



Caribbean Natural Resources Institute (CANARI)

FORESTS AND LIVELIHOODS PROGRAMME



Consolidating Change: Lessons from a Decade of Experience in Mainstreaming Local Forest Management in Jamaica

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Acronyms

CDC	Community Development Council
CIDA	Canadian International Development Agency
FD	Forestry Department
EFJ	Environmental Foundation of Jamaica
FCF	Forest Conservation Fund
FIDCo	Forestry Industry Development Company
JAFARMS	Jamaica: Farmers Access to Regional Markets
IICA	Inter-American Institute for Cooperation on Agriculture
LFMC	Local Forest Management Committee
MOU	Memorandum of Understanding
NFMCP	National Forest Management and Conservation Plan
NGO	Non-governmental organisation
NSWMA	National Solid Waste Management Agency
PARE	Protected Areas and Rural Enterprise Project
RADA	Rural Agricultural Development Agency
SBAJ	Small Business Association of Jamaica
SDC	Social Development Commission
TPDCo	Tourism Product Development Company
TFT	Trees for Tomorrow
USAID	United States Agency for International Development
WROC	Women's Resource and Outreach Centre

Executive Summary

Local Forest Management Committees (LFMCs) are the main mechanism for formal community participation in forest management in Jamaica. These committees are set up in critical watersheds and are intended to play monitoring, advisory, and management roles within their local area. When the first two groups were established in 2000, the approach was a departure from how forest management was traditionally done in Jamaica and indeed, along with excitement and curiosity about what working with communities in this way might bring, there was uncertainty, scepticism and even resistance to the new approach among some staff. But ten years later, the approach is no longer considered a new way of working, but rather is accepted as part of how the Forestry Department operates.

There are eight LFMCs now operating in Jamaica and the Forestry Department aims to have 12 by 2013. If this target is met, 46 percent of Jamaica's 26 defined watersheds will enjoy local arrangements for management through the LFMC mechanism. The first two were launched in 2000 (Buff Bay and Pencar) and the most recently established to date was launched in March 2010 (Spring Garden/Plantain Bank).

Legislation and Policy Context

Jamaica's forest legislation and policy make specific provisions for stakeholder participation in management and decision-making about the use of forest resources. Within the parameters set out by the Forest Act (1996), the 2001 National Forest Management and Conservation Plan (NFMCP) and Forest Policy identify stakeholder and community participation as key implementation strategies towards meeting the country's forestry and watershed management goals, with the LFMCs as the main vehicle for doing so at the local level.

The current Strategic Forest Management Plan 2009 – 2013 also places importance on participatory approaches to forest management, building on the 2001 NFMCP and Forest Policy. The new plan, however, makes stronger statements about community participation in general, and the LFMCs in particular, and includes performance measures related to the latter. It places participatory forest management in a livelihoods framework, together with capacity building for sustainable livelihoods.

The LFMC model

The principles of sustainability, broad-based engagement, relationship building and responsiveness guide the Forestry Department in its work with the LFMCs.

Its strategy has been to:

- establish LFMCs in areas where forest resources have been subjected to human-induced degradation, particularly where the adjoining communities have played a role in this;
- reconcile forest sustainability and biodiversity conservation with the livelihood needs of the communities while reducing pressure on the resource;
- manage expectations and stimulate community responsibility for resource mobilisation by taking into account the existing financial and human resource situation;
- increase appreciation of forests and of the principles of forest management through training; and
- commit to the long-term viability of the LFMCs while placing an emphasis on community-led resource mobilisation.

The Forestry Department uses a three-phased approach for establishing the LFMCs. In phase one the focus is on getting to know and understand the community and its concerns, while raising awareness about forest management and sustainable livelihoods.

In phase two, the emphasis is on engaging the community through a series of consultations in order to take action towards establishing an LFMC. Discussions move out of the individual groups and the engagement becomes community-wide. Through the consultative process, community members begin to formulate common goals for sustainable forest management and livelihoods, and begin to develop collective plans.

The launch takes place in phase three and is an iterative process. The group and the Forestry Department go through a three-step validation process to ensure there is clarity and consensus on the way forward. Two meetings, known respectively as Preliminary 1 and Preliminary 2, are held by the group prior to the launch event. Senior members of the Forestry Department staff, in addition to the Forestry Department animation team also attend these meetings. Once there is satisfaction on both sides (community and Forestry Department) with what is being proposed and how what is being proposed will be done and there is a demonstrated level of commitment on the part of the community, the LFMC is launched.

The Forestry Department has contributed to the sustainability of the LFMCs in various ways, including: the participation of Forestry Department personnel in regular LFMC meetings and special events; the provision of technical advice and support for the implementation of community-led reforestation, agro-forestry, and eco-tourism initiatives; and the provision of project support, including assistance with fundraising. There is also an ongoing training and capacity-building component to the Forestry Department's accompaniment of the LFMCs. Integration with other Forestry Department initiatives, such as the Private Planting Programme, the provision of seedlings for nurseries and demonstration plots and providing in-kind support such as the provision of lumber and transportation for people and materials, also contribute to sustainability.

Another significant contributing factor to sustainability is that the Forestry Department has worked in partnership with state, donor and non-governmental organisations at all stages of animation. Organisations such as the Social Development Commission (SDC), the Women's Resource and Outreach Centre (WROC), the Department of Health, the Rural Agricultural Development Agency (RADA), the Canadian International Development Agency (CIDA), the United States Agency for International Development (USAID), and the Windsor Research Centre have generously given of their resources.

Assessment of the LFMCs

The widely-used typology developed by Jules Pretty (1995) has been used as the framework for assessing degree and kind of participation of the LFMCs. In this context, the predominant form of participation that characterises the participatory arrangement that the LFMCs facilitate is *functional participation*. The LFMCs do not participate in management decision-making, which is retained by the Forestry Department, although they do inform it. And even though the LFMCs establish their priorities for local action and develop local plans of action, these fall within the parameters set by the Forestry Department, which the LFMCs have played no part in developing. The management structure defined by the Forest Act (1996) is a centralised one, albeit one that allows for community input (Geoghegan and Bennett, 2002).

Although functional participation predominates, this is not the only form of participation that the LFMCs facilitate. There are also elements of interactive participation and self-mobilisation, particularly in the LFMCs's broader community development role and functions, where they set their own agendas within the wider livelihoods framework. While the LFMCs are a mechanism for community participation in forest management, they are also a vehicle for advancing community development aims, some of which go beyond the direct scope of forest management. The experience of the LFMCs in Jamaica illustrates that community participation in processes can be quite nuanced, with varying degrees of participation coexisting with each other, even if a particular form of participation predominates.

