formation of 3000-plus VFCs, "effective community participation" continues to be a mirage. Worse still, participation is being redefined in ways that narrow and distort the spirit of JFPM. Indeed, JFPM in Karnataka seems to be a case of one step forward and two steps back.

We must reiterate that our findings depend critically upon the manner in which we have defined the notion of JFPM quality. Given the fact that JFPM is essentially a new way for communities and the KFD to take decisions about how to manage forests and common lands used by the communities, we have given primacy to the *process*, i.e., the manner in which activities have been conducted. We only examine the outcomes where the processes have crossed some minimal threshold. Not surprisingly, our findings differ from those of other evaluations of the EPFEP or of JFPM, which tend to focus on outcomes such as "how many hectares were planted",

“what is the survival rate of seedlings”,⁴⁰ “how much revenue or employment was generated”, “what is the level of biodiversity”, or “how much money was transferred to the VFC” (e.g., Anonymous, 2002; Sudha *et al.*, 2003).

Many officials and even some academics have argued that in focusing on the quality of participation and “jointness” we may be applying too stringent a criterion, that the goal of JFPM is not the empowerment of local communities per se but ultimately of afforestation. We must point out that even if afforestation (and not even meeting local needs) is the ultimate goal, *in those areas where JFPM is implemented*, “joint management” (defined in fairly clear terms) is the officially stated and adopted means to achieving this goal. The quality of JFPM can therefore only be assessed in terms of how participatory or joint the planning and management of forests has become in these areas. To focus on the outcome variables without carefully looking at how the outcomes came about is to miss the whole point of JFPM.⁴¹

The main reason for the overall poor quality of JFPM functioning is clearly the manner of its implementation by the KFD. The large number of lacunae in design and implementation and the responses of many senior officials to our findings force us to conclude that the problem is rather deep-rooted. It seems that, contrary to postures adopted in the EPFEP proposal and JFPM guidelines, the majority of senior KFD officials do not believe in the primacy of JFPM as the process by which to manage those forest lands that are used by rural communities. And the state government seems to be happy to go along with the notion of JFPM as yet another programme, to be implemented only when large foreign funds are available and in a way that will ensure some revenue generation to repay the loans.

At the same time, our study, particularly the analysis of relatively active VFCs, has identified some lacunae in the structuring of JFPM as well and pointed to the policy-level changes that are required. These are:

- a) There must be clear, statutory provisions for ensuring that all lands used by the village or the hamlet are brought under the management of the VFC. The identification of these must be done through a process that is independent of the KFD, that is transparent to all stakeholders, and that identifies and resolves or resettles pre-existing and overlapping *de jure* and *de facto* rights.
- b) The planning for management of these lands must be independent of the KFD. The KFD’s role must be limited to setting and publicising the limits for harvesting and planting practices and the sustainable use norms for different ways of managing the forest and common lands.
- c) There must be clear, statutory provisions for ensuring that the partnership is enforceable both ways. Villagers must be able to demand JFPM as a right if they demonstrate a willingness to manage their forests, and VFCs must be able to force the KFD to meet its commitments towards joint protection, sharing of returns, etc. Bringing JFPM either under the Panchayati Raj Act or the Forest Act will be a necessary condition, but the rules passed under these acts must provide these rights clearly to VFCs.
- d) Reserving a certain fraction of the MC for various marginal groups is not enough to address the problem of varying dependence on common lands and the generally higher socio-economic status of those that are non-dependent. The policy of keeping VFC membership virtually open

⁴⁰ We understand that the Karnataka Forest Department has commissioned a consultancy outfit (STEM, Bangalore) to carry out an evaluation, but we could not get a copy from either KFD or the consultants. The Terms of Reference of this evaluation, however, indicated that they were quite restrictive, focusing more on plantation success than on JFPM itself.

