



**CARIBBEAN NATURAL RESOURCES INSTITUTE  
(CANARI)**

**RISKING CHANGE: EXPERIMENTING WITH  
LOCAL FOREST MANAGEMENT COMMITTEES  
IN JAMAICA**

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## **Executive Summary**

Throughout the world, forestry departments have been rethinking the way they work in order to meet the challenges of a changing sector. As forestry in many countries has become less about timber production and more about watershed protection, biodiversity conservation, and tourism, the range of stakeholders has become larger and more diverse, while management that emphasizes regulation and enforcement has become less effective and relevant. Bringing stakeholders into the management process makes sense, but it also involves risks. In the Caribbean, Jamaica stands out as a country that has been willing to meet these risks head on and in doing so has begun to create a new and positive dynamic between the Forestry Department and the people it serves.

This paper presents the results of research on one component of Jamaica's new approach: the establishment of Local Forest Management Committees (LFMC) to involve local stakeholders in the management of forest reserves. The research followed the establishment of the Buff Bay/Pencar Local Forest Management Committees (LFMCs) from the planning stage in mid-2000 until May 2002, when they were fairly well established and beginning to develop and undertake their own activities. A collaborative effort of the Forestry Department and the Caribbean Natural Resources Institute (CANARI), the research aimed at deriving a better understanding of the requirements for effective stakeholder participation in forest management.

The LFMCs are a part of a broad national trend in Jamaica towards increased stakeholder participation in natural resource management. Their basis is found in the 1996 Forest Act (Government of Jamaica 1996), which permits their establishment and defines their functions, including monitoring of the condition of the forest, advising the Conservator on forest management issues and needs, and supporting local conservation activities. The first LFMCs, which are the subject of this paper, were established in November 2000 in the Buff Bay/Pencar watershed in the northeast of the country. This watershed had been earmarked for special attention through the Trees for Tomorrow Project, a Government of Jamaica-Canadian International Development Agency project to improve the management and conservation of Jamaica's forest resources. The exceptionally steep landscape in the watershed supports a range of uses that put pressure on the forest reserves in its upper reaches and the services they provide. The area also has among the highest poverty rates in Jamaica.

The largest stakeholder group in the watershed is that of the farming families who grow crops including bananas, coffee, and root vegetables in small plots along the steep hillsides and who live in small communities throughout the watershed. In order to reach this group as well as other stakeholders, the Forestry Department divided the watershed into two units, each with its own LFMC, and opened membership in the committees to "all community groups, organizations, NGOs and private sector entities... whose members are willing to participate". It particularly targeted local branches of the Jamaica Agricultural Society, local citizens' associations and schools, and those government agencies with an active presence in the watershed. The initial response, which followed an extensive programme of community sensitisation and outreach, was highly encouraging.

Despite the early enthusiasm, the terms of reference for the LFMCs were not initially very clear. Forestry Department documents described the Committees rather inconsistently, sometimes as partners in the co-management of forest reserves and other times as advisors and watchdogs. The

members also were not clear on what to expect. Many hoped that the establishment of the committees would lead to local jobs, as had been the case in the 1970s and 1980s when the Government briefly went into the timber business on a large scale. Others were looking for solutions to the environmental problems in the watershed, which result in frequent flooding and landslides with serious social and economic consequences. Some were hoping that the opportunity posed by the LFMCs could contribute in some way to the alleviation of the area's entrenched poverty. The government agencies invited to participate, meanwhile, largely took a wait-and-see attitude, attending an occasional meeting but making no firm commitments.

Eighteen months after their establishment, the LFMCs were continuing to meet regularly, had provided useful advice and input to the Forestry Department on a number of issues, and were embarking on small but rather ambitious projects to increase the contribution of forest resources to local development. While still in their infancy and with many challenges yet to overcome, the Committees have undoubtedly made a good start. Some of the factors that have contributed included:

- C significant attention to education and awareness, including school programmes, presentations to local organizations, agroforestry demonstration programmes combined with the provision of free seedlings to farmers, and training opportunities for LFMC members;
- C high levels of commitment and dedication on the part of the Department's field staff, which has been unusually open to change and to adapting their work habits and hours to the requirements of participatory forest management
- C strategic use of funds from the Trees for Tomorrow project to reimburse members' travel costs and provide lunches and refreshments for meetings, demonstrating respect for the sacrifices members were making to participate.

Despite the progress, participation in meetings has declined, and this is a major concern of members. The reasons for decreasing involvement are undoubtedly complex, but several can be identified. They include:

- C the weakness and instability of many of the organizations making up the membership of the LFMCs
- C the limited economic opportunities in the area, which have caused some representatives to relocate
- C the number of important stakeholders who are not participating in the work of the LFMCs, either because they are not represented by an organized group (for example the absentee landowners whose large coffee plantations have significant impacts on the watershed); are marginalized from the organized life of the community (as are many of the poor); or have not been presented with a compelling reason to participate (as appears to be the case for some government agencies who play a role in the watershed)
- C the Forestry Department's inability to maintain the high level of its initial public education work once the original awareness objectives were achieved
- C delays in completing the draft Buff Bay/Pencar watershed forest management plan, which was meant to be the focus for the work of the LFMCs

Although they have not yet had a major impact on forest management, the Buff Bay/Pencar LFMCs are having some influence (and could have more) on the national policy environment and on the institutional culture of the Forestry Department.

The LFMCs and the Forestry Department generally are ahead of the policy curve in Jamaica, which appears to support decentralization and delegation but in fact continues to consolidate authority at the highest levels of government. The same Forest Act that enabled the establishment of the LFMCs generally defines a centralized, hierarchical structure for forest management. But the Forest Policy and National Forest Management and Conservation Plan, developed by the Forestry Department and adopted by Cabinet in 2001, give considerable importance to participatory approaches, and the experience of the LFMCs seems to have reinforced the Department's policy-level commitment to stakeholder involvement. Policy environments in Jamaica tend to be complex and multi-layered, and other policies, such as those on watershed management and local government, have also influenced the design and development of the LFMCs. But at the ground level, the LFMCs have mainly reflected the evolving relationship between the Forestry Department, and particularly its field officers, and the people who live in the area. The key to their impact at the policy level will be in the development of functional feedback loops to the policy and decision-making process.

The establishment of the LFMCs is part of a wider effort to transform the way the Forestry Department works and its staff perceive their roles. Training that has been provided for staff at all levels has done much to change perceptions and attitudes, but efforts to extend the Buff Bay/Pencar LFMC experience to other watersheds have demonstrated that the commitment and skills of some staff are still wanting. The experience of the LFMCs has had a profound influence on the local staff that has been involved, but others have not had many opportunities to benefit from it. Its value as a pilot could be enhanced by more opportunities for staff from other regions and from the central office to be involved.

Like Forestry Department staff, LFMC members need specific knowledge and skills to contribute meaningfully to management planning. Their limited technical knowledge of forest management is a real constraint to their ability to assist in the development of the local forest management plan. While a programme of forest management training for LFMC members would be long-term and costly, it would substantially increase the usefulness of the committees and assure that they do not become simply rubber stamps.

One meaningful role for the LFMCs is in identifying opportunities to improve local livelihoods, and especially the livelihoods of the poor, through the sustainable use of resources within forest reserves. Although the poor, who mostly live in the upper reaches of the watershed, currently make little use of the forest except to capture land for farming, opportunities in tree plantation, nature tourism, and timber extraction exist and are being explored by the Committees.

Several lessons have already emerged from the experience of the Buff Bay/Pencar LFMCs that can be useful in developing them further and in extending the approach to other areas. These include:

1. *Advisory bodies comprised of only organizational members have limitations if the objective is to include all major stakeholders.* Mechanisms are needed to involve unorganised stakeholders,

as well as to assure that all voices are equal so as not to mimic and reinforce inequitable local power structures.

2. *The design of collaborative management arrangements should be determined by the objectives of the collaboration.* There is no one-size-fits-all pattern for involving stakeholders in forest management, and the objectives of all parties need to be clear before the structure of the institution can be considered.

3. *Continuous improvement approaches offer the opportunity and challenge to build dynamism into the management process.* More flexible and incremental alternatives to rigid management plans can respond quickly to changes in the natural, socio-economic, or political environment while permitting stakeholders to have an ongoing role in management.

4. *A commitment to participation will have major implications for the way organizations are structured and operate.* For forestry departments, a switch to collaborative approaches is likely to require changes in rules and procedures, budget allocations, and the responsibilities, training needs, and working conditions of staff.

5. *Participatory forest management requires the full, knowledgeable, and equitable participation of all appropriate stakeholders.* Making participatory forest management work means responding to the capacity needs of different stakeholders and paying attention to the balance of power within the arrangement.

6. *Incentives and longer-term benefits are the key to getting and keeping stakeholders involved.* Stakeholders entering into participatory management arrangements expect benefits, ranging from improved watershed management to employment opportunities, for themselves and for their community. They may also require incentives and rewards to maintain their involvement.

7. *The arrangements for stakeholder participation in forest management need to be based on the local institutional landscape, which will vary over time and from place to place.* Institutions for participatory forest management should use and build on what already exists rather than adding new layers to the local institutional landscape or attempting to prop up weak organizations in order to secure their involvement.

8. *The influence of external factors needs to be understood and taken into account in the design of participatory approaches.* While the involvement of interested politicians, international assistance agencies, and technical advisors can be extremely valuable, it can also skew agendas and or create unrealistic standards and expectations, resulting in the need for delicate balancing.

9. *Forest management that benefits stakeholders cannot be separated from other aspects of environmental management or local development, and requires partnerships with a diversity of agencies and sectors.* The management of the Buff Bay/Pencar watershed presents a good example of the integrated nature of development, incorporating forestry, agricultural extension, land use planning, environmental education, and numerous other disciplines.

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# **Risking Change: Participatory Forest Management Comes to Jamaica**

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## **1 Introduction**

This paper presents the results of a research project undertaken by the Caribbean Natural Resources Institute (CANARI) in collaboration with the Jamaica Forestry Department (FD) between June 2000 and May 2002. The research was carried out under the framework of a regional programme of the European Commission entitled *Building Capacity for Participatory Forest Management in the Insular Caribbean*, which was implemented by CANARI. By examining the process of establishing a pilot participatory management mechanism for one of the Forestry Department's management areas, the project sought to improve understanding of the requirements for effective stakeholder participation in forest management.

The research followed the establishment of the Buff Bay/Pencar Local Forest Management Committees (LFMCs) from the planning stage until they were fairly well established and beginning to develop and undertake their own activities. Using material drawn from this experience, the research project aimed to achieve the following objectives:

- C define appropriate tools and methods for negotiation among stakeholders on the allocation of management rights and responsibilities in the Buff Bay/Pencar management area
- C understand the ways in which the effectiveness of management is affected by the distribution of power among management partners
- C understand the linkages and feedback loops between action at the local level and national policy processes
- C assess the impacts of a shift to collaborative management on the operations and culture of the lead management agency
- C identify the factors that contribute to the sustainability of participatory management arrangements.

To assure its practical relevance, the project was guided by a Research Advisory Committee comprised of representatives of agencies and organizations closely involved in the development of the Buff Bay/Pencar LFMCs. The Research Advisory Committee periodically reviewed and provided feedback on work plans and preliminary findings. On two occasions during the course of the project, research results were presented to the LFMCs themselves for feedback.

Jamaica's recently adopted Forest Policy and National Forest Management and Conservation Plan place considerable emphasis on participatory forest management, and the Forestry Department demonstrated its commitment to effectively implementing participatory approaches through its active support of the project.