The role and function of the LFMCs, as set out in the Forest Act (1996), fall broadly into the categories of providing advice to the Forestry Department, assisting with management of forests, and advocacy and public education, but there has been some lack of clarity about how what is defined on paper translates into action on the ground.

The advisory role of the LFMCs has been limited. The advisory function has mainly been at the field level, with the LFMCs making suggestions to foresters and wardens, including through LFMC meetings. The main mechanism that was identified for facilitating the advisory function of the LFMCs was the local forest management plan. In fact, the two most important roles initially proposed for the LFMCs were assisting with the development of the plans and monitoring their

implementation (Headley, 2003:4). However, there have been challenges associated with developing the plans and putting them into operation.

Although the management role of the LFMCs has been greater than their advisory one, there is unrealised potential in this area. The LFMCs have assisted with specific activities such as tree planting, weeding and maintenance but have not been given full authority for managing an area or for oversight of particular activities within an area. The LFMCs have been instrumental in reducing pressure on forest resources and reducing illegal activity in the reserves, but they have not played a formal role in patrolling or enforcement. In short, while the LFMCs may have been involved in forest activities, they have not been very involved in forest *management* activities.

Perhaps the role in which the LFMCs have been most successful is that of advocates for the forest and its resources. The LFMCs have become champions for the forest and for environmental stewardship. Most have a strong environmental education, awareness and outreach component and are active in area schools, churches and community groups. The LFMCs's education and awareness activities complement the Forestry Department's own awareness raising programme. Further, the LFMCs's education and awareness programmes have successfully influenced behaviours in the surrounding communities and created a demand for forestry services.

Social and Economic Impacts of the LFMCs

The livelihoods framework used in assessing the social and economic impacts of the LFMCs is based on the idea that human well-being is determined by the extent to which individuals and households have access to a range of types of "assets," be they human, social, political, financial, natural, or physical. These activities and the strategies for implementing them, in turn, lead to outcomes that include increased well-being, increased income, empowerment, improved health, and reduced vulnerability.

The LFMCs have contributed to asset building in the following ways:

- ***Human: Training and capacity building for farmers and community members.*** The Forestry Department has provided training for LFMC members in forest-related areas, and through partnerships with other organisations it has facilitated training for the LFMCs in other areas, such as small business development and operations, tourism and tour-guiding.
- ***Social: Organisational development and networking.*** The LFMC process has led to the formation of community groups that have been able to transcend established patterns of organising at the local level. Although local, the LFMCs have not been parochial in reach nor in the scope of activities pursued. By drawing on membership from individuals and organisations, the LFMCs go beyond the traditionally defined community interests, albeit to bring people together around a set of common stakes related to use of forest resources and forest management activities.

Increase in community confidence. Some groups have used the LFMC as a vehicle for improving services in their area, or for identifying solutions to non-forestry related problems. *Conflict resolution and mediation of disputes.* The LFMCs are also used as fora to air and resolve disputes, as well as mediate with state agencies. This has been the case in Buff Bay, in particular. The LFMC executive has, on occasion, approached farmers that are beginning to encroach on forest lands and encouraged them to withdraw. It has also helped mediate between local landowners and a state agency to clarify land ownership and tax obligations that were complicated by the closure of a state agency which had agreed to purchase the lands (see social and political assets below).

- ***Political: Influence on Forestry Department decision-making.*** The LFMCs have provided communities with an avenue to communicate their priorities to the Forestry Department, and this in turn has influenced the Department's decision-making. The LFMC communities are now perceived differently by foresters, are considered active co-stewards and are valued for the contributions that they have made to forest activities,

particularly their role in reducing illegal activity in the reserves and for their ability to leverage funding for forest and biodiversity conservation work from sources that are not available to the Forestry Department.

- **Natural:** *Access to forest lands.* The LFMCs have provided communities with a mechanism for formal access to forest lands and use of forest resources. In some instances this has regularised traditional use and access.
- **Financial:** *Access to funding.* The LFMCs have been able to raise funds from various local and international donors for their activities. To date they have raised more than US\$600,000 from various sources.

An examination of the strategies and activities undertaken by the LFMCs suggests groups have shown a preference for certain kinds of income-generating activities, notably ecotourism and agro-forestry, and little interest in lumber extraction and production.

- **Physical:** *Community infrastructure.* Several of the LFMCs have acquired infrastructure, such as an office, a gazebo, a nursery, a Visitor Centre and a greenhouse, through project funding for their activities.
- **Livelihoods outcomes**

In the area of livelihoods outcomes, the benefits of the LFMCs in the short term have been mainly in the sphere of building or enhancing community assets. The full potential for positive livelihood outcomes is yet to be realised. And indeed, except for the older LFMCs, it is perhaps unrealistic to expect any significant livelihood outcomes to have accrued to the communities as it takes time for any community development venture to mature and become self-sustaining.

Notwithstanding the limited tangible financial benefits of the LFMCs, the advantages of LFMC status are beginning to be more broadly recognised.

Impacts of the LFMCs on the Resource

There are no empirical data available from the Forestry Department to assess the impact of the LFMCs on the health and change in state of the forest resource, but anecdotal evidence from foresters suggests there has been improvement in the conditions of the resource. All LFMC projects incorporate reforestation components and even prior to getting grant funding, the LFMCs have been involved in tree planting on forest land on a volunteer basis.

The LFMCs have played an important role in forest protection. One of the areas where there has been a noticeable change has been in the incidence of illegal offences, particularly unauthorised timber extraction.

Impact of the LFMCs on the Forestry Department

The LFMCs have impacted the Forestry Department in significant ways. One is that the LFMCs are widely regarded as the “eyes and ears of the Forestry Department” by Department staff and Committee members. In areas where the LFMCs are established, the need for active enforcement by the forestry department has decreased.

The LFMCs have been good for the Forestry Department’s community relations and have helped transform the way the Department is viewed. LFMCs have been a direct link between the Forestry Department and communities, acting almost as agents of the Forestry Department at times.