⁴¹ It is in fact quite possible to achieve “good outcomes” in biophysical terms without any local participation, at least temporarily. Indeed, given the level of investments in the EPFEP (including the JFPM part of it), it is hardly surprising that thousands of hectares have been planted. And given that these plantations are protected for the first three years by a watchman paid by the KFD (regardless of whether they are under a VFC or not), it is hardly surprising that the survival rates at the end of 3-4 years are quite high. But JFPM is premised on the argument that these outcomes will not be socially appropriate or sustainable unless they have been achieved through a participatory process. The Social Forestry project demonstrated exactly that.

to all villagers needs to be changed, so that the economic benefits from JFPM activities flow only to those who are traditionally directly dependent upon forests and common lands and are today willing to put their own physical labour into planting, protection, regeneration and harvesting of forest produce.

- e) Not all village communities may be dependent upon and interested in regenerating their common lands. Hence, while giving all communities the option to join the JFPM arrangement, there must be a clear assessment, at the policy level, of the areas that are conducive for such arrangements and a time-bound process to shift to JFPM in such areas. Creating VFCs at the hamlet-level by default will also enable interested communities within villages to take up JFPM.
- f) The policy-makers must clearly recognise that JFPM lands cannot be sources of revenue to the state, and hence must be willing to let go of all shares in forest produces generated from these lands. At the same time, the subsidies to be given in the form of (say) free seedlings and planting support must be limited and targetted. Concomitantly, the practice of taking large loans for JFPM-based activities must be discontinued.⁴²
- g) Funding agencies must recognise that JFPM is a process of social and institutional

change which in itself does not require large funds, and setting numerical targets and physical plantation targets for such a process is counter-productive and inappropriate. They must wait for the institutional change to occur on the ground before offering funds for regenerating of heavily degraded areas to the appropriate *local* institutions.

Bringing about such changes is of course not an easy task. It would require the political system and the bureaucracy to take the concept of participatory management seriously and in fact to redefine it as decentralised resource governance, something that seems a far cry in the current scenario. It can happen only if those with the greatest stake in the sustainable and fair management of forest and other common lands, viz., the marginal communities, the activists working with them and the intellectuals supporting them, avoid getting co-opted into "participating" in poorly designed and implemented projects and come together to carry out to press for such redefinition at the level of policy and implementation. Until that happens, JFPM will remain a buzzword to be adopted when writing proposals to get external loans for meeting state revenue deficits, and might even generate socially perverse and environmentally marginal outcomes in many areas.



⁴² After all, the original idea of JFPM was that people's involvement would reduce the burden of protection on the Forest Department.

ANNEXURE I

PRE-EXISTING LACUNAE IN JFPM POLICY IN KARNATAKA

The choices made regarding the structuring of JFPM in Karnataka are embedded in the 1993 JFPM G.O., as modified by the 1996 G.O. (Government of Karnataka, 1993; 1996).⁴³ These orders have been debated on many occasions and subjected to several analyses (Lélé, 1995; Saxena *et al.*, 1997, pp.192,203-220; KFD *et al.*, 1999; Lélé, 2001b; Martin and Lemon, 2001). The key lacunae in the structure of JFPM in Karnataka that had been pointed out prior to our study may be summarised as follows.

1. **Canopy cover restriction:** JFPM is permitted to be taken up only in “degraded” forests, i.e., lands controlled by the KFD with tree canopy cover less than 25%. Lands with denser canopy, even if used by villagers, cannot be brought under JFPM, which means that not-fully-degraded lands continue to be treated as open access and therefore will continue to degrade. It also means that the more productive forest lands cannot be utilised by the village community as a part of JFPM, even for NTFP collection. The only concession made is in the context of tribal areas, where all forest land, regardless of canopy cover, can be brought under JFPM. However, neither has the precise definition of tribal areas been mentioned, nor have tribal communities been keen on joining JFPM, for reasons given below.
2. **Inadequate incentives:** The incentives for participation are inadequate, because short-term needs are not met, and even existing benefits might shrink in tribal areas. The major incentive offered by JFPM is the 50:50 sharing in the net profits of final harvest of forest produce. If the final harvest is timber, it would come at the end of 15-20 years. This is usually an inadequate