The major activities, which were carried out by the authors along with local consultants, were:

- C a stakeholder identification and analysis
- C an analysis of the policy and institutional context in which the LFMCs operate
- C a beginning and ending analysis of the institutional structure of the LFMCs



- C a beginning and ending analysis of the Forestry Department's policies and staff attitudes towards the LFMCs
- C a study of stakeholder perceptions and expectations regarding the LFMCs
- C characterizations of the population in the area living in or at risk of falling into poverty, and of the potential benefits that forest resources could provide
- C an analysis of the process of development that the LFMCs have gone through.

The results of these studies form the basis for this report.

## **2 The context, globally and nationally**

The most recent FAO assessment of the state of the world's forests notes, "The involvement of communities in forest management is now a significant feature of national forest policy and practice and of internationally supported forestry programmes throughout the world" (FAO 2001). The modern trend towards stakeholder participation in forest management began in south Asia in the 1980s and has spread throughout the developing world as governments have tried to come to terms with growing demands on forest resources in the face of their own human and financial constraints.

In Jamaica, years of structural adjustment, as well as policies during the 1970s and 1980s favouring a reallocation of forest land for commercial timber and coffee production, resulted in a significant decline in the role and capacity of the government's Forestry Department, which continued into the 1990s (Hall 1998, Simons-Tecsult 1999). Without adequate management during a time of continual national economic crisis, forests were rapidly being cut for timber and fuelwood or converted to agriculture and residential use, resulting in increased soil erosion, landslides and flooding and declining water quality, among other problems.

The Forestry Department received much-needed support in the 1990s from two technical assistance projects: a United Nations Development Programme capacity-building project and the Trees for Tomorrow (TFT) project of the Canadian International Development Agency (CIDA) and the Government of Jamaica, which placed substantial emphasis on the revitalization of the Department and the development and testing of participatory approaches to forest and watershed management (CFAN 2001).

With this assistance and a 1996 Forest Act, the Forestry Department went about the task of preparing a new five-year forest management plan and updated forest policy, which were completed in 2001 and adopted by Cabinet in the same year. These documents define a central role for stakeholder participation in the management of forest resources. The primary mechanism for implementing the strategy of community participation is the establishment of Local Forest Management Committees (LFMCs) to enable "the participation of the communities in the co-management of forested areas" (Headley 2001).

The concept of LFMCs was not entirely new to Jamaica, where a government policy of delegation of management responsibility to local organizations dating from the early 1990s and active lobbying by NGOs for increased stakeholder participation have produced a range of experiments in participatory resource management. These include the delegation of responsibility for the management of Jamaica's protected areas to local NGOs; the establishment

of Local Advisory Committees in communities surrounding the Blue and John Crow Mountains National Park to provide input on the management of the Park; and the establishment of Parish Development Committees to support participatory local-level planning processes. The results of these efforts have however been mixed and as such do not provide much guidance on how to go about setting up local level forest management committees.

### **3 A short history of the development of the LFMCs**

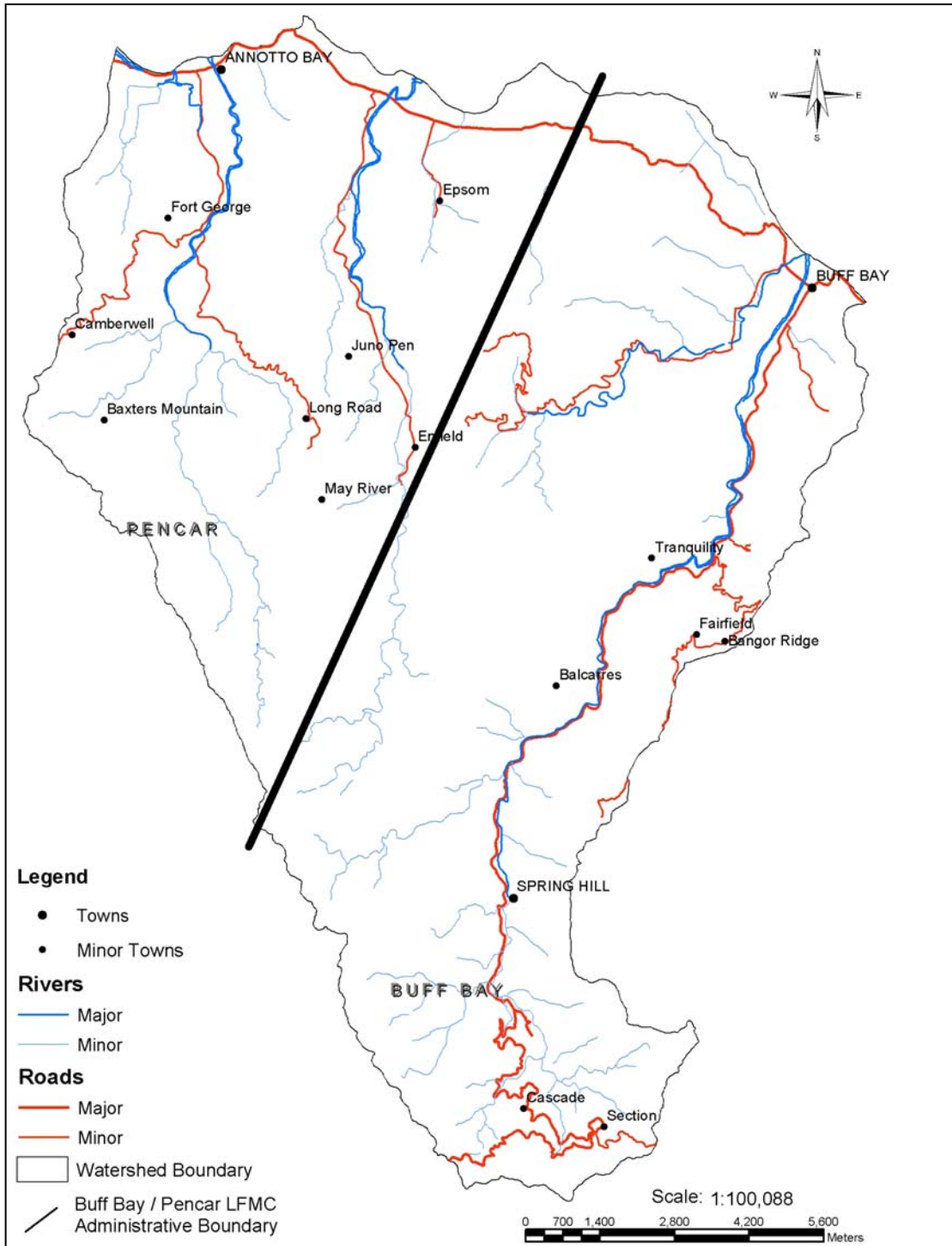
Using the Watershed Management Unit system that had been developed for the country, the TFT project selected a pilot watershed, Buff Bay/Pencar, based on a range of biophysical, social, and logistical criteria, for the development of new approaches to watershed management (Cunningham and Limbird 1993).

The Buff Bay/Pencar watershed includes two major drainages that run from the northern reaches of the Blue Mountains, at heights of greater than 2000m, down to the towns of Annotto Bay on the Pencar River side and Buff Bay on the Buff Bay River side, on the northeastern coast of Jamaica (Figure 1). The upper reaches of the watershed include portions of the Blue and John Crow Mountains National Park, a forest reserve, but much of the forest outside the Park, especially on the Buff Bay side, has been converted to coffee plantations over the past twenty years. The land drops steeply from the mountains to the sea and deforestation appears to have increased the frequency and severity of landslides and flooding that periodically do major damage to the crops and infrastructure in the area. The middle and lower reaches of the watershed are dominated by mixed farming by small farmers (Bennett 2000). Most of the substantial income from the Blue Mountain coffee that is grown there goes to absentee landowners, and the area is ironically among the poorest in Jamaica (Statistical Institute of Jamaica and Planning Institute of Jamaica 1998), with poverty rates on both sides of the watershed estimated to be in excess of 25% (Mills 2001, Wright 2002).

The idea for Local Forest Management Committees came out of a provision in the 1996 Forest Act, which permits the Minister responsible for forest management, in consultation with the Conservator of Forests, to “appoint a forest management committee for the whole or any part of a forest reserve, forest management area or protected area”. The Act defines the functions of these committees as follows:

- (a) *monitoring of the condition of natural resources in the relevant forest reserve, forest management area or protected area;*
- (b) *holding of discussions, public meetings and like activities relating to such natural resources;*
- (c) *advising the Conservator on matters relating to the development of the forest management plan and the making of regulations;*
- (d) *proposing incentives for conservation practices in the area in which the relevant forest reserve, forest management area or protected area is located;*

**Figure 1: Buff Bay/Pencar Watershed**



- (e) *assisting in the design and execution of conservation projects in that area; and*
- (f) *such other functions as may be provided by or under this Act.*

In early 2000, based largely on the encouraging results of community outreach activities conducted by TFT's Rural Sociologist and her FD counterpart along with FD field staff, the FD decided to test the concept of Local Forest Management Committees in the Buff Bay/Pencar watershed. Since the FD wants to develop LFMCs in other watersheds based on the experience in Buff Bay/Pencar, it has taken a learning approach that includes the collaborative research described in this paper as well as regular participatory reviews and assessments involving the members of the LFMCs and FD staff.

The plan for the LFMCs was fleshed out over several months in advance of presenting it to local stakeholders for consideration. Because the Buff Bay and Pencar portions of the watershed were isolated from one another by their geography, it was proposed that separate committees be formed for each portion.

In September 2000, the FD held preliminary meetings with potential LFMC member organizations in each watershed to confirm interest and get feedback on proposals regarding the Committee's objectives, composition, and structure. Based on the interest demonstrated at these meetings, the LFMCs had their first regular meetings in November 2000 and were officially launched at a joint meeting in Buff Bay in December 2000.

Membership in the LFMCs is open to "all community groups, organizations, NGOs and private sector entities present in the Buff Bay and Pencar sub-watersheds whose members are willing to participate" (Forestry Department n.d.). Invitations were extended to a wide range of organizations that were identified during earlier sociological fieldwork. National and local government agencies with an interest in watershed management were also invited to participate. The initial composition of the LFMCs included:

- C Citizens Associations and other community groups, such as parent-teacher associations, within the watershed
- C Local chapters of the Jamaica Agricultural Society (JAS)
- C Local and national environment and development NGOs
- C Business interests (e.g., the St. Mary Banana Estate, Coffee Industry Board, local cooperatives)
- C Local police
- C Rural Agricultural Development Authority (RADA), the government agency responsible for agricultural extension
- C National Environment and Planning Agency (NEPA), the government agency with overall responsibility for environmental management
- C Public Health Department
- C National Water Commission (NWC)

At the preliminary meetings, members opted for a structure like that of a "regular community organization" (Minutes of Buff Bay sub-watershed meeting, 15 September 2000), and the FD prepared draft Constitutions that the committees finalized and accepted. The committees elect their own officers and meet bimonthly, with joint meetings of the two sub-watersheds twice a

year. The FD serves as the secretariat for the committees “until the capacity of the committee can facilitate the setting up of its own office” (Forestry Department n.d).

Since their establishment, both LFMCs have met regularly and their meetings have addressed a range of matters. The meetings have demonstrated the interest of local people in securing licenses to harvest trees within the watershed, assisting with reforestation, and serving as honorary game and forest wardens. The discussions have also revealed how effective the FD’s private tree planting programme has been in increasing local environmental awareness and benefiting farmers, and members successfully made a case for expanding the programme to include fruit tree as well as timber tree seedlings. The expanded programme went into effect in April 2002.