Other ways in which the Forestry Department has been impacted include:

- the fact that decision-making is informed by community interests and not only by forest management considerations;
- Forestry Department staff members have developed an appreciation of the benefits of working with people to manage forests, and participation has come to be accepted as the norm;

- the Department has made an investment in training and capacity development so that staff can work effectively with communities; and
- the adoption of participatory forest management techniques has helped to bring out new competencies among Forestry Department staff.

Enabling factors

Some of the factors that have enabled the growth and development of the LFMCS include the following:

- *Legislative and policy environment*: Jamaica's forest policy and legislative framework are supportive of community participation and pending changes in legislation and at the institutional level within the Forestry Department point to a deepening of this support.
- *Leadership within the Forestry Department*. Incorporating community approaches to forestry required a cultural shift within the Forestry Department and the commitment of the senior management of the Forestry Department in bringing around this change was crucial. The Conservator's strong support and leadership in this regard has set the tone for the rest of the organisation.
- *Institutionalisation of Forestry Department involvement*: The institutionalisation of many of the elements of the Canadian International Development Agency-funded Trees for Tomorrow (TFT) Project has ensured that the LFMCS were not end of project orphans when the project closed in 2006. Animation and sustained accompaniment of the LFMCS have been integrated into the Department's operations. This commitment has translated into a significant investment of time, human and financial resources by the Forestry Department and partner organisations.
- *On staff sociologist*: Having a full-time sociologist on staff within the Department has allowed for a greater prominence of social and cultural issues in forestry and the building of "bridges of understanding" between foresters and communities adjacent to forests.
- *Availability of local funding for conservation and livelihoods*: The emergence of the Environmental Foundation of Jamaica (EFJ) and the Forest Conservation Fund (FCF) as local sources of funding has been an important development for community-level activity, particularly given their willingness to support both conservation and livelihoods. The FCF, for example, has channelled J\$45m/US\$529,723 into the LFMCS.

Lessons learnt

- The LFMCS experience has shown that ***communities are willing to participate in forest management activities, if given the opportunity to do so***. Communities that use forest resources will adopt and support sustainable practices if empowered to do so through formalised access to forest resources and if there are channels for communicating their concerns and value is placed on their contribution.
- ***Community initiatives for managing forest resources can support asset-building for sustainable livelihoods***. The nature of community assets or capital is such that they have a multiplier effect on household and community well-being. Mobilisation of community members around one issue can have spin-off benefits for other areas of community development.
- ***Income benefits are important to community groups, but they are not the only kind of benefits that matter***. Even without significant income benefits there has been a sustained and growing interest in the LFMCS programme. The capacity-building and other social and political benefits of the LFMCS at the individual and community levels are valued. Community and individual empowerment can be an important outcome.
- ***Community processes can be derailed if integrity and trust are compromised***. The experience in Pencar has shown that an early breach of confidence can set an initiative

back, particularly if little or no tangible income or other benefits have been derived from the process. There has been some level of loss of confidence and enthusiasm in the Cockpit Country because of the problems of misappropriation of funds there, but swift and decisive action and the improvement of accountability mechanisms within the groups has minimised the negative fall-out and ultimately strengthened the groups' management capacity.

- **Capacity constraints of the LFMCs influence the pace and scope of their development.** The constraints faced by the LFMCs are no different from the constraints faced by community-based organisations. Most of the LFMCs have a limited capacity for group management and development; organisational management, including financial management; and the technical side of forest management and stimulating livelihood outcomes. There is a need for stronger administrative and management procedures and internal accountability mechanisms.

And although strong leadership is emerging in some of the LFMCs, there is a need for succession planning as well as a need to go against the trend of high levels of group dependency on leaders. In some instances it has been challenging for the LFMCs to identify sustainable livelihood opportunities and strategies for taking advantage of them. Additionally, all-volunteer community groups are constrained in the amount of time and effort that members can dedicate to volunteer activities, especially when participation in these activities means forgoing income or neglecting a component of one's livelihood strategy.

- **The LFMC approach is a long-term investment of time, human and financial resources.** It requires strong leadership and institutional buy-in at the level of the Forestry Department. At the level of the community, it requires commitment over the long term.
- **Forestry Department personnel's engagement with LFMCs has to be consistent and proactive.** Notwithstanding the acceptance of participatory forestry within the Forestry Department, there is a lingering perception among some foresters that community mobilising and organising is the purview of the Rural Sociologist. Where local foresters have played an active and integral role in the mobilisation and accompaniment of the LFMCs the outcome has generally been better than where there has been little or no Forestry Department engagement. Even minimal networking activities can yield significant results. An initial period of distrust or strained relations between Forestry Department personnel and the community can be hard to overcome, even when personnel changes.
- **Participatory processes take time and do not necessarily fit bureaucratic time frames.** Building new community organisations takes time, as does the process of engaging and securing the buy-in of major stakeholders. And even when this buy-in exists, certain decisions may require negotiation among different interests. Additionally, as the LFMCs are all-volunteer groups (with the exception of Buff Bay and Dolphin Head, which both have paid staff), the planning and implementation of project activities have to fit in and around how members organise their livelihood strategies. Decision-making processes may therefore be lengthier than in a 'corporate' environment.

Recommendations

- **Increase Forestry Department capacity to support sustainable livelihoods**
The expanded role that Forestry Department staff are expected to play in supporting community forestry in implementing the Strategic Forest Management Plan 2009 – 2013 and the inclusion of community development/sustainable livelihoods as a performance measure will demand that local forest officers have greater community animation capacity and skills. It will also be important that the terms and conditions of employment of the relevant personnel facilitate their expanded community forestry role.

- ***Improve Forestry Department mechanisms for monitoring and evaluating the impact and effectiveness of the LFMCs***

The Forestry Department should consider introducing internal accounting and monitoring procedures to track inputs and measure social forestry impacts. By adapting and mainstreaming participatory forestry and including sustainable livelihoods and community development performance measures, the Forestry Department now has social objectives in addition to forest and biodiversity conservation objectives. It will be important for the Forestry Department to monitor both. Indeed, the livelihoods framework offers a useful starting point for tracking social and economic impacts. Equally important is being able to generate empirical data about how the LFMCs affect or contribute to the health and condition of forest resources. The systematic documentation of processes and outcomes will contribute to the Forestry Department's monitoring and evaluation processes as well as to building the body of knowledge about participatory forest management in the Caribbean.