incentive for households that might be facing immediate shortages of fuelwood and fodder and income opportunities. NTFPs could yield immediate benefits, but NTFPs are not available in large quantities in degraded forests and dense forests are excluded from JFPM! Moreover, in tribal areas where this restriction does not exist, the 50:50 sharing arrangement would actually lead to a *reduction* in the benefits flowing to tribal communities, because the existing rights conferred on tribal communities through their co-operative societies (called LAMPS) ensure a much greater share.⁴⁴ More generally, there is no rule that ensures that the benefits from NTFP collection in a VFC-managed forest flow entirely to the NTFP-collecting community *within* the village because the auctions of rights to NTFP collection are open to outsiders.

3. **Lack of clarity regarding older plantations:** There is also considerable confusion about using another incentive: the shares in the harvest from existing plantations. In many villages, plantations (mostly of eucalyptus or acacia) were raised under the earlier Social Forestry programme or some central government scheme (such as National Rural Employment Programme). Many of these plantations are ready for felling, and could therefore be a source of immediate returns to the VFC. But strictly speaking, the Social Forestry plantations are supposed to have been handed over by the KFD to the respective Gram Panchayats. It is therefore not clear whether the newly constituted VFCs can get any share in them. The GOs have not clarified this point.

⁴³ A new JFPM GO was issued in June 2002, i.e., after the completion of the EPFEP project. Hence, we do not consider it to have had any influence on the implementation of JFPM during the project period, which is the focus of our study.

⁴⁴ LAMPS societies obtain revenues from harvest of NTFPs for which they used to be charged a lease amount by the KFD that worked out to between 5% and 60% of their revenues from NTFP sale. Recently, this royalty amount has been reduced to a completely nominal amount of Rs.100 per LAMPS per year.

4. **Ignoring pre-existing rights in forested lands:** In stating that forest lands of a certain canopy cover or other common lands are to be given for JFPM, the GOs assume that all forest and other common lands are free of any pre-existing rights other than those of the state. It fails to recognise the existence of a large variety of existing systems of forest rights that often conflict with the new system of village-level control proposed under JFPM. For instance, in Uttara Kannada district, a system of individual usufructs rights, called *soppinabetta* privileges has been officially in place since the 1890s and continues to be recognised by the Karnataka Forest Act. Specific areas have been demarcated in many villages for the exercise of these rights by *certain* households in those villages. Being individual exclusive privileges, and being quite liberal in many places, the households are not at all keen on giving them up in favour of some form of community management. The JFPM GOs are silent on whether *soppinabetta* lands (which fall under the category of Protected Forests) can be assigned to the VFC. In practice, this has never been possible. Consequently, when VFCs have been formed in such villages, the holders of *soppinabetta* privileges get double benefits: they retain these privileges and also get a share in the benefits that the VFC gets from other forest lands. But the management of the *soppinabetta* lands does not come under any community regulation whatsoever. Alternatively, if a village has no land free of such privileges, JFPM cannot be taken up in that village, even if there exist some households in the village that do not enjoy these privileges. More generally, all across the Western Ghats region, there exist many such systems of rights on forest or other common lands (Srinidhi and Lélé, 2001) that would come in the way of JFPM, unless explicitly addressed, dissolved, or somehow subsumed under JFPM.
5. **Lack of autonomy for VFC:** The village-level institution, i.e., the VFC, does not have adequate autonomy. The local forester is the ex-officio secretary of the Managing Committee of the VFC, and so its day-to-day functioning and formulation of even operational rules become subject to the cooperation and approval of this official and almost completely under the control of the KFD. This can create a disincentive for the community to participate, because they may not feel confident that their concerns and perspectives will be expressed in the functioning of the VFC. It also creates a practical problem, since one forester may have many villages within his/her jurisdiction, and therefore may not be able to actually devote adequate time for each VFC (Saxena *et al.*, 1997, p.212).
6. **No accountability for the KFD:** While the KFD has enormous discretionary powers to terminate the MoU and de-recognise VFCs that do not discharge their responsibilities properly, there is no reverse accountability mechanism. It is not mandatory for the KFD to respond to requests for VFC formation within a fixed timeframe, nor do VFCs have any way of ensuring that the KFD discharges its responsibilities as per the GOs or the specific MoU. More generally, one could argue that in any partnership arrangement, one partner cannot have unilateral powers over the other—some powers must be reciprocal and some powers must be delegated to some third party to act as mediator or referee. This has clearly not been done.
7. **Insecurity of tenure and lack of statutory support in general:** The MoU signed between the VFC and KFD has a limited duration of five years, creating a disincentive for villagers to invest efforts in forest regeneration that will typically bear fruits much later. The VFC itself has a very precarious legal existence, since it has not been constituted or registered under any Act. The lack of statutory support for JFPM also means that there is no independent mechanism for conflict-resolution. VFCs cannot take KFD to court for non- or faulty implementation of JFPM or for violating the MoU, because the MoU has no legal standing and JFPM itself is set up under a GO (not an Act) and hence is not justiciable.⁴⁵