A number of these discussions and suggestions have been reflected in the draft forest management plan for the watershed, which was prepared by FD technical staff (Forestry Department 2001). The plan is intended to be the major vehicle for the input of the LFMCs in forest management planning and decision-making, and the LFMCs are expected to assist in finalizing it and in monitoring its implementation. However, the research required to prepare the technical aspects of the plan took considerably longer than anticipated, and although FD staff presented elements of the draft plan to the LFMCs for feedback on a number of occasions, the draft was only completed in November 2001 and in May 2002 had still not been presented in its entirety to the LFMCs. An abbreviated or “popular” version is now being prepared to facilitate this process. This simplified version will leave out the technical aspects of the plan, for easier comprehension by local stakeholders.

Without the local forest management plan to focus the work of the LFMCs, the FD has explored with the Committees opportunities for collaborative activities to address forest management issues. These discussions have resulted in a project by the Pencar LFMC to establish a plant nursery and demonstration agroforestry plot in the Enfield area under a Memorandum of Understanding with the FD. The project has received financial support from the Foundation for International Training, in conjunction with the Enhancing Civil Society Project, both of which are CIDA-sponsored, and counterpart support from TFT. The project is now getting underway, and construction of the facilities started in May 2002. Following on the Pencar LFMC’s success in obtaining project funding, the Buff Bay LFMC is now preparing a proposal to implement an ecotourism project in its portion of the watershed.

#### **4 The stakeholders: who are the LFMCs meant to represent?**

Stakeholders with an interest in the management of forest lands in Buff Bay/Pencar were initially identified by the FD in 1999. Local stakeholders were broadly conceived of as small and large farmers, local communities, relevant government departments, community institutions including schools and churches, and non-governmental and community-based organizations. The design of the LFMCs was based on a belief that the interests of individual stakeholders could be adequately represented by existing organizations, such as citizens associations and the local chapters of the Jamaica Agriculture Society. While in theory, membership in the LFMC is open to all stakeholders (and occasionally persons have attended meetings in a personal capacity), in practice it is legal entities and formal organizations that have been targeted and invited to join. The members of the LFMCs and their interests are identified in Table 1.

**Table 1**  
**Buff Bay/Pencar LFMC members and their interests**

Continuum level	Members		Interest in LFMC
	Buff Bay LFMC	Pencar LFMC	
<b>Global and international, wider society</b>	Canadian International Development Agency/ Trees for Tomorrow Project		Funding and technical support
<b>National</b>	FD, NEPA, NWC, RADA, Police		Government agencies directly involved in watershed management issues. Local political interests are also included.
<b>Local off-site</b>	Buff Bay Action Development Committee (BUBADAC) Portland Environmental Protection Agency (PEPA)	St. Mary Rural Development Project (SMRDP)  St. Mary Banana Co.	Non-government organizations involved in environment and development activities, and agricultural interests concerned with management of watershed. Although working in the watershed these entities are situated far from forests.
<b>Local on-site</b>	JAS local chapters Community citizen and parent-teacher associations Coffee Industry Board (CIB) Public Health Public Works	JAS chapters Community citizen and parent-teacher associations Long Road and Fort George Cooperatives River Edge Tourism Development	Community-based organizations largely grouping residents of different communities and persons involved in agriculture at subsistence level (JAS). CIB represents plantation scale coffee interests. Entities closer to forests, activities by personnel may impact forests directly.

This organization-based membership approach has not been fully successful in involving all major stakeholders, as shown by the following simplified stakeholder analysis matrix:

**Table 2**  
**Buff Bay/Pencar Forest Lands Stakeholder Analysis**

Category	Interests/Objectives	Stakeholders	LFMC Representatives	Gaps
<b>Watershed resource management agencies</b>	Resource sustainability Watershed protection	Government Jamaica Conservation and Development Trust (JCDT: manager of Blue and John Crow Mountains NP)	FD NEPA NWC RADA	JCDT was invited but has not participated

Category	Interests/Objectives	Stakeholders	LFMC Representatives	Gaps
<b>Forest resource owners</b>	Protection from landslides, flooding, etc. Acceptable use of neighbouring lands	Private landowners  Government	National Land Agency (former FIDCO lands) NWC	No organizations exist to represent interests of private forest landowners National Land Agency has not participated
<b>Forest resource users</b>	Access to resources Sound management to maintain supply and quality	Timber harvesters Fuelwood and charcoal producers		No representation of timber or fuelwood harvesters (and no recent licences issued)
		Tourism enterprises	River Edge Tourism Development	No representation of sector except River Edge
		Water abstractors	NWC	
<b>Off site forest resource enterprises</b>	Maintenance of supplies	Sawmills		Because no legal timber harvesting now occurs in the forest reserve, sawmillers tend to avoid the attention of government
<b>Watershed (non-forest) land users</b>	Access to land Protection from erosion, landslides, flooding, etc. Access to adequate supplies of clean water	Farmers (large and small)	JAS chapters St. Mary Banana Co. CIB	Representation of small farmers dependent on status of local JAS chapters and farmers' participation in them
		Residents (legal and illegal)	Local citizens associations	Representation dependent on status of citizens associations and individuals' participation in them Illegal residents (squatters) are not easily identifiable and not organized
<b>Watershed resource enterprises</b>	Access to primary products	Agricultural producers and marketers	Long Road and Fort George Coops CIB	
<b>Forest conservation advocates</b>	Biodiversity protection, natural resource conservation, sustainable use	Interested citizens (local and national) CIDA, other international agencies and programmes	PEPA TFT	

Category	Interests/Objectives	Stakeholders	LFMC Representatives	Gaps
<b>Community development advocates</b>	Social and economic opportunities through use of local resources	Churches Citizens' groups	SMRDP BUBADAC Local citizens associations	Church leaders have supported the LFMC and meetings are held in churches, but no churches are members Many community citizens associations are weak
<b>Community protection and development agencies</b>		Government	Public Works Public Health Schools Police	

The above analysis indicates that a number of stakeholder groups targeted for outreach, particularly the poorer and marginalized segments of the community who tend not to be involved in citizens associations and other groups, are not adequately represented on the LFMC. Other critical stakeholders, including private forest landowners and forest resource users, are also not directly represented (although some may be members of organizations such as citizens associations and JAS chapters, which represent different interests on the committees.) The FD continues its outreach to many segments of the community, but the issue of representation of these overlooked stakeholder groups has not yet been addressed.

## 5 The stakes: what do people want out of the LFMCs?

*The rhetoric: how the role of the LFMCs is defined on paper*

Forestry Department documents consistently define the role of the LFMCs to be forest management: “The Local Forest Management Committee... together with Forestry Department staff, will manage the forest within a watershed area” (Forestry Department 2000). “The LFMC is the institutional body to be created in watersheds for enabling the participation of the communities in the co-management of forested areas (specifically those managed by the Forestry Department)” (Headley 2001). But the responsibilities described in these and other documents, including the Forest Act, are those of an advisor and supporter rather than a full management partner: “The LFMC will act in an advisory role to the FD for the management of the forested Crown land...” (Forestry Department 2001); “its most important role is to monitor the implementation of the Local Forest Management Plan” (Forestry Department 2000).

*The Forestry Department staff's sometimes diverging viewpoints*

Interviews with Forestry Department senior management and field staff help to clarify this seeming inconsistency to some extent. While the FD clearly intends that the main role of the LFMCs will be advisory and informational, there is also an expectation that through the LFMCs, elements of the community will take on or assist with certain management responsibilities, particularly monitoring of activity within forest reserves (one forest officer used the term “watchdogs of the forest”) or assisting in the management of specific sites. The FD does not appear to expect that the LFMCs or their members will become involved in technical aspects of forest management, or that authority for legal enforcement would eventually be vested in them,



at least in the short term. On the other hand, several staff persons hope that the input of the LFMCs might make the policies and practices of the FD more relevant to local development needs. One senior officer saw the main purpose of the LFMCs as being to optimize the sustainable returns to the community from forest resources, while another mentioned the need to meet the longstanding local expectations of economic benefits through work with the FD.

#### *The FIDCO legacy: expectation of jobs*

In the late 1970s, in an effort to make Jamaica more self-sufficient in lumber, the Government established the Forest Industries Development Company (FIDCO) and transferred to it more than 20,000 ha of public land, including forest reserve, for the purpose of timber production (Hall 1998). Approximately 1,750 ha of FIDCO's holdings were in the Buff Bay/Pencar watershed (Forestry Department 2001).

Between 1978 and Hurricane Gilbert in 1988, which destroyed about half of its plantations across the island, FIDCO employed many local people in cutting and planting trees and building roads (Mills 2001). Upon the completion of salvaging activity following the destruction caused by Gilbert, FIDCO went into decline, and with it the local job opportunities that people had come to depend on to supplement their other economic activities. Throughout most of the 1990s, the FD, with its limited resources, was little seen in the area. Its increased presence in recent years, as a result of the TFT-supported outreach work, has raised hopes within the watershed for a new era of economic benefits through work in the forest (McKenzie, Virgo, Simpson, pers. comm.). Because the FIDCO legacy still creates this expectation of local employment, it makes the job of communicating the FD's new approach, which does not include tangible short-term benefits, more challenging.

#### *Views and expectations of LFMC members*

In early 2001, exercises were conducted at meetings of both LFMCs to identify members' expectations. Stakeholders were divided into groups based on their location in the watershed (upper or lower), while Forestry Department staff formed their own group. The results of the exercises (included at Appendix A) confirmed that local stakeholders have an expectation of opportunities for casual labour through the LFMCs. The exercises, along with discussions at LFMC meetings and interviews with selected members, also revealed that members are concerned about the link they perceive between deforestation and poor land use in the upper watershed and landslides and flooding during the rainy season. They would therefore like to see the LFMCs support watershed protection through environmental education and reforestation programmes. Members are also interested in increasing local economic opportunities through the provision of timber licences, as well as through indirect use of forest resources for activities such as ecotourism. At the same time, they are concerned about forest and biodiversity conservation and would like to see the local population take greater responsibility for forest protection and management.

Not surprisingly, the more active members of the LFMCs are also active in other aspects of community life, including education, business, and religion. They see the LFMCs as a potential vehicle for meeting some of their longstanding development objectives. One local educator who was interviewed, for example, expressed a desire that the LFMCs, by serving as a forum for addressing one set of local development issues, could contribute to a larger objective of increased community-based governance and decentralized development planning.

As indicated by socio-economic studies done in both sub-watersheds as part of this project (Mills 2001, Wright 2002), the poor and near-poor farming families that make up more than half of the population of the watershed see the FD as a potential source of economic assistance, through the types of casual labour that were available during the FIDCO era, or more recently through the FD's private tree planting programme, from which many local farmers have benefited. The provision of timber seedlings through this programme appears to have led to an expectation among poor farmers that the FD and the LFMCs could assist them with land conservation measures as well as with the provision of fruit trees. The FD, at the suggestion of the LFMCs, has responded to some of these expectations through the expansion of the private planting programme to include fruit tree seedlings and through the Pencar nursery project, which should make a greater number and wider variety of seedlings available. The expectations regarding assistance with land conservation measures, which exceed the FD's mandate and scope of work, appear to reflect a need for RADA, the government's agricultural extension service, to have a stronger presence in the watershed.