- ***Support community capacity for forest co-management***

As the FD explores the possibility of entering into co-management or other types of agreements that will increase the management role of the LFMCs, it will be important to ***identify management practices that are appropriate for communities and to provide adequate support for the acquisition of the skills needed by the community groups to carry out their function***. Jamaica's experience of parks and protected area management has shown that when groups do not have the correct mix of skills to carry out management functions they are being set up for failure (Hayman, 2007). Indeed, the LFMCs operate at a different level than, and within a different context, from professional NGOs. It would therefore be unrealistic to expect that their capacity for managing an area would be the same as a professional NGO with a full-time staff that includes technical personnel. It is important to focus on the comparative advantages of the LFMCs, including their local presence and strong connection to their local area, and maximise these to engage them in appropriate management activities.

As part of its support to the LFMCs, the FD should ***prepare a standard operating procedures manual for the establishment of LFMCs and create a basic, standardised course for members to ensure a common understanding of the programme, as well as a basic level of knowledge of forest management and environmental awareness***. The course could be designed to be delivered in modules and ought to include a series of core modules which would be delivered to all of the LFMCs prior to and within a certain time frame after launch, as well as optional or elective modules on topics that may be of interest to many of the LFMCs, but are not critical to forest management and proper management and functioning of the LFMCs. Such standardisation in programme delivery will become more important as more people become involved in LFMC animation due to staff additions and changes in the roles and functions of current personnel.

- ***Establish a formal LFMC instrument that can be given to communities at the LFMC launch stage and which confirms in writing their status as an LFMC.***

At present, there is some uncertainty in the wider society about the legal status of the LFMCs, as the more widely recognised indicators of legality are registration with the Department of Co-operatives and Friendly Societies under the Friendly Societies Act (1968) or with the Registrar of Companies. When the LFMCs set up bank accounts, for example, they currently need to have a verification letter from the Forestry Department.

PART I OVERVIEW OF THE LOCAL FOREST MANAGEMENT COMMITTEES

1. Introduction

In 2000, the Jamaica Forestry Department (FD) took a bold step and departed from previous practice to put into operation a mechanism for community participation in forest management. Not only did the Department decide that it wanted to engage communities in forest management and biodiversity conservation, it opted to work directly with communities, rather than through intermediary or third-party organisations to achieve this. The concept of participatory forestry was hardly a new one, having been around since the late 1970s, but it was an untested and uncharted approach to forest management for the FD, even though the legislation that allowed for this had been around since 1996.

Ten years on, there has been a paradigm shift in the way forestry is done in Jamaica and Local Forest Management Committees (LFMCs) are now the main mechanism for formal community participation in forest management. These committees are set up in critical watersheds and are intended to play monitoring, advisory, and management roles within their local area. The FD launched its first two LFMCs in the Buff Bay/Pencar Watershed in 2000 as part of a pilot initiative to increase community participation in forest management under the Trees for Tomorrow (TFT) Project, an institutional and forest management initiative supported by the Canadian International Development Agency (CIDA). Since then, an additional six LFMCs have been established across the island, bringing the current total to eight. Recognising the importance of livelihood and poverty issues within the communities in many of the country's forests and watersheds and how these affect the condition of the resource, the FD has placed importance on sustainable livelihoods and poverty reduction as a vehicle for improved forest management and biodiversity conservation.

Over time, what started out as a pilot initiative has become a mainstreamed forest management approach in Jamaica. The FD aims to have 12 operational LFMCs by 2013, and increase from four to 12, over this same period, the number of groups with an active livelihood, community development and/or conservation component (Forestry Department, 2009). If this target is met, 46 percent of Jamaica's 26 defined watersheds will enjoy local arrangements for management through the LFMC mechanism.

But even as the FD seeks to expand its work with and through LFMCs, it seems a certain momentum has already been gained: while the first seven LFMCs were establishing through FD initiatives and with partner support, the most recent one to be launched was formed out of an initial community approach to the Department. The FD has also been approached by four other community groups and has begun discussions with them about the potential establishment of new LFMCs.

Ten years into Jamaica's experience with the LFMCs and with the seemingly growing demand for this type of participatory arrangement, it is a fitting point in time to take stock of key lessons learnt to date about how the LFMCs contribute to sustainable livelihoods and forest management. This case study is one of a series prepared under the Caribbean Natural Resources Institute's (CANARI's) **Forests and Livelihoods Programme** that seeks to analyse the relationship between the type of institutional arrangement for forest management and the livelihood benefits derived by the rural poor. The series is an output of a regional project entitled "**Practices and policies that improve forest management and the livelihoods of the rural poor in the insular Caribbean**" funded by the European Commission's Programme on Tropical Forests and other Forests in Developing Countries (2007-2009).¹ In this context, *livelihood* is understood to mean more than just earning money and encompasses all the other assets that contribute to overall human well-being (see section 6 for a more detailed explanation). The central question the case study series seeks to investigate is *how do*

¹ This project was implemented in Barbados, Commonwealth of Dominica, Grenada, Jamaica, Saint Christopher (St. Kitts) & Nevis, Saint Lucia, Saint Vincent & the Grenadines, and Trinidad & Tobago but it is anticipated that the lessons learned will be of relevance to other Caribbean islands. Other case studies and project outputs can be found at <http://www.canari.org/forests.asp>

institutional arrangements, including the degree and type of participation, influence the provision and distribution of benefits to the community?

This case study also seeks to assess the extent to which the LFMCs have delivered on their intended purpose and identify the institutional and socio-economic factors that have enabled and/or impeded this. It also seeks to distil lessons from the FD's approach to establishing and supporting the LFMCs. The approach has been characterised by wide-ranging, long-term support and accompaniment and a focus on building relationships as keys to forging strong organisations, particularly in the face of uncertain funding.

An earlier study, which documented the establishment of the first two LFMCs in the Buff Bay/Pencar Watershed, offered emerging lessons and made recommendations, provides a useful starting point and baseline for charting the development of the LFMCs to date (Geoghegan and Bennett, 2002).

Information for this case study was gathered through interviews with national, regional and local FD staff and members of each of the LFMCs conducted between April and May 2010 (see Appendix 1). Information was also gathered on a site visit to Buff Bay and Pencar organised as part of a study tour for community-based resource managers in June 2010. The case study findings were reviewed and validated at LFMC meetings in Buff Bay and Dolphin Head and by senior management of the FD in September and October 2010.

The first part of the case study provides an overview of the LFMCs and the FD's approach to mobilising and animating LFMCs. The second part of the case study analyses aspects of the LFMC experience, presents selected lessons learnt and recommendations.