To what extent might these lacunae in JFPM policy play a role in influencing the quality of JFPM in the maidan region? Some of the lacunae do not matter in the maidan region because of the socio-ecological characteristics of the region. The canopy cover restriction and the problem of pre-existing tenure regimes are in this category. With regard to canopy cover, most forests of the maidan region fall in the scrub thorn type, which are not very dense even in their natural state. Furthermore, the condition of most of the forest lands in this region is one of high level of degradation: our case study village of Kanvihalli being a good example. Thus, most of the forest land would be eligible to be brought under JFPM, and in fact the handing over of reasonably well-forested lands such as in Adavimallapura and Komaranahalli indicates the 25% canopy cover restriction has not hampered JFPM.

With regard to the problem of pre-existing tenure regimes in forest and common lands, our exploration of such regimes in the maidan cannot be said to be an exhaustive one. However, we found no evidence of individual (household-level) usufruct rights on the lines of the *soppinabetta* privileges of the Western Ghats. It is possible that some forest lands in Gulbarga and other parts of the Hyderabad-Karnataka region were originally owned or controlled by local princes. For instance, the Raja of Shorapur claimed to have, even today, rights over about 2000 acres of forest land. So, this aspect merits further enquiry. But to the best of our knowledge, these situations prevail in small pockets only. On the other hand, we found a history of *community* management of forests, such as the Panchayat Forests of Kanvihalli and other villages that were part of the erstwhile Madras Province, and more informal arrangements of *adavi-*

kavalgars at the village-level in Shorapur taluka. Such a history should facilitate JFPM at least in those areas.

Most other lacunae in the JFPM GOs are one-sided, i.e., they would adversely affect communities attempting to set up JFPM if the KFD was *not* supportive of JFPM, but would not constrain the KFD if it seriously wished to initiate and support JFPM. The inadequacy of incentives, of autonomy to the VFC, and of accountability of the KFD are all in this category. If the KFD so wishes, it can discontinue the auction of NTFP harvesting rights in those forests that have been handed over to a VFC and permit the VFC to extract and sell the entire produce for a nominal royalty. Similarly, the assigning of existing social forestry plantations does not seem to have been limited by the lack of clarity in the GO. And allowing the VFCs autonomy in practice (i.e., training KFD foresters so that they play a facilitating rather than dictatorial role in MC meetings) and being responsive to all demands for setting up VFCs or to requests from VFCs for support is obviously completely within the KFD's capacity. So is the setting up of meaningful conflict-resolution mechanisms, such as district-level committees consisting of VFC representatives, FD representatives, and outsiders.