#### *Expectations of other institutional actors*

Watershed management has been given priority by the Government of Jamaica, as indicated by the establishment by the Prime Minister of the National Integrated Watershed Management Council (NIWMC) comprising selected representatives from civil society, government and non-governmental agencies. (NEPA 2001; NRCA 1999) has drafted a national Watershed Policy, still under review, that defines institutional arrangements for watershed management at the national and local levels. A key strategy for local involvement is the formation of Local Watershed Committees "to spearhead work at the local level". NEPA initially perceived the LFMCs as precursors of these Local Watershed Committees, into which the LFMCs would eventually be absorbed. As the complexities and costs involved in establishing Local Watershed Committees in all 26 of the country's defined watersheds became clear, however, NEPA has begun to see the LFMCs as being substitutes for Local Watershed Committees and therefore as quite critical to the implementation of the watershed policy. Although initially not very active, NEPA has recently begun to participate more regularly in meetings of the LFMCs, although the participation of senior officers remains irregular.

RADA, the NWC, and to some extent the local police have also seen the development of the LFMCs as potentially supportive to their own missions, but their participation has depended in the availability and personal interest of their local officers. Thus, RADA is an active member of the Buff Bay LFMC but not the Pencar Committee, the police have been active in Pencar but not Buff Bay, and the NWC has not been active since the resignation some time ago of its local community relations officer. Other government agencies apparently have not seen the relevance of the LFMCs to their own mandates, and have not been involved in their development.

## **6 One and a half years after establishment: the preliminary results**

The Buff Bay/Pencar LFMCs are still in their infancy; their role and purpose are not yet clearly defined; and they cannot yet help much in dealing with complex issues of forest management. They have however managed to survive and develop over a period of eighteen months and to make small but important contributions to forest management in the area.

The second annual joint meeting of the Buff Bay and Pencar LFMCs, held in February 2002, included a participatory evaluation of the experience to that point. The evaluation involved those local and national members of the LFMCs who were present at the meeting, as well as Forestry Department field and head office staff. The results of the review are included at Appendix B.

*What has worked well*

The evaluation indicated that perhaps the greatest success of the LFMC process has been in enhancing local understanding of the value of forests and of the requirements for effective forest and watershed management. Committee members feel that they have personally learned a great deal about watershed management issues and needs, and that the FD's outreach to schools and local organizations has made a significant local impact.

This success came at a cost. The sensitisation and awareness campaign designed and led by the TFT and FD Rural Sociologists included 88 visits to communities, organizations, and group meetings to promote the idea of the LFMCs in the four months leading up to their establishment, as well as various training programmes, and presentations at schools and communities in both sections of the watershed. In addition, the FD has promoted its private planting programme widely to farmers in the area and provided them with over thirty thousand tree seedlings between November 1999 and October 2000. Agroforestry demonstration plots and farms were set up in conjunction with local schools and farmers throughout the watershed. The initial groundwork for community engagement was laid over the two years prior to the establishment of the LFMCs through the activities of the TFT project, including a forest inventory and socio-economic and agroforestry studies.

This outreach work has depended heavily on the commitment and coordination provided by the FD technical staff, from the local forester, wardens and TFT extension officers up to the regional officer. This team has been unusually open to change and to adapting their work habits and hours to the requirements of participatory forest management. They also appear to have developed strong relationships of mutual trust with the members of the LFMC. They are realistic about stakeholders' expectations and the FD's limitations in meeting them, and have been creative in looking for ways to make a difference.

TFT's strategic use of its funds to reimburse LFMC members' travel costs and provide lunches and refreshments for special events has been a significant and useful support to the process. It would have been a sure failure had persons been asked to give up a day's work and also pay for their own travel.

*What has not worked so well*

Despite the commitment that has been shown by the FD and the LFMC leadership, participation in LFMC meetings has declined, which has limited their usefulness as advisory bodies; and this is a major concern of the members. The weakness and instability of many of the organizations that make up the LFMCs' membership is clearly a contributing factor. In his socio-economic study of the Pencar watershed, Mills (2001) estimated that 14 out of the 19 original community-based members of the LFMC were either dormant or very weak one year after the LFMC was established. This may indicate that the strategy of relying on local CBOs to make the links between the LFMCs and individual stakeholders needs to be reconsidered. The geography of the watershed is also a challenge to participation. Setting up separate LFMCs for each sub-watershed was a step in the right direction, but the distance from the upper reaches of the watersheds to the

bottom, isolation of many communities due to poor roads, and the limited contact between many of the communities within each sub-watershed are all constraints to bringing people together.

The FD/TFT public awareness arm was not deployed to bolster the efforts of the extension team, despite the emphasis of the programme on widespread local public education. This was unfortunate as the pilot area could have been used to test new approaches to public education and awareness, and additional support during the mobilization phase was badly needed. The departure of the local extension officer, employed through TFT, to take a full-time post with the FD elsewhere also limited the FD's capacity to contact and develop relationships with stakeholders.

Declining attendance may also be indirectly related to the limited economic opportunities in the area, which have caused delegates to move out in search of employment or to take jobs that make attendance difficult. The fact that the LFMC delegates are largely drawn from a small core group of local activists who tend to have heavy demands on their time compounds the problem (however, it appears that many of the most active delegates are persons who are multi-organization representatives).

Another concern noted in the evaluation was the poor participation of government agencies, both national and local, in the meetings of the LFMCs. Many of the issues being addressed require information or coordinated responses from a number of agencies, and their lack of involvement has hindered the early work of the LFMCs. Given the constraints that they work under, all of Jamaica's government agencies must make trade-offs regarding the use of their limited human resources. It seems that the FD and the other supporters of the LFMCs have not yet been able to make a strong enough case for greater commitment by these agencies.

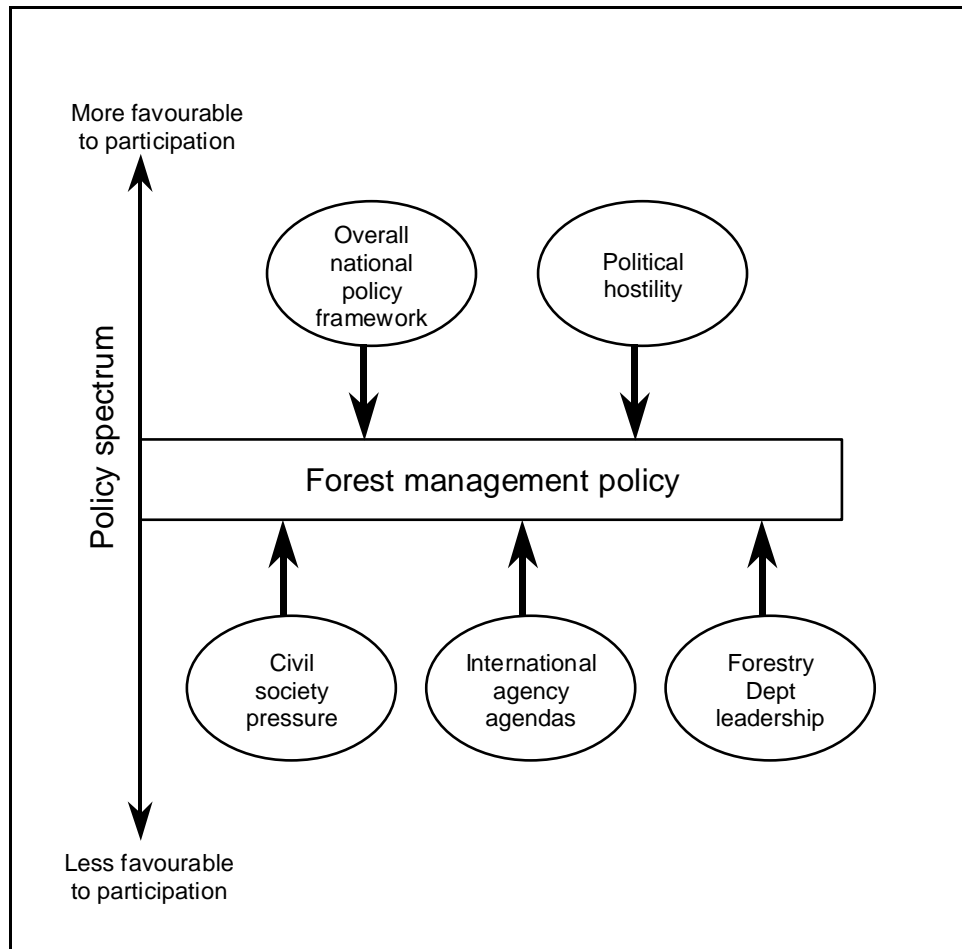
Another obstacle to the LFMC's development, though not noted in the participatory evaluation, has been the delays in presenting the draft Buff Bay/Pencar watershed forest management plan to it for review and input. These delays have left the LFMCs without a clear purpose or agenda for their meetings and have hindered their ability to make a meaningful contribution to management decisions.

## **7 Where the LFMCs fit in the overall policy context - and policy debate - in Jamaica**

### *Forest Act, 1996*

In Jamaica since the early 1990s the policy rhetoric has supported the decentralization of decision-making and devolution of management responsibility to local entities. The rhetoric is not matched by the institutional context, though, which centralizes authority within the government ministries. This situation reflects a continuing debate within the government and society generally on the appropriate extent of stakeholder participation in management and decision-making. While the country's active NGO community and international donor agencies have effectively pushed for policies more favourable to stakeholder participation, senior politicians and civil servants have largely resisted the structural changes required to implement more participatory approaches. As indicated in Figure 2, this resistance acts as a "glass ceiling" to the implementation of participatory policies.

**Figure 2**  
**Factors influencing forest policy in Jamaica**

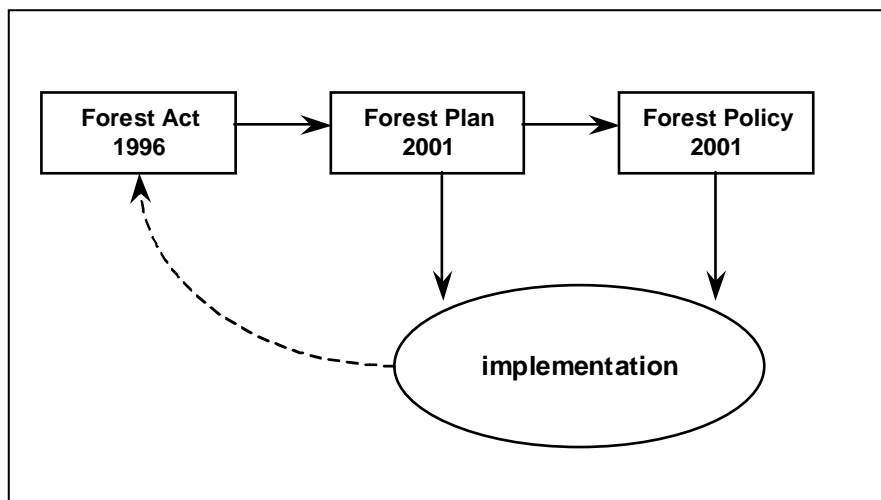


In reflection of this context, the Forest Act of 1996 defines a highly centralized management structure, in which all responsibility for management of public forest is placed in the hands of the FD and all authority in the Conservator on behalf of the Minister. But it also makes provision for stakeholder input through the establishment of forest management committees.

*Forest Policy and Plan 2001*

The Forest Act provided the basis for the development of the 2001 National Forest Management and Conservation Plan, but the process of developing the Plan was a consultative one and resulted, somewhat unexpectedly, in a revised Forest Policy that places much stronger emphasis than the Forest Act on local participation and management partnerships, with the formation of LFMCs given prominence within an overall strategy of community participation. The establishment of the Buff Bay and Pencar LFMCs is the concrete result of this policy guidance. Interestingly, the failure of the Forest Act to permit delegation of management authority has now been seen by the FD as a potential constraint to implementing aspects of the Policy and the Plan, and the Forestry Department is looking into the possibility of having the Act amended. This reflects a dynamic interaction between legislation, policy, and experience on the ground (see Figure 3), as well as an activist stance towards policy on the part of the FD.