1.1 The bigger picture: The legislative and policy context

From its experimental roots in forest management in Asia in the late 1970s, participatory management has been mainstreamed and is internationally considered an element of good practice for sustainable forest management (UN, 1992; Secretariat of the Convention on Biological Diversity, 2009). The rationale is that this leads to better outcomes for forests and people as it brings forest sustainability and biodiversity conservation together with the socio-economic needs of communities in or near forests.

Jamaica's forest legislation and policy make specific provisions for stakeholder participation in management and decision-making about the use of forest resources. Within the parameters set out by the Forest Act (1996), the 2001 National Forest Management and Conservation Plan (NFMCP) and Forest Policy identify stakeholder and community participation as key implementation strategies towards meeting the country's forestry and watershed management goals, with the LFMCs as the main vehicle for doing so at the local level.

Under the Forest Act (1996), Local Forest Management Committees can be appointed by the Conservator (the chief forest officer) for all or part of a forest reserve, forest management area, or protected area. The functions of these committees, as outlined in the Act, broadly include: monitoring and assisting with management; public education and mobilisation; and advising the Conservator on matters relating to the development of the forest management plan; as well as on making regulations and proposing incentives for local conservation practices (Government of Jamaica, 1996). See Appendix 2 for the relevant section of the Forest Act that sets out the LFMCs's roles and responsibilities.

The LFMCs are not the only mechanism that facilitates community involvement in forestry, however. Over the years, non-governmental organisations (NGOs) operating in specific locations, such as the Jamaica Conservation and Development Trust and the Southern Trelawny Environmental Agency, have entered into partnership agreements with the FD and as part of their work in forest reserves have empowered local communities to play a role in forest conservation. But in these cases, the interface is community \leftrightarrow NGO \leftrightarrow FD, and not community \leftrightarrow FD, as with the LFMCs. The partnership approach to forest management set out in the 2001 NFMCP continues to be a hallmark of the FD's way of working: the Department currently has more than seven active memoranda of understanding (MOUs) with a range of private sector and non-governmental organisations, including some of the LFMCs.

The current Strategic Forest Management Plan 2009 – 2013 also places importance on participatory approaches to forest management, building on the 2001 NFMCP and Forest Policy. The new plan, however, makes stronger statements about community participation in general, and the LFMCs in particular, and includes performance measures related to the latter. Moreover, it goes further than the previous plan and policy in placing participatory forest management in a livelihoods framework: while the 2001 NFMCP identifies “income-earning activities [for communities] based on sustainable use of forest resources” as an incentive for sustainable forest management, the present plan includes sustainable livelihoods for LFMCs as a performance measure against which implementation of the plan will be evaluated. It also identifies capacity building for sustainable livelihood projects (in addition to forest management and conservation) as a strategy towards meeting its objective around increased community participation and public awareness (Forestry Department, 2009).

1.2 Implications of recent and pending changes in the policy and institutional environment

Under the Government of Jamaica’s Public Sector Modernisation Programme, the FD became an executive agency in April 2010. This status gives the Department greater autonomy and responsibility for its management, performance and finances (including revenue generation).² The structure that will result from the FD’s new status is expected to support a more focussed approach to the LFMCs, as outlined in the Strategic Forest Management Plan 2009 – 2013, and to result in a higher level of activity due to changes in the staff complement and assignments. The Department is, for example, slated to have two rural sociologists on staff instead of just one, as has been the case since the inception of the LFMC programme. It is anticipated that facilitating community or rural development forestry, as it is sometimes called, will become part of all foresters’ roles and functions on the ground. This will further root and integrate community participation into how forest management is practised in Jamaica in a way that other approaches for supporting participatory methodologies, such as establishing a cadre of community development officers within the FD, might not.

The Forest Act (1996) is currently under review. It is expected that the revised Act will allow for a more comprehensive partnership between the FD and communities, with the LFMCs functioning as full management partners, rather than only playing monitoring and advisory roles as they now do. While these functions are important, the current arrangements and legislative context fail to make the most of the full *community forestry* potential of the LFMCs (See Box 1).

This limitation has been recognised by the FD and was documented in the 2002 study by Geoghegan and Bennett.

This approach by the FD takes place in a national context in which stakeholder/community participation in natural resource management has gained traction since the 1990s. There are a number of formal mechanisms that make it possible for communities and other stakeholders to play an active role in managing natural resources in Jamaica. Park and protected area management, for example, has over the years included delegation arrangements with NGOs. Since the first delegation contract was entered into in 1996, a total of four parks and protected areas have been formally managed by Jamaican NGOs. At present, however, only one delegation instrument is current and a second is in the process of being finalised. More recently, the Fisheries Division has moved towards

Box 1. Participatory Forestry versus Community Forestry

The Food and Agriculture Organisation (FAO) makes a distinction between participatory forestry and community forestry. The former “refers to processes and mechanisms that enable those people who have a direct stake in forest resources to be part of decision-making in all aspects of forest management, from managing resources to formulating and implementing institutional frameworks.”

Community forestry, however, refers to a component of participatory forestry that focuses on local communities as key stakeholders in managing common property resources (www.fao.org).

² The FD will not be responsible for raising all of its annual budget, however, as consideration is given to its role in maintaining and enhancing the forests’ ecosystem services .

establishing participatory management arrangements within its sector. New fish sanctuaries declared under the Fishing Industry Act (1975) are to be collaboratively managed by community and fishers' organisations. Moreover, the current national development plan further entrenches this policy direction. Vision 2030 Jamaica identifies strengthening the capacity of organisations to facilitate citizen participation in managing natural resources in their local areas as one of the strategies for developing efficient and effective governance structures for environmental management (PIOJ, 2009).

It is important to note, however, that the FD's experience with LFMCs has been taking place not only in a legislative and policy framework that supports participatory natural resource management, it has also been occurring in a context in which the experience with participatory approaches has been mixed and has included challenges related to capacity, financial resources, inadequate or ambiguous institutional arrangements, and limited or narrow stakeholder participation, among others (CANARI, 2001; Figueroa, 2005; Geoghegan, 2004; Gordon, 2003; Hayman, 2007). And as the FD seeks to increase the management role and function of the LFMCs, there are lessons from past experiences that it can learn from.

2. Summary Description of the LFMCs

Local Forest Management Committees (LFMCs) are independent, community-based organisations formed for the express purpose of playing a role in the management of forests and forest resources and using them sustainably in community livelihood strategies. LFMCs give the FD a way to formally integrate communities located near important watersheds and forest reserves into forestry activities; the LFMCs provide these communities a mechanism for legal access to, and use of, forest lands and resources.