In short, it appears that even though there are serious lacunae in the structure of JFPM, these lacunae are either irrelevant in the maidan region or that the implementing agency, being the Forest Department itself, had enough operational flexibility to overcome them in practice. One is therefore forced to conclude that these lacunae cannot be mainly responsible for any shortcomings in JFPM quality that one may come across.



⁴⁵ Although the Government of Karnataka has amended the Karnataka Forest Act to make space for JFPM (Government of Karnataka, 1997), the Rules under this amended chapter have not been promulgated till date. JFPM continues to operate on the basis of Government Orders. But GOs do not have the sanctity of legislative Acts and Rules, and hence are not justiciable in the courts.

ANNEXURE II

EFFECT OF CANAL IRRIGATION ON DEPENDENCE ON COMMON LANDS

Background

The core assumption of JFPM-type initiatives is that rural communities are heavily dependent upon common lands¹ for key livelihood needs of fuelwood, fodder, and so on; hence the degradation of these lands is of great concern to them, and so, given a chance, they would willingly cooperate amongst themselves to manage and regenerate these lands (see, e.g., Agarwal and Narain, 1989). But if the rural community is *not* dependent upon common lands in this manner, this would seriously reduce the incentive for them to get involved in any management of these lands in general and JFPM in particular. A reduction in dependence on common lands could come about in a couple of different ways. In the Western Ghats, it has been shown that where coffee or tea plantations have become important land-uses, the traditional link between forests, agriculture and livelihoods is lost.² In the drier regions, the advent of canal irrigation or the deployment of irrigation pumpsets has dramatically changed the agrarian economy in many pockets. This, we hypothesized, could

- a) reduce the importance of common lands as sources of fuelwood and fodder, because an increase in the number of crops and area cultivated could result in a substantial increase in the availability of crop residues, and
- b) increase the availability of wage employment within the village, increasing the opportunity cost of labour and reducing the need for the landless to go to the forest or common lands for earning a livelihood.

We tested these hypotheses by choosing two VFCs in the northern maidan region, both having significant area of common lands (more than 90 ha) but one with canal irrigation and one without.

Selection of villages

Hoping to understand the effect of changing common land dependence on JFPM, we looked only at villages with VFCs. This made the population we could choose from very small. Of the 1722 VFCs in the KFD dataset, only 1036 could be matched with the Census 1991 village list. Of these, only 233 belonged to the northern maidan region. Of these, the number of villages that have irrigated area amounting to more than 50% of the total cropped area were only eight, of which only five had more than 90ha of total common land, and even amongst these, most were very large (more than 2000 population). We ended up choosing Kanvihalli in Harappanahalli taluka (unirrigated) and Benkanahalli in Shorapur taluka (irrigated). Note, however, that the presence of canal irrigation and the presence of common lands are significantly (negatively) correlated, because topography dictates that canals can only irrigate villages in the lower parts of valleys, whereas forests and common lands occur much more in villages in the upper reaches. As a result, our two case study villages are not quite comparable on other counts of social composition, extent of common land per capita, and original (pre-canal irrigation) cropping pattern. The key characteristics of the case study villages are summarised in Table A.2.1.

¹ Throughout, we use the term “common lands” to include both forest lands and other types of common or public lands.

² Whereas traditional agricultural or horticultural systems (i.e., paddy or areca cultivation) occupy the valley lands only and depend upon forests for substantial inputs of organic matter and nutrients in order to maintain productivity under heavy rainfall conditions, coffee and tea plantations directly compete with forests for the same ecological niche, i.e., the hill slopes and ridges, and use chemical fertilizers extensively to maintain fertility. The shade trees in the plantations also yield substantial amounts of fuelwood. Thus, farmers cultivating coffee and tea are no longer dependent upon the commons for any of their domestic or agricultural inputs; instead, they prefer to convert the commons to such plantations (Lélé, 2001a).