**Figure 3**  
**Linkages between Jamaica's forestry legislation, policy, and experience**



*Other policy influences*

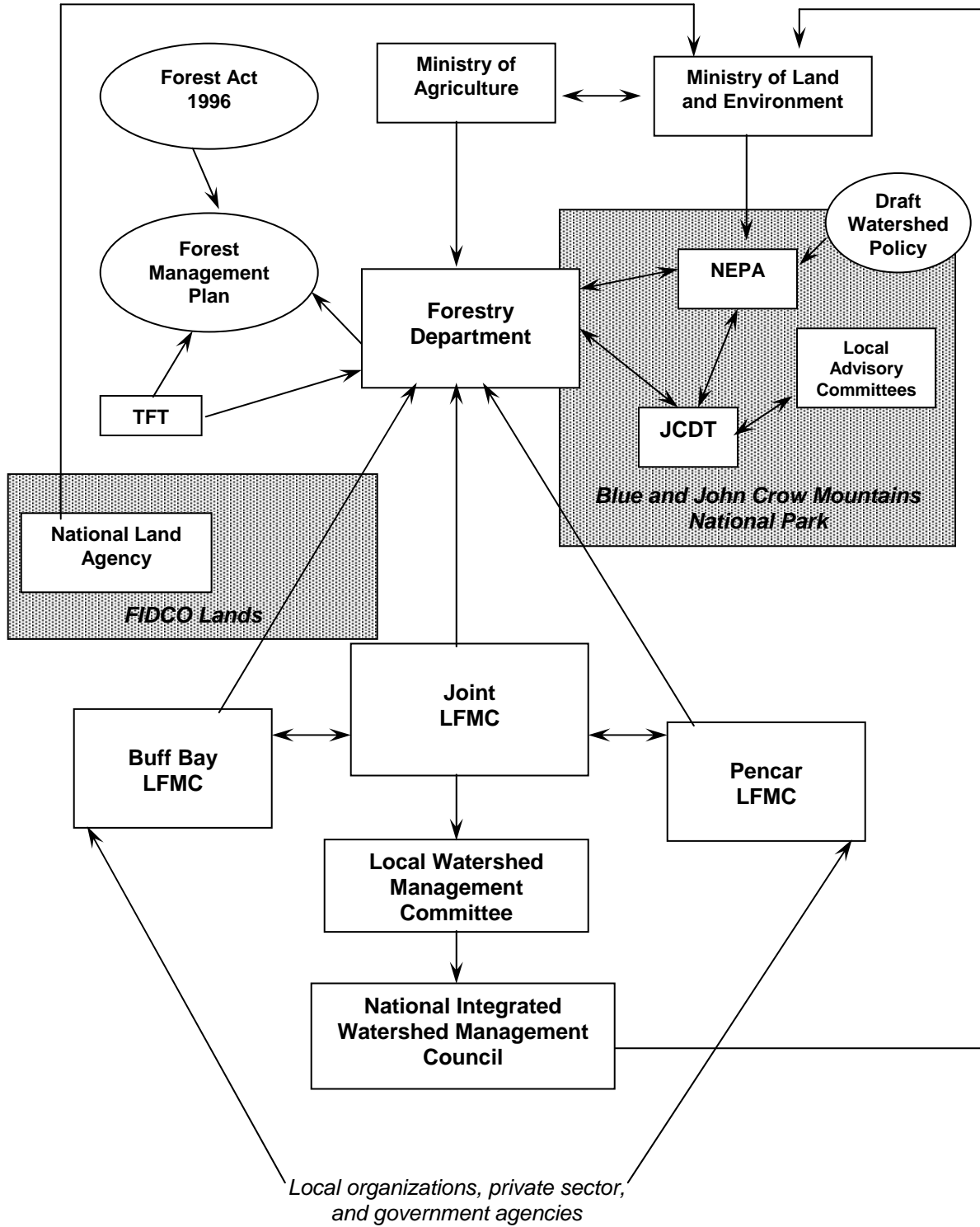
The LFMCs must also be seen within the context of the nation's proposed watershed policy and the institutional arrangements it defines. The FD established the Buff Bay and Pencar LFMCs with the expectation that they could eventually be absorbed into a Local Watershed Committee, whose geographic scope would be the entire watershed and not only the forest reserve lands. While this has not yet occurred and now appears unlikely, the LFMCs remain a piece of the strategy for implementation of the watershed policy.

Also, the LFMCs are potentially affected by policies related to the management of protected areas and the administration of lands formerly held by FIDCO. The portion of the watershed that is within the boundaries of the Blue and John Crow Mountains National Park is governed by a co-management agreement between the FD, which is responsible for the forest estate within the Park, NEPA, which is the government agency responsible for protected areas, and the Jamaica Conservation and Development Trust, an NGO that has been delegated by NEPA management responsibility for the Park. The lands formerly leased to FIDCO, including forest reserve lands, were turned over to the Commissioner of Lands and are now managed by the FD. Freehold land, or private land acquired by FIDCO, was placed with the liquidator, PricewaterhouseCoopers, for disposition following FIDCO's demise.

The institutional landscape in which the LFMCs operate is therefore from a formal policy perspective very complex. The following diagram (Figure 4) reflects the way the landscape was seen at the inception of the LFMC pilot project by its initiators in the FD and TFT.

Figure 4

Formal policy and institutional linkages, Buff Bay/Pencar LFMC



### *The debate over decentralization*

The context has been further complicated by ongoing bilaterally funded development projects that aim to enhance stakeholder participation in decision-making through the strengthening of parish-level government and the establishment of Parish Development Committees whose function is “to undertake a planning process and to coordinate development planning and priorities in each Parish” (ARD 2001). A recent consultant’s report (ARD 2001) suggested that these Parish Development Committees would be the most appropriate vehicle for stakeholder input into local forest management plans and that LFMCs may be a costly and unnecessary duplication of effort. However, the development of Parish Development Committees has been slow, and since the impetus to establish the Committees is coming through bilateral aid projects, it is unclear how much support the process actually has within Government. Nonetheless, the FD participates in the meetings of the rather active Committee in the parish that includes the Buff Bay sub-watershed, as do some other members of the Buff Bay LFMC.

### *The actual institutional landscape*

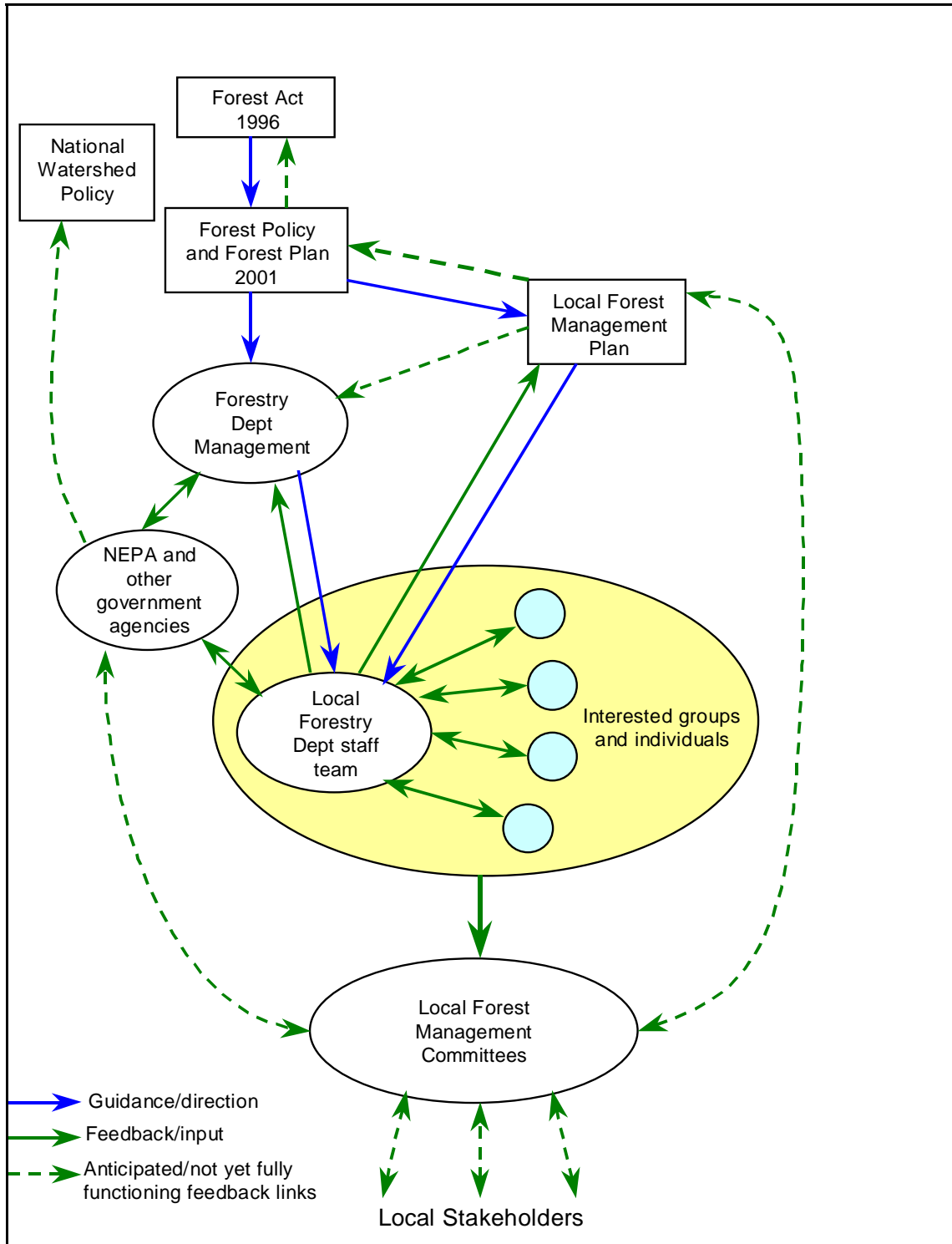
The actual institutional linkages that form the Buff Bay and Pencar LFMCs (Figure 5) are a good deal simpler than the above discussion would imply. In actuality:

- no Local Watershed Committee has been established for the Buff Bay/Pencar watershed and it now appears that none is likely to be formed, as NEPA has decided to use the existing LFMCs as the link between local stakeholders and the larger national watershed policy process;
- the LFMCs have not become involved in issues related to the Blue and John Crow Mountains National Park, which are currently dealt with entirely through the co-management agreement between the FD, NEPA, and JCDT;
- the issue of the disposition of FIDCO freehold lands is being dealt with directly by the liquidator and the National Lands Agency, with no input, at least at this stage, from the LFMCs. The Chairman of the Buff Bay LFMC did however seek answers from relevant officials in the tax department to questions about the disposition of FIDCO lands raised at LFMC meetings;
- the main driver of the LFMC is currently the interaction between FD staff with responsibility for the Buff Bay/Pencar area and a small number of interested local groups and individuals;
- the local FD staff also provide the feedback between the LFMC and FD management, as well as to other government agencies, which are not active members of the LFMC;
- the major feedback loop from the LFMC to the policy level is likely to be through the Committees’ eventual involvement in the local forest management plan.