Although the LFMCs bear the name of the watershed or forest where they are active, each committee typically draws its membership from several villages and districts of one or more community.³ In some locations, this means the LFMCs's membership is spread over a wide geographic area.

In order for a group to have LFMC status it must be sanctioned by the FD. Under the law, the Conservator of Forests has the authority to "appoint" LFMCs. In order to get the FD's "seal of approval" groups go through a Department-led organising and mobilisation process, which is described in section 3.

The first LFMCs were created in the Buff Bay/Pencar Watershed in north-eastern Jamaica as pilot initiatives under the TFT project. Ten years on, there are eight LFMCs located in watersheds across the island (see figure 1).

³ Jamaica's Social Development Commission has identified 785 communities in Jamaica for administrative and planning purposes. Each community is made up of villages and smaller districts.

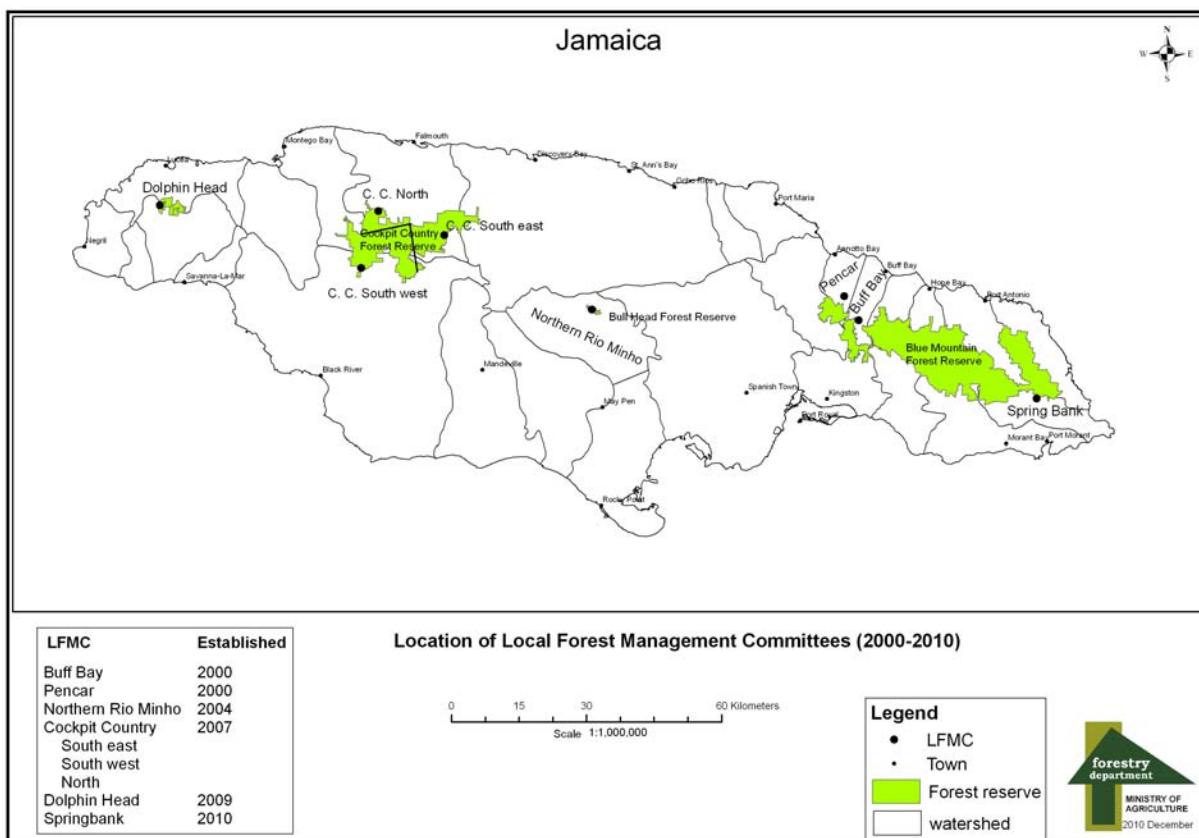


Figure 1 Map of the LFMCs in Jamaica

The **Buff Bay Local Forest Management Committee** was launched in 2000 and was one of the first two LFMCs established. The Buff Bay Watershed is a sub-section of the Buff Bay/Pencar management unit and it extends from Jamaica's northern coast at Buff Bay south to the border between the parishes of Portland and St. Andrew. In the upper reaches of the Buff Bay Valley, upper montane broadleaf forest is interspersed with plantations of the Caribbean pine (*Pinus caribaea*) planted under the re-afforestation programmes of the Forestry Industry Development Company (FIDCo) and the Forestry Department. In areas below 1000 metres, lower montane broadleaf forest predominates, with a mix of Caribbean pine and bamboo plantations (Wright, 2002).

The Buff Bay LFMC covers some 18 communities within a 20 mile radius throughout the Buff Bay Valley. It currently has some 134 group and individual members, with an average attendance of 35 people (or 26 percent) at its monthly meetings. In both governance and operational terms, this is the most mature of the LFMCs.

The Buff Bay LFMC is involved in community and school education and outreach, reforestation and tree-planting, agro-forestry and training for area farmers. The Buff Bay LFMC is in the third and final year of the first phase of a J\$6m/US\$70,000 grant from the Forest Conservation Fund (FCF). The project components include reforestation, agro-forestry, community awareness, and school programmes. It has recently been awarded a J\$20m/US\$234,000 follow-up grant for the second phase of the project, which will expand the services offered during phase one.

The Buff Bay LFMC has signed an MOU with the FD for the proposed development of the Lancaster Nature Park, which they hope will become a major eco-tourism site in the watershed. The Buff Bay LFMC is currently trying to register as a Benevolent Society with the Department of Co-operatives and Friendly Societies.

The **Pencar Local Forest Management Committee** was launched in 2000 along with the Buff Bay LFMC, but its development and organisational maturity lag behind its sister committee. The Pencar Watershed is a sub-section of the Buff Bay/Pencar management unit. Located in the parish of St. Mary, it extends from the northern coast at Annotto Bay south to the main ridge of the Blue Mountain Range. It gets its name from the Pencar River, which is one of the rivers that

drain the watershed. The area's forest cover includes mangroves along the coast, fields, disturbed broadleaf forest, and Caribbean pine plantations. The LFMC encompasses seven communities in the Pencar sub-section of the watershed, but activity is centred in one, Enfield, where the group operates a nursery and greenhouse. It currently has 15 members on its rolls.