Table A.2.1. Basic characteristics of the villages studied for common land dependence

Feature	Details	Kanvihalli	Benkanahalli
Rainfall		~300-500 mm	~550-600 mm
Population 1991	SC	256	208
	ST	0	0
	Others	1592 (Valmiki, Kuraba, Lingayat)	571 (Valmiki, Kuraba, Lingayat)
Households (year)	Total	1848	779
		273 (1991), 330 (2001)	144 (1991), 187 (2001)
Total Geographical Area (ha)		1716	548
Common Land (TCL)	Forest land	781	51
	Other	0	42
	Total	781	93
TCL per capita		0.36	0.12
Forest type		Scrub thorn	Scrub thorn
Forest type	Main species	<i>Diospyros melanoxylon</i> , <i>Acacia catechu</i> , <i>Soymida febrifuga</i> , <i>Eucalyptus globulus</i> , <i>Dolichandrone crispera</i> , <i>Hardwickia binata</i> , <i>Pongamia pinnata</i> , <i>Chrysopogon fulvus</i>	<i>Prosopis juliflora</i> , <i>Albizia amara</i> , <i>Carissa carandas</i> , <i>Dodonia viscosa</i> , <i>Chloroxylon switenia</i> , <i>Randia uliginosa</i> , <i>Cassia auriculata</i> , <i>Santalum album</i>
Density		182 trees/ha	62 trees/ha
Regeneration potential		High: lots of coppice stumps present	Low: many patches devoid of any vegetation
Agricultural land (1991: ha)	Irrigated	10	346
	Unirrigated	826	92
	Main crops	Hybrid sorghum, Maize, Groundnut, Tobacco, Tur, Horse gram,	Paddy, Groundnut, Jowar, Bajra and Cotton
Livestock	Large ruminants	600	459
	Small ruminants	1400	220
	TCL per animal unit	0.88	0.18

Note that each village is by no means a homogeneous entity. Apart from having a range of caste groups, there are significant differences

in landholding and wealth. An indication of vertical economic difference can be obtained from the distribution of agricultural land

holdings in the case study villages given in Table A.2.2. Twenty percent of the households in each village are landless and around 50% hold very small areas of agricultural land.

Although landholding size does not exactly correlate with wealth, nevertheless it is clear that both the villages have a high degree of internal inequality in economic conditions.

Table A.2.2. Differences in land holdings within the case study villages

Land holdings	No. of households	
	Kanvihalli	Benakanahalli
Large farmers [>10 ac]	15 (5%)	7 (3.5%)
Medium farmers [5-10 ac]	42 (13%)	15 (8%)
Small farmers [2-5 ac]	57 (17%)	31 (16.5%)
Marginal farmers [1-2 ac]	150 (45%)	93 (50%)
Landless households	66 (20%)	41 (22%)
Total	330 (100%)	187 (100%)

Note: The landholdings have not been adjusted for the difference in economic productivity of irrigated versus dry lands. Figures in brackets represent percentage of total households in the village that belong to a particular class.

Method of data collection

In each of these villages, we collected available secondary data from the Village Accountant, and historical information from the Taluka-level archives. We then conducted social mapping, focus group discussions, key informant interviews, and also questionnaire surveys for about 30 households stratified by landholding. We also sampled the vegetation in the common lands. Through these methods, we attempted to assess the effect of change in the agricultural situation on the importance of common lands in the village economy. (We also collected data on functioning of JFPM that

have been used in the main section on assessing JFPM quality).

Fuel, fodder and grazing

The key differences in the use of common lands for fuel and grazing are summarised in Tables A.2.3 and A.2.4

The differences between the two villages are very stark. While most sample households in the unirrigated village (Kanvihalli) have some dependence upon the commons for gathering fuelwood, almost all sample households in the other village get biomass fuel from other sources. The same is essentially true about grazing, although the difference is slightly less

Table A.2.3. Variation in use of forest and other common lands for fuelwood

Village	Does household gather fuelwood from forest or other common lands?		
	Yes	No	Total
Kanvihalli	32 (82%)	7 (18%)	39 (100%)
Benkanahalli	3 (12%)	24 (88%)	27 (100%)

Note: "Other common lands" includes gomaals and other revenue lands, but not roadsides, canal banks, or stream banks.