Assuming that all the feedback links will eventually function as anticipated, these arrangements should provide effective functional linkages between stakeholders on the ground and the policy process (see Figure 5). The major shortcoming of the arrangements is that they depend heavily on the involvement and support of the local FD field staff, while the main impetus for the process at the policy level comes from the central FD office, whose staff is somewhat isolated from and insufficiently aware of what is happening in the field. .



**Figure 5**  
**Functional policy and institutional linkages, Buff Bay/Pencar LFMCs**



## **8 The LFMC experience and the institutional culture of the Forestry Department**

The establishment of the LFMCs is part of a wider effort, led by the Conservator under the impetus of the TFT project, to transform the way the FD works and its staff perceive their roles. The implementation of the 2001 National Forest Management and Conservation Plan, with its emphasis on community participation and cooperative management arrangements, requires different attitudes and skills than were needed in the days of strict protection and enforcement. While some members of staff realized early on that most of the issues now facing the Department have a social dimension that cannot be addressed solely with technical forest management skills, others felt threatened by the proposed change and initially resisted (Brown 2000).

An extensive training programme over the past several years, for staff at all levels, in fields related to community outreach and participatory forest management, has done much to change perceptions and attitudes within the Department (Headley, pers. comm.). This has been supplemented by a manual titled *Working With Communities*, prepared to assist FD staff in carrying out participatory processes in communities. The Rural Sociologist recently conducted seminars introducing the manual to field staff in all regions.

Those members of staff most directly involved in the development of the LFMCs have been profoundly influenced by the experience and are now among the most outspoken proponents of participatory forest management in the Department. The development of the LFMCs has had little impact on the attitudes of other staff, however. One reason for this may be that there are few opportunities to share experiences across the Department, due to geographic dispersion and to the lack of effective intra-departmental mechanisms for communication and information sharing (Headley pers. comm.). Efforts have been made to build on the Buff Bay/Pencar experience in the development of other LFMCs through the transfer of staff to these areas, but this has not had the expected impact. In addition, the TFT project staff, who were intensely involved in the Buff Bay/Pencar work have not put priority on sharing the experience with FD field staff from other regions.

Another factor contributing to the changed attitudes of local FD staff may have been the extensive support and field training that they received from the TFT and FD rural sociologists during the initial stages of the pilot project. Given existing resources, it has not been possible to provide the same levels of support to field staff in other areas slated for the establishment of LFMCs. Finally, although impossible to assess, it may be that the Buff Bay/Pencar staff were simply personally more open to participatory approaches than staff in other areas.

As the local staff have become more committed to the LFMCs and to participatory forest management generally, they have been increasingly vocal in their requests to management for the resources required to carry out the work. With a grossly inadequate budget and the TFT project resources stretched thin, it has not been possible to meet all these demands, leading to a certain level of tension between management and the field. While this tension does not yet appear to have significantly affected staff morale, it has the potential to do so and bears attention.

## **9 Public demand and capacity to be involved: how strong is it really?**

While the commitment of the FD to the LFMCs and to participatory forest management is real and is growing within the Department's culture, the interest and commitment of the other partners in the LFMCs is less certain. Although the response to the FD's outreach work in the watershed was positive and the concept of the LFMCs was well received, there was no local demand for their establishment, and other development issues are given higher priority by local organizations than forest management. The LFMC concept was "sold" to local stakeholders, and those that have become involved are still working out how the committees can be most useful in achieving their objectives.

As noted earlier, local participation in LFMC meetings has declined over time, and some of the factors involved are logistical or structural, such as meetings being held at inconvenient times or representatives leaving the area and not being replaced. But there also appear to be more fundamental issues impeding the capacity of stakeholders to participate, including poverty; the lack of effective organizations representing some interest groups; the lack of monetary compensation for members' time away from other, income-generating, activities; and the limited background many stakeholders have in the technical aspects of forest management.

### *The constraints of poverty*

The socio-economic studies carried out for the Buff Bay and Pencar watersheds (Mills 2001, Wright 2002) indicate that a substantial portion of the population of the watershed may be constrained from participating in the LFMCs, or taking advantage of what they have to offer, due to poor education, the limitations and daily demands imposed on their lives by poverty, and their lack of involvement in the organizations, except for churches, that comprise the membership of the LFMCs.

### *The lack of effective stakeholder associations*

Many of the local organizations that are or could be members of the LFMCs are dormant, weak, or represent the interests of a small number of individuals. Very few of the LFMC member organizations appear to be active and democratic representatives of stakeholder interests (Mills 2001), and there are no groups that represent the interests of a number of critical stakeholder groups, such as private forest land owners or timber and fuelwood harvesters.

### *The lack of monetary compensation*

Although an effort has been made to arrange the times of LFMC meetings around members' schedules, members must sometimes make a choice between their work and their participation in meetings. Given the already marginal returns that many in the watershed are making from farming, any time away from work can be a sacrifice if it does not result in some financial reward.

### *Limited technical knowledge and skills*

The Buff Bay/Pencar forest management plan is meant to be the channel for local stakeholders, through the LFMC, to contribute to management planning. But the draft Plan, which was written by trained foresters and includes complex data and treatment prescriptions, is too technical to be accessible to most laypersons. The FD's decision to prepare a simplified version of the Plan for local use does not address the fundamental problem, though. In order to contribute meaningfully on technical issues, the LFMC members need to be educated on those issues and trained in forest

management methods and techniques. This would be a long-term and costly process, but one that could substantially increase the usefulness of the LFMCs and assure that they do not become simply rubber stamps for the Forestry Department. In the interim, perhaps reorganising the Plan document into technical and non-technical sections could serve the same purpose as a “popular” version without the hint of local conceptual deficiency, while reducing the paperwork.

## **10 Forests and sustainable livelihoods: what can the LFMCs do to address livelihood and poverty issues?**

Studies carried out through this project for the Buff Bay and Pencar watersheds (Mills 2001, Wright 2002) confirmed and expanded upon the findings of the socio-economic study carried out in 2000 by the FD through the TFT project (FD/TFT 2000). As one of the poorest areas in Jamaica, the development needs of the watershed are very real. The portion of the population living in or at risk of falling into poverty stands at around 60% for the Pencar sub-watershed (Mills 2001) and just over 50% for the Buff Bay sub-watershed (Wright 2002). The percentage comprising the educated “middle class” most likely to be active in community organization and development, is extremely low, estimated at 10% or lower. High levels of illiteracy (estimated at close to 50%) and of out migration by educated members of the community impede economic advancement (Mills 2001, Wright 2002). Much of the poverty is concentrated in the upper watersheds, where community infrastructure, including transportation and communication networks, is poor and where watershed management issues are most critical. This portion of the population is highly dependent on farming, eking out a living on small hillside plots.

The causes of poverty in the watershed are diverse, but typical of similar parts of Jamaica. They include:

- marginal returns from farming, largely as a result of eroded soils due to poor land use on steep slopes;
- lack of adequate farmland and/or secure tenure;
- poor access to resources and markets (a bridge washed out for over two years in the upper watershed had a substantial negative impact on local income);
- limited educational opportunities;
- vulnerability to loss from landslides and flooding (which may be tied to deforestation and poor land use), praedial larceny, and natural disasters;
- attitudes of dependency.

Despite traditions of occupational multiplicity (FD/TFT 2000), the poor and near-poor in the watershed appear to focus their livelihood strategies on agriculture, and do not consider the use of forest resources, aside from the capturing of forest land for farming, as a compelling option. Opportunities for improving livelihoods through the use of forest resources do however exist, and some are currently being developed by both LFMCs.

In the Pencar sub-watershed, plans for the establishment of a nursery and pilot agroforestry plot in the Enfield/Fort Stewart area are well advanced. According to project documents, the objectives of this project include providing local economic opportunities; improving the economic status of local women and men; and preventing out migration of youth. The project

includes opportunities for training of local youth, women, and farmers in nursery management and agroforestry techniques, and long-term plans would include an ecotourism component.

The Buff Bay LFMC is looking into the development of an ecotourism and sustainable forestry project to include cabins, nature trails, scenic and educational spots, as well as recreational areas. The structure and management will draw lessons from the Pencar nursery experience particularly in terms of project and financial management.

In both these projects, forest reserve land is being allocated for sustainable economic uses. The benefits that will accrue will depend on the measures that are designed to attract the involvement of target groups and the ways in which the project is implemented. As the first efforts in this direction, they need to be closely monitored and their impact on the target beneficiaries periodically evaluated. If these projects are successful, the lessons learned can be applied to other initiatives involving sustainable uses of forest reserve land.

Although timber stealing is a problem, managed extraction of timber and other forest resources is a potential forest use that is not currently being exploited. The system for purchasing timber in reserves has been in place since the 1950s and does not favour the small producer with limited resources since it requires payment in advance. It may however be possible, government financial regulations permitting, for the FD to take a more open and proactive approach by advertising sales of trees and decentralizing payment and administration. The LFMCs could assist by identifying local users of wood for construction, furniture, or craft who could benefit from sales.

## **11 Lessons and future needs**

*11.1 Stakeholder bodies comprised of organizational members may fail to include important stakeholders who are not organized into formal groups, and may mimic the power structures within society by giving the most powerful the greatest voice while leaving out the poor and marginalized.*

In order to efficiently fulfil its advisory and monitoring roles, the LFMCs have attempted to use local and national organizations to represent stakeholder interests, and by giving each an equal seat doing so in an equitable manner. But organizational members are not equally capable of representing their constituents, nor are all stakeholders represented by organized groups. And some stakeholders, including those with political connections or legal mandates, are able to influence decisions regarding the use of forest resources through means other than the LFMC. Such stakeholders may actually prefer not to participate in the LFMCs, which might require them to make trade-offs that they would not otherwise need to make.

In the case of the Buff Bay and Pencar LFMCs, those stakeholders who already have the greatest ability to influence decision-making – government, big agriculture, and the national conservation NGOs - have strong and well-informed representatives. One reason that a number of these representatives do not regularly attend LFMC meetings is likely to be that they have other, potentially more efficient, avenues for influencing decisions on forest management. Other powerful stakeholders that have chosen not to be involved in the LFMCs, except perhaps by low level personnel such field workers or headmen, are the landowners who largely control the

coffee holdings in the watershed. These individuals generally do not reside in the watershed but exploit the resources in ways that can be detrimental to it and its occupants.

Some of the stakeholders most directly affected by the management of the watershed, farmers and local residents, are largely represented by weak and often undemocratic organizations with ineffective systems for feedback to their members. The poor and marginalized (including illegal residents and forest resource users) who tend not to join local organizations, have no representation at all (except indirectly through the rural development NGOs BUBADAC and St. Mary Rural Development Project). And some key stakeholders, including private forest owners, tourism interests, and wood harvesters, are not organized into formal groups and so are unrepresented.

Given this scenario, it is easy to imagine the LFMCs becoming dominated over time by their most powerful members, who would be able to use them to give the stamp of stakeholder approval to decisions. Guarding against such an eventuality will require efforts on two fronts: on the one hand, finding ways to equitably involve all stakeholders, including those not represented or poorly represented by existing organizations; and on the other hand, increasing the role and authority of the LFMCs to make them the most legitimate avenue for stakeholder input into forest management planning. Changing existing power balances needs to be approached with caution, however, as it often can have unintended side effects, particularly when weak organizations are propped up without an understanding of the (often very valid) reasons for their weakness, or when new organizations are created to represent the interests of stakeholders who have themselves not seen any reason to organize.