The trajectory of Pencar's development has not been one of overall steady growth. After the early success of getting funding to set up and operate a nursery through CIDA's Enhancing Civil Society Project in 2002 and being the first LFMC to sign a MOU with the FD, the group floundered in the face of internal misappropriation of funds by one member and the subsequent loss of trust and enthusiasm among the membership.

A change in leadership was not enough to revitalise the flagging group as other factors presented challenges to its development and cohesion. Pencar's geography and the road network (and poor road conditions) make communication and travel difficult there. The Pencar communities are located along two parallel roads between the upper reaches of the watershed and the coast, so to get from one side of the area to the other, one always has to return to the coast and then travel inland. And unlike in the Buff Bay Valley, the communities that fall within the Pencar region have no common identity as "Pencar residents." The level of poverty within the Pencar region is believed to be an obstacle to greater community participation.

The group acquired a greenhouse under the USAID/Jamaica: Farmers Access to Regional Markets (JAFARMS) project at the nursery site in Enfield in 2009. However, both the nursery and the greenhouse have been under-resourced and the group has experienced some unfortunate setbacks due to pest infestation and disease.

The group is currently attempting to renew itself and since the start of 2010 has begun a concerted effort to meet regularly and attract new members. One of the challenges faced by this LFMC is the lack of an inter-generational mix in its leadership: the core group that has been trying to sustain the organisation and its activities over the years comprises senior citizens.

The ***Northern Rio Minho Local Forest Management Committee*** was launched in 2004 under the TFT project. The Rio Minho Watershed extends from the northern section of the central parish of Clarendon to the Portland Bight. The northern section of the watershed, where the LFMC operates, extends south to the parish capital in May Pen. The Bull Head Forest Reserve, which is located in the Northern Rio Minho Watershed, is the site of the trigonomic point that marks the geographic centre of Jamaica. The area includes fields, disturbed broadleaf forest, and Caribbean pine plantations.

Between 20 and 24 people regularly attend the Northern Rio Minho LFMC meetings. The LFMC has prepared the Bull Head Local Forest Management Plan, with funding from the FCF. After some delay, the FD and the LFMC have reached a common understanding regarding the scope of the plan and the finalisation and launch of the plan are pending.

The ***Cockpit Country Local Forest Management Committees*** were launched in 2007. Located in the north-western part of the island, the wet limestone forest of the Cockpit Country is Jamaica's largest remaining primary forest. The area is an outstanding example of karst topography, with its steep-sided hollows eroded from the limestone bedrock and separated by numerous conical hills.

There are three autonomous LFMCs in the area, namely: the South-east Cockpit Country LFMC, South-west Cockpit Country LFMC, and the Northern Cockpit Country LFMC. Each LFMC has its own executive and by-laws, but the executives of all three come together to form a federated executive. The LFMCs and the federated executive meet on a bimonthly basis. The Cockpit Country LFMCs are registered as a (single) limited liability company.

The Cockpit Country LFMCs were part of a major collaboration that included the FD, The Nature Conservancy (TNC) and the USAID/Protected Area and Rural Enterprise (PARE) Project between 2007 and 2009. The PARE Project aimed to strengthen the linkage between effective natural resource management practices and livelihoods in and around conservation sites. It focussed on improving production techniques and management strategies, institutional strengthening and capacity building. The USAID/PARE Project included livelihood training in such areas as entrepreneurship, business, crafts, and culinary skills; as well as material and

money to start a revolving livelihood loan scheme. TNC, USAID/PARE and other agencies, such as the Institute of Jamaica, worked along with the LFMCs to develop the Flagstaff Visitors' Centre as a central component of eco-heritage tourism in the Cockpit Country. In addition to support received through the partnership with TNC and USAID/PARE, the Cockpit Country LFMCs have received funding from the Environmental Foundation of Jamaica (EFJ) for capacity building; renovating an office building made available by the FD; conducting an institutional self-assessment and developing a strategic management plan. The Cockpit Country LFMCs hosted the first conference of LFMCs in Jamaica at Litchfield, Wait-a-bit, on 30 July 2009.

Like the Pencar LFMC, which received funding very early on in its life cycle, the Cockpit Country LFMCs have had to address accountability challenges linked to misappropriation of funds; however, these have led to the introduction of new administrative checks and balances and a strengthened accountability mechanism.

The **Dolphin Head Local Forest Management Committee** was launched in 2009. The nucleus of this LFMC had previously been associated with a local NGO, the Dolphin Head Trust, which reduced its level of operations in the area in 2008. The Dolphin Head Trust was formed in response to local concern about the scale of illegal activities, encroachment, and deforestation in the Dolphin Head Reserve and had already begun organising and mobilising community members around reforestation activities and the development of an eco-tourism attraction in the Reserve. The area is located in the north-western parish of Hanover and includes disturbed broadleaf and closed broadleaf forests. It is being proposed as a national park. This Dolphin Head LFMC currently has 20 members, 12 of whom are active. The LFMC received funding in 2010 from the FCF for a reforestation, agro-forestry, community/school awareness and livelihood project.

Very strong leadership within the Dolphin Head Trust crowded out community initiative and created a dependent relationship between the NGO and the community. One of the capacity strengthening challenges for this LFMC is building community confidence.

The **Spring Bank/Plantain Garden Local Forest Management Committee** was launched in March 2010. Spring Bank/Plantain Garden is located in the south-eastern parish of St. Thomas. The Spring Bank Forest Reserve is a closed broadleaf forest.

This LFMC grew out of the local Community Development Council (CDC), which was attempting to set up a community eco-tourism project in the Spring Bank Forest Reserve. The group approached the FD to ascertain the best way to go about obtaining formal permission to use the site and was advised to become an LFMC. The LFMC has approximately 20 members (the CDC has 40) and has received funding from the EFJ. In addition to developing the eco-tourism attraction, the LFMC intends to get involved in reforestation and the promotion of agro-forestry techniques to area farmers. The Spring Bank/Plantain Garden LFMC has identified "women in forestry" as a strategic area for the development of programmes because of the high unemployment rate among women in the area.