Table A.2.4. Variation in the use of forest/common lands for grazing

Village	Does household graze its livestock in the forest or other common lands?		
	Yes	No	Total
Kanvihalli	16 (41%)	23 (59%)	39 (100%)
Benkanahalli	6 (22%)	21 (78%)	27 (100%)

Note: "Other common lands" includes gomaals and other revenue lands, but not roadsides, canal banks and stream banks.

stark: most households in the irrigated village do not depend upon the commons for grazing, whereas a very significant fraction of households (~40%) in the unirrigated village do. Since the common lands in both villages are in degraded condition, the difference cannot be attributed to the condition of these lands.

We found that irrigation had indeed significantly increased the availability of fuel and fodder in Benkanahalli and reduced the dependence on the forest and gomaal lands, but in complex ways. Our hypothesis was that irrigation would directly increase the availability of fuel through increases in agricultural waste availability. However, we found that the changes in cropping patterns introduced by irrigation are very location-specific and complex. Thus, in

Benkanahalli, the area under cotton cultivation decreased drastically, and therefore the availability of cotton stalks, which serve as a good fuel, declined. So in fact, agricultural waste contributes a lower fraction of total collected fuel by the sample households in Benkanahalli as compared to the sample households in Kanvihalli, although for the richest households in Benkanahalli this contribution is still quite high (see Table A.2.5). The bulk of the collected fuel in Benkanahalli comes neither from agricultural waste nor from the forest or gomaal lands, but from canal banks, road sides, and a tank bed.

A much larger fraction (45%-80% depending upon the class, 81% when all sample households are put together) of the fuel used

Table A.2.5. Source-wise distribution of fuel collection by households in different economic classes

Village	Fuelwood source	Economic class				
		1	2	3	4	Total for sample hhs
Benkanahalli	Forest + Gomaal	0	2	0	0	2 (1%)
	Roadside+canal banks+stream banks	18	55	41	40	154 (81%)
	Agricultural land	22	8	4	0	35 (18%)
	Total headloads					191 (100%)
Kanvihalli	Forest + Gomaal	28	30	26	48	131 (66%)
	Roadside+canal banks+stream banks	0	0	0	0	0 (0%)
	Agricultural land	40	13	13	2	68 (34%)
	Total headloads					199 (100%)

Note: Units are standardised headloads per year per household. Class 1 represents the largest landholders and 4 the poorest (landless).

in Benkanahalli, however, comes from *Prosopis juliflora* bushes (locally known as *Bellary jali*) that grow along canal banks, stream banks and roadsides. *Prosopis* is an exotic, and its spread across the country is primarily a result of its physiological characteristics (high rate of growth, regrowth from coppice, thorny nature preventing browsing, etc.) that make it an excellent invasive species. Canal irrigation results in increases in soil moisture levels along canal banks, which is essential for the growth of *prosopis*. Thus, irrigation does have an indirect role to play in increasing the availability of fuel. This can also be inferred from the fact that people from the neighbouring village of Siddapur, which does not have canal irrigation, come to Benkanahalli to cut *prosopis*. This is in complete contrast to Kanvihalli, where the major portion of fuel comes in the form of fuelwood from the forest lands.

In the case of grazing, the role of irrigation is direct. Initially, irrigation had a mixed effect, because although the availability of agricultural wastes went up, the agricultural lands were kept under cultivation for a greater fraction of the year, thereby reducing the availability of these lands for browsing of stubble by cattle. Later, however, farmers shifted from irrigated dry crops to paddy. The area under paddy cultivation has increased from 0 in 1980 to 397 acres in 2001, which has resulted in a very substantial increase in the availability of paddy straw as fodder. The creation of forest plantations on part of the forest lands by the KFD has reduced the area available for grazing.