#### *11.2 The objectives of collaboration among stakeholders should determine the design of management arrangements, as well as the roles of each party.*

The variations in the descriptions of the role of the LFMCs in different documents written by different people indicate that their objectives were not clearly defined and agreed to before their structure was determined. At the outset, they were variously described as management partners, key informants, and advisors to the FD in matters relating to the management of the forest reserves in the Buff Bay/Pencar watershed. These are important distinctions that would substantially affect the way the LFMCs evolve and function. Through the reflections and dialogue that have occurred over the past two years, a general consensus seems to have emerged among the LFMC partners that the groups will initially function largely as key informants and providers of feedback on FD policies and plans; will eventually, when their own understanding of forest management issues and needs evolves sufficiently, become advisors on matters related to the local forest management plan; and will also occasionally collaborate with the FD on specific management projects and activities. If that is indeed the understanding, it would be useful to revisit the structure of the LFMCs and the plans for their development, in order to assure that they are the most appropriate for filling these roles.

One specific question to address is that of their level of autonomy. There has been an assumption that the LFMCs will eventually become financially and administratively independent of the FD. At several meetings, the question of financial sustainability has been raised, and it is clear that there are no easy solutions. In fact, seeking financial independence could become an end in itself for the LFMCs, diverting them from the roles they are intended to play.

*11.3 Participatory management that includes ongoing stakeholder negotiation offers the opportunity and challenge to build flexibility and dynamism into the management process.*

One of the most important roles of the LFMCs is to provide a forum for stakeholders to advocate for different uses of forest resources and approaches to forest management, within the overall framework of the Forest Act and National Forest Management and Conservation Plan. Already participants at LFMC meetings have raised such issues as the granting of licences for timber extraction, the allocation of forest land for ecotourism and agroforestry, and the acquisition of lands that had been leased to FIDCO. As economic, social, and environmental conditions change in the watershed, the forest management issues of interest to local stakeholders will also change. And as the capacity of local stakeholders to engage in forest management activities increases, so will their potential to take on new roles and responsibilities.

The LFMCs offer a unique opportunity for continuous negotiation among stakeholders on their rights to and responsibilities regarding the management and use of forest resources, but this means that the basis of such negotiation, the Buff Bay/Pencar watershed forest management plan, cannot be a document that is set in stone for a defined period of time, but instead must be a dynamic tool that can respond to changing conditions and needs within the context of defined (although periodically reviewed and renegotiated) conservation and sustainable development objectives. The detailed data collected for the plan on land use capability and options can serve as the basis for negotiated decisions on forest management strategies and the roles and responsibilities, as well as rights and returns, of stakeholders. Such an approach would certainly be a more technically challenging one for the Forestry Department, but could result in a number of important benefits, particularly in terms of sustaining stakeholder involvement and of addressing critical social issues and needs. It would also place the LFMCs on the cutting edge of participatory forest management, not only in Jamaica and the Caribbean, but globally.

Processes of continuous improvement must be accompanied by effective systems for ongoing monitoring and evaluation. One effective mechanism already being used is periodic self-assessment, which has been a part of some LFMC meetings. There is a need however for the establishment of baselines against which to measure change, as well as accountable procedures for following up on the recommendations and issues that come out of evaluation exercises.

*11.4 A commitment to participation requires forest management agencies to rethink their structures, their methods of operation, the allocation of their budgets, and the responsibilities, training requirements, and working conditions of their staff.*

It is highly likely that the Buff Bay and Pencar LFMCs would not have gotten off the ground without the supplemental human, technical and financial resources offered by the TFT project. Even with this support, the local forest officers have struggled to support the process with inadequate staff (particularly since the extension officer assigned to the area was relocated to another watershed) and funds for travel. The implementation of effective participatory approaches in geographically extensive areas with a diversity of stakeholders and issues requires a significant presence on the ground of individuals who are willing to work odd hours and be generally flexible regarding their conditions of employment. It is extremely fortunate that the FD staff working in the Buff Bay/Pencar watershed have these qualities, which have not yet emerged in other areas where the establishment of LFMCs is being pursued.

The training that was provided to local staff in forest extension, socio-economic survey methods, participatory forest management, conflict management, and other subjects appears to have contributed to their enthusiasm for the work, as well as to their effectiveness; and similar courses of training will be necessary for staff in all areas where participatory forest management approaches are being considered. Some progress in this direction has already been made, with officers from all Regions having participated in training courses in forest extension, conflict management and other relevant areas.

It will nonetheless be difficult for the FD, given its budgetary constraints (which appear to be increasing), to replicate the labour-intensive approach that was taken in Buff Bay/Pencar in other watersheds. Other approaches, including partnerships with organizations already working with a number of local stakeholders (as is being done with the Dolphin Head Trust and with the Southern Trelawny Environmental Agency in the Cockpit Country region), are likely to be needed in order to maximize the use of limited resources. Future progress also will depend on defusing the tension between FD management and field staff that has developed as a result of management's inability to provide all the resources demanded by the field, including support for travel and compensation for extra time worked. There is an obvious need for more transparency regarding budget allocation decisions as well as more opportunities for frank and open dialogue between the management and field staff, to help both sides better understand the position of the other and to seek workable solutions.

In implementing its strategies of community participation and collaborative management, the FD needs not only well-trained forest officers but also persons with social science and community development training and skills, to design and monitor interventions, provide basic training and guidance to staff, and analyse outcomes. The existing post of Rural Sociologist needs to be made a permanent part of the staffing structure and additional positions may be required in the future.

*11.5 The enabling requirements for participatory forest management include the full, knowledgeable, and equitable participation of all appropriate stakeholders, requiring attention to the capacity needs of different stakeholders and the balance of power within the arrangement.* Equity among stakeholders is an important principle of participatory forest management, and it requires that all partners come to the table with a power base of knowledge, skills and resources. The current situation within the Buff Bay/Pencar LFMC is that the FD is holding most of the cards. It has the legal mandate to manage the forest reserve as well as the bulk of the technical knowledge, skills and human and financial resources. Achieving equity therefore must entail strengthening the positions of other stakeholders through such measures as:

- C training programmes to enhance LFMC members' understanding of forest management issues and needs
- C amendments to the legal framework to make delegation and co-management possible when they offer the most appropriate option
- C opportunities for partners to develop skills in aspects of forest management through training and field experience
- C commitment on the part of the FD to accept and when possible act on the recommendations of the LFMC, to the extent that they are compatible with the Forest Policy and the National Forest Management and Conservation Plan.



*11.6 Incentives and longer-term benefits are the key to getting and keeping stakeholders involved.*

The LFMCs will only succeed if they are perceived as responding to local issues and demands. Sensitisation programmes are required to demonstrate linkages that make sense to people in the watershed, such as the link between good forest management and the provision of clean water or control of landslides and erosion. Programmes of this nature could offer valuable opportunities for collaboration with other agencies including NEPA, RADA, and local schools.

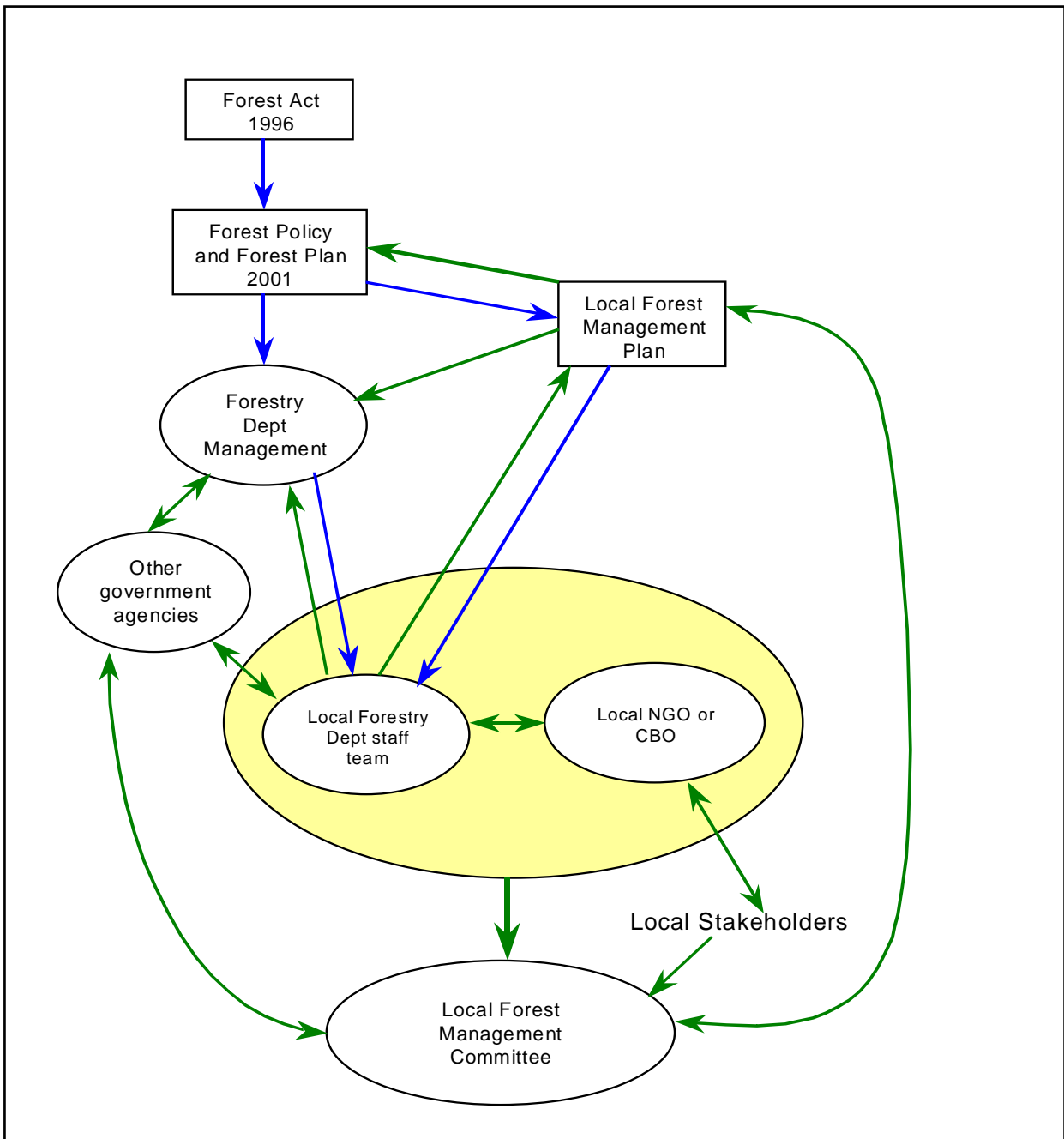
As noted in the local forest management plan, it will also be necessary to provide incentives and rewards for participation by local stakeholders. The only incentive currently in use is the provision of tree seedlings, and while this programme has been well received by local farmers, it will not be adequate to sustain interest and support over the long term. The local forest management plan offers the possibility of a range of incentives, particularly in terms of preferential access to forest resources for uses that are compatible with management objectives. Other potential rewards could include opportunities for specialized training and the provision of technical assistance in matters related to watershed protection and soil conservation. It should be the responsibility of the LFMCs to identify potential incentives based on the interests and needs of stakeholders.

Finally, there is the special issue of poverty in the watershed. The National Forest Management and Conservation Plan implicitly recognizes that a number of forest management issues are linked to the constraints that poverty imposes on local farmers and other residents, and sees the LFMCs as one mechanism for addressing these poverty-related issues. Poverty in the watershed is the result of a complex mix of factors, most of them beyond the capacity of the FD or the LFMCs to address. However, it is possible and would be desirable to insert a “pro-poor” dimension when determining how and by whom forest resources might be used, as well as the target beneficiaries of incentives such as training. The LFMCs could also serve as advocates for broader watershed management issues of relevance to the poor through the proposed link to the National Integrated Watershed Management Council (see Figure 4).

*11.7 The arrangements for stakeholder participation in forest management need to be based on the local institutional landscape, which will vary from place to place.*

In designing the Buff Bay and Pencar LFMCs, the FD took advantage of the numerous community-based organizations in the watershed to create an organization-based structure for the committees. While this design has not been fully effective in representing stakeholder interests, it has respected and built upon the local institutional context. Field work in other areas may indicate different directions, and the FD needs to be open to the possibility that a LFMC comprised of local CBO members and other interested parties is not the most appropriate model for every watershed. Another option might be an arrangement whereby a respected local NGO would establish and provide the secretariat for a LFMC (see Figure 6). Alternatively, the recommendation that Parish Development Committees could take on the role of LFMCs (ARD 2001) could be considered in areas where the Committees are functioning and legitimate representatives of local stakeholder groups. Many other options are also possible; what is important is that the FD enter into processes of engagement in watersheds and other management areas without a preconceived structure for stakeholder involvement in mind.

**Figure 6**  
**A possible alternative institutional landscape for a LFMC**



There are nonetheless many lessons to be shared between different places. The design of effective interventions in other watersheds could be considerably helped by systems for sharing experience between watersheds. These could include exchanges between members of FD staff or field visits to allow LFMC members and other local partners from one area to meet their counterparts in other areas. They could also include seminars, field days, and written assessments to permit experiences to be more broadly shared with FD staff.

*11.8 The influence of external factors, including political processes and international assistance projects, needs to be understood and taken into account in the design of participatory approaches.*

The quality and flexibility of the technical assistance provided by TFT, as well as the excellent working relations between its staff and the Forestry Department, have made critical contributions to all aspects of work in the Buff Bay/Pencar watershed. While the value of this assistance to the FD is enormous, it also presents some dangers for the future by creating standards that it may not always be possible to meet. One example is the Buff Bay/Pencar watershed forest management plan, which is the result of extensive research on every aspect of forest management relevant to the watershed and which meets international standards in its levels of detail and specificity. Even given the TFT assistance, the preparation of the plan was so labour-intensive that its completion was substantially delayed, possibly to the detriment of the development of the LFMCs. In the design of future local forest management plans, the FD will need to take into account both its own technical limitations and the potential for a more “continuous improvement” approach to management planning that participatory forest management offers.

Although the work in Buff Bay/Pencar has not (yet) been subjected to political interference, democratic processes such as the LFMCs have a high likelihood of being co-opted, particularly in such a politically charged society as Jamaica. In designing mechanisms for participatory forest management it is important to take account of local political factors and to involve political actors in ways that balance their influence with the objectives and priorities of the other stakeholders. It is also necessary to be mindful of political undercurrents that may be affecting the operations and decisions of the LFMCs to assure that they do not result in the marginalisation of some stakeholders.

The LFMC experience has the potential to influence the national political context, and the views of politicians, in ways that are favourable to participatory approaches. The feedback loop from the LFMC through the local forest management plan to the Forest Policy that is identified in Figure 5 is the mechanism for policy influence at the level of forest management. Influencing broader national policies will require that the LFMC experience be broadly shared and used as a tool for sensitisation and advocacy. Although such advocacy is outside of the mandate of the FD, the LFMC experience could be drawn on by NGOs and others involved in policy advocacy in Jamaica.

*11.9 Forest management that benefits stakeholders cannot be separated from other aspects of environmental management or local development, and requires partnerships with a diversity of agencies and sectors.*

The results of the self-evaluation of the LFMCs in February 2002 show that the issues of interest to members cover a much broader scope than strict forest management. Members demonstrated an understanding that the achievement of forest management objectives is related to, among

other things, soil conservation in the watershed, public awareness in the schools and local communities, provision of local economic opportunities, protection of rivers and fauna, and capacity-building of local organizations. None of these are issues that the FD is equipped to tackle on its own, and several fall outside its mandate and within that of other agencies.

This confirms the need for the FD to work harder to involve other government agencies in the development of the LFMCs. It also points to a need for a range of new partnerships, with government agencies and non-governmental organizations dealing with environment and development issues. Programmes to address issues of public awareness and land management practices could for example be developed in collaboration with NEPA, RADA, the local environment and rural development NGOs, Parish Councils, and schools.

## **12 Recommendations**

The following recommendations are offered to the Forestry Department for consideration:

1. *Make the LFMCs a vehicle for a continuous improvement approach to management planning.* Help build the capacity of the LFMCs to assist with preparing local forest management plans and monitoring their implementation, by making the format of the plans more flexible, dynamic and accessible to laypersons, and by providing training to LFMC members in forest management skills and methods. Develop systems for the continuous use of the self-evaluation activities the LFMCs have carried out, as well as monitoring mechanisms to assure that their results are used.
2. *Give the core field staff who have been involved in the development of the LFMCs a role in building the Department's capacity in participatory forest management.* Use their experience to train others in the Department on participatory approaches and outreach skills. Provide opportunities for dialogue between management and field staff regarding allocation of resources to support fieldwork, and more transparency regarding budget decisions.
3. *Build on success in increasing local awareness by developing with RADA, NEPA, local NGOs and the LFMCs, a watershed management extension and awareness programme for local farmers.* Together with the LFMCs, identify both short and long term incentives for stakeholder involvement in forest management and incorporate them into the local forest management plan. (A section on incentives is already included in the draft plan, but it needs to be developed further.)
4. *Learn from and build upon the experiences of the two sustainable economic development projects the LFMCs are now embarking on.* Based on those experiences, continue to identify, in consultation with the LFMCs, other economic opportunities offered by the local forest management plan and the measures needed to make them available to local people. Include a "pro-poor" perspective in decisions about the allocation of forest resources, to assure that they benefit those who need help the most.
5. *Establish strategic partnerships with effective local NGOs to reach out to unorganized stakeholders.* In some watersheds NGOs could also take on mobilization activities and serve as the secretariats for LFMCs.

6. *Use the LFMC experience as a tool for policy reform*, by feeding its lessons into national policy forums such as the National Integrated Watershed Management Council, and by documenting it for use in advocacy campaigns of NGOs and others. Encourage other government agencies to become more involved, since the issues being raised by the LFMCs often require an interagency response.

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## **Appendix A: Results of stakeholder expectation exercises**

### **Pencar LFMC**

The stakeholders attending the Pencar LFMC meeting at the St. Theresa's Catholic Church, Annotto Bay on 8 March 2001 were divided into three groups and asked to identify their expectations regarding the LFMC. Time allotted was ten minutes; there was no discussion of the issues listed. The stakeholders were divided into groups according to geographical contiguity, proximity and interests. The Fort George group comprised persons west of the Pencar River (Camberwell, Long Road, Baxters Mountain, Pleasant Hill and Fort George) and the Epsom/Enfield group those east of the River. The Forestry Department's Eastern Region represented a distinct interest group. The results of the exercise are as follows:

#### ***Fort George Group***

1. Community management responsibility
2. Informed entry into the forest area
3. Greater community involvement in watershed area
4. Economic benefit to community e.g. tree planting
5. Protection of watershed
6. Appreciation of forest management
7. Responsibility, care and interest in the forest
8. Protection of species
9. Model watershed project
10. Educational awareness by youth in the community
11. Ecotourism development and employment for community
12. Environmental consideration and development

#### ***Epsom/Enfield Group***

1. Better environment through community awareness
2. Creation of employment
3. Building sound financial stability in order to create expansion of activities in the area
4. Design and implement rural development
5. Better communication

#### ***Forestry Department (Eastern Region)***

1. Cooperation - passing on information about larceny, illegal operations, fires etc.
2. Some sort of autonomy - technical guidance
3. Seek to develop some programmes - utilisation of resources, timber harvesting
4. Involvement in private farming (make recommendations)
5. Involvement in protection (animal grazing)
6. Eventually some form of legislation - allowing the LFMC to manage resources
7. Flow of knowledge and technical information from the LFMC to the community

### **Buff Bay LFMC**

The same exercise was carried out at a meeting of the Buff Bay LFMC at the Tranquility Baptist Church on 16 March 2001. As at the Pencar LFMC meeting, stakeholders were divided into groups based on geography (upper and lower watershed), with Forestry Department staff forming their own group. Results of the exercise were as follows:

#### ***Tranquility Group***

1. Control deforestation
2. See more timber trees planted to protect the watershed, prevent soil erosion
3. Source of income through lumber production, employment, seed collection, seedling production and eco-tourism
4. Protection of watershed from deforestation
5. Provide safe habitat for animals

#### ***Bangor Ridge Group***

1. Protect mature trees from praedial larceny
2. Provide materials for building purposes
3. Involvement of more youths
4. Prevent soil erosion caused by deforestation
5. Employment

#### ***FD Staff (Eastern Region)***

1. Better community relations with special emphasis on youths.
2. Improved watershed management
  - Better water quality
  - Less soil erosion through good farming practices
  - Improved soil fertility
3. Economic benefits for the community
4. Improved forest protection
5. Coordination and cooperation between government agencies, NGOs operating in the area
6. Good political will
7. Good solid waste management to prevent water pollution mountain-to-sea

#### ***Summary of expectations***

Following the group exercises, the results were summarized under five major headings:

1. Watershed protection
2. Forest conservation and protection
3. Economic benefits to community
4. Increased benefits from forest resources
5. Social development



## **Appendix B: Results Of Buff Bay/Pencar Joint LFMC Review 2002**

At the Joint Buff Bay/Pencar LFMC Meeting, held in Annotto Bay on 8 February 2002 the following are some issues emerging from a brief review by participants of the LFMC, conducted through small group discussions. The matters on the way forward are generated from the floor of the conference.

### ***Positives:***

1. Meetings are informative and educational
2. Activities will enable better watershed management practices
3. LFMCs can help in reforestation of deforested areas
4. LFMCs are increasing community awareness of forestry practices
5. Individual farmers benefit through distribution of seedlings
6. Community exposure to environmental practices has been enhanced
7. There is progress in achieving the objectives of LFMCs' mandate
8. The LFMCs facilitate regular FD activities e.g. private planting programme
9. LFMCs are contributing to the implementation of the national watershed policy

### ***Negatives:***

1. Communication between members is difficult because of geography
2. There is insufficient inter-agency and NGO participation
3. Some expectations are unrealistic
4. Local employment opportunities in the FD are limited and fewer than before the demise of FIDCO
5. There is sometimes poor communication between FD and local communities
6. The LFMCs lack funding
7. There is not enough support/attendance by residents
8. The pace of advancement/development has been slow, for example, in terms of generating benefits
9. The feedback on the LFMCs has been limited (no complaints)

### ***The Way Forward (and Things to do to Make Things Better):***

1. Need to target the youth, especially the ones that are not in school or part of youth groups
2. Need to adjust dates and time of meetings to attract a wider cross-section. LFMC can have their own meeting, promoting their activities
3. Need to find ways for the LFMCs to enhance/improve failing/ailing community groups
4. Public awareness staff of FD need to play a more significant role in advertising the LFMC and its activities in the communities of the watershed e.g. open air meetings
5. Need for wardens to serve a protection function - game and river wardens
6. Need to find innovative ways to utilize bamboo e.g. seed trays, picket fences to protect planted areas, to generate income
7. Need to improve use and permit sale of second grade lumber
8. Need to increase inter-agency involvement
9. The economic and social benefits must be highlighted in the implemented activities