The case of NTFP collection for income is more complex and the evidence ambiguous. It is true that the total number of families engaged in NTFP collection is higher in Kanivehalli (20) than in Benkanahalli (10-15), and that even these families in Benkanahalli are really involved in illicit felling and sale of sandalwood (which occurs in significant quantities along the stream bank, not in the forest area and cannot be really called an NTFP). But at least some of the differences in NTFP collection levels are due to basic differences in the types of plant species occurring in the two villages (see Table A.1). This is reflected in the fact that even historically, the level of NTFP collection in Benkanahalli has been low (as per our discussions with villagers)

whereas that in Kanvihalli was much higher. The influence of irrigation-led agricultural change thus appears to be minimal in the case of NTFP collection.

Differences and Changes in employment patterns

We had hypothesized that, with the advent of irrigation, one would see an increase in the agricultural labour opportunities (as the cropping intensity would increase) and a decline in the level of unemployment faced by landless labourers. A comparison of the agricultural wage labour employment across the two villages and across classes within each village, however, does not reveal such a pattern (see Table A.2.6). Indeed, the landless labour class in Benkanahalli (the irrigated village) have less employment available to them as compared to those in Kanvihalli.

Our discussions with the villagers indicated that while over time, as Benkanahalli got irrigation, there was an increase in wage labour opportunities, there has been a recent decline due to the uncertain nature of canal water and declining productivity of these lands. The reason why the trend across the two villages is not as expected seems to be related to two confounding factors which make the villages not actually similar. The inequality in landholding is much higher in Kanvihalli, with one landlord alone controlling more than 100 acres of cultivated land. This creates significant potential for wage labour work for the landless households.

Larger effects of irrigation-led agrarian change

The advent of canal irrigation has brought about many more changes than just increases in agricultural waste or the density of *Prosopis*. Benkanahalli villagers are now greatly concerned with maintaining the flow of irrigation water to their village, with the effects of converting their dry lands to paddy on the soil, with minimising the costs of agricultural inputs and dealing with indebtedness, which has grown enormously after the advent of canal irrigation and with associated changes in crop choice and cultivation practices. Obviously not all these effects are positive, i.e., leading to increases in the (at least long-term) prosperity of the villagers. Nevertheless, it seems to have made the villagers much more inward-looking, focused on their agricultural lands, and less

Table A.2.6. Extent of wage labour employment in each village

Labour days per adult per year	Village	Economic class			
		1	2	3	4
Agricultural + Non-agricultural labour	Benakanahalli	0	69	139	114
	Kanvihalli	0	36	174	241
Agricultural labour	Benakanahalli	0	40	78	114
	Kanvihalli	0	7	95	199
Average per capita agricultural labour days in each village	Benakanahalli	59			
	Kanvihalli	84			

Note: Class 1 is the wealthiest class, Class 4 are landless.

interested in their common lands (even as sources of ecological services such as soil conservation or infiltration).

Summary

The effects of irrigation-induced agrarian change are complex and context-dependent. Nevertheless, there appear to be significant direct and indirect effects on the availability of alternative sources of fuel and fodder and hence on the importance of common lands in the livelihood strategies of most villagers, except perhaps the poorest. It seems

reasonable to conclude that, even if any JFPM-type process is seriously implemented in such villages, the level of interest of the community *as a whole* in regenerating common lands would have been lower in canal-irrigated villages than in unirrigated villages. This is not to argue that canal irrigated villages should be kept out of the purview of JFPM. Rather, this is to point out that the core assumption underlying JFPM-type programmes, viz., that villagers are dependent upon common lands and hence interested in regenerating them, may not be valid everywhere.



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Email: cised@isec.ac.in www.cised.org

Sharachandra Lele
A. K. Kiran Kumar
Pravin Shivashankar

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