3. The LFMC Model

Over the past decade, what can be called the FD's LFMC Model has emerged from practice, building on the pilot experience during the TFT Project.

3.1 What guides the Forestry Department in its work with the LFMCs

The FD's work with the LFMCs is guided by the following principles:

Sustainability: biodiversity conservation, forest management and livelihood needs can be compatible.

Broad-based engagement: stakeholders and community members with a range of interests have to be brought into the process.

Relationship-building: the investment in building trust, working with formal and informal community leadership creates more effective processes for mobilising communities and lays the ground work for strong community organisations. Relationships must be based on mutual trust and respect.

Responsiveness: Community needs and concerns are taken into account in the design of interventions.

3.2 The LFMC approach

- *Counter human induced threats by engaging communities.* The FD seeks to establish LFMCs in areas where forest resources have been subjected to human-induced degradation, particularly where the adjoining communities have played a role in this.
- *Reconcile forest sustainability and biodiversity conservation with the livelihood needs of the communities.* At the core of the intervention is a desire to reconcile forest sustainability and biodiversity conservation with the livelihood needs of the communities while reducing pressure on the resource. The FD seeks to ascertain and address the needs of the community and encourages the identification of community-driven solutions to maximise livelihood benefits of the resource and ensure sustainable forest management.
- *Manage expectations and stimulate community responsibility for resource mobilisation.* The existing financial and human resource situation is taken into account in all work and discussions with communities as part of a strategy to manage expectations and stimulate community responsibility for resource mobilisation, from the very start.
- *Sensitisation and training for forest management and livelihoods.* Sensitisation and training of community members is geared towards increasing their appreciation of forests and their understanding of the principles of forest management as well as towards building their capacity to deliver sustainable income-generating projects.
- *Commitment to the long-term viability of the LFMCs and an emphasis on community-led resource mobilisation.*

3.3 Getting off the ground

The process the FD used to set up and work with the committees in the Buff Bay/Pencar Watershed during the TFT Project has become the model for its subsequent work with LFMCs. The process has been refined over time and is applied with a certain degree of flexibility in each community to adapt to the situation on the ground. The Department has no manual to guide its work with the LFMCs, but there is a standard procedure that has evolved and is used.

The FD has a three-phased approach for establishing LFMCs.

- *Phase 1: Awareness raising and organising*
The focus at this stage is on getting to know and understand the community and its concerns, while raising awareness about forest management and sustainable livelihoods. The Rural Sociologist makes preliminary contact in the community through existing groups and structures, such as the Parent Teachers Associations, and the local branch of the Jamaica Agricultural Society. In some instances the Rural Sociologist is supported by a local Forest Officer and the two work together as a team.⁴ Initial discussions take place through these groups. The FD also engages any other state agencies or non-profit organisations that might be active in the area, for example, the Rural Agricultural Development Agency (RADA) and the Social Development Commission (SDC).

Although much of the awareness raising and organising is done through existing structures, the engagement also targets individuals. One of the early lessons learnt was that restricting LFMC membership to organisations and institutions can lead to the exclusion of those community members who are not organised into formal groups and may replicate power structures in society that lead to the marginalisation of certain groups (Geoghegan and Bennett, 2002).

FD staff establish and maintain regular contact with the various groups by attending meetings, taking part in farm workdays, and setting up demonstration sites. Activities in this phase include promotion of forestry and agro-forestry activities including the Private Planting Programme for timber seedlings, as well as training farmers and community members. Much of this work takes place outside of regular business hours.

⁴ During the pilot phase under the TFT project, the Rural Sociologist worked with project extension workers to establish the Buff Bay, Pencar and Northern Rio Minho LFMCs. In the absence of extension workers, the Rural Sociologist works with Forest Officers, when and where feasible.

As part of its efforts to build a profile of the area, during this phase the FD also does biophysical assessments of the natural and forest resources, which are complemented by socioeconomic research.

- *Phase II: Mobilisation*

The emphasis at this stage is on engaging the community through a series of consultations in order to take action towards establishing an LFMC. Discussions move out of the individual groups and the engagement becomes community wide.

Through the consultative process, community members begin to formulate common goals for sustainable forest management and livelihoods and begin to develop collective plans.

It is during this phase that the core values of the LFMCs are introduced (see Box 2) and that the groups begin to determine how they will function as a group. An early experience with misappropriation of funds within the Pencar LFMC brought home the need for the clear articulation and instilling of core values during the mobilisation phase.

The Department continues to be involved in forestry and agro-forestry promotion activities with farmers and other community members during this phase.

Box 2. Organisational Core Values of the LFMCs

Organisational core values provide a framework for how things are to be done within the organisation or group. They set out non-negotiable behaviours and offer a framework for achieving the group's vision.

The core values of the LFMCs are:

- *Inclusiveness*: anyone who is willing to participate can do so.
- *Democracy*: every member has a say in the operations and decisions of the group.
- *Transparency*: meetings are open; there is full financial disclosure and the open sharing of information about fundraising initiatives and projects.
- *Equity*: each member shares in the work of the group and the benefits generated.
- *Participation*: each member has a responsibility to be a proactive and productive part of the group and to contribute to its overall good.

- *Phase III: Launch*

The launch phase is an iterative process, much like publishing banns to ensure there is no impediment to a marriage. The group and the FD go through a three-step validation process to ensure there is clarity and consensus on the way forward. Two meetings, known respectively as Preliminary 1 and Preliminary 2, are held by the group prior to the launch event. Senior members of the FD staff and the FD animation team also attend these meetings. The LFMC is launched once there is satisfaction on both sides (community and FD) with what is being proposed and how what is being proposed will be done and once there is a demonstrated level of commitment on the part of the community. The launch is a major event to which the Minister of Agriculture is invited and is attended by the senior management of the FD. The Department takes responsibility for organising and financing the launch. Once the LFMCs are launched, they elect their executive members. In instances where an executive is in place prior to the launch, the positions are ratified at the first post-launch meeting.

3.3 Sustaining the LFMCs

Ongoing commitment and activity

FD personnel continue to actively support the LFMCs once they have been established. They do this by participating in regular LFMC meetings and special events, providing technical advice and support for the implementation of community-led reforestation, agro-forestry, and eco-tourism initiatives, and providing project support, including assistance with fundraising.

The Rural Sociologist's support and animation is a prominent feature of the Department's sustained accompaniment of the groups. This helps to keep a focus on group organisation and community development issues once the LFMCs are up and running. It is perhaps no accident that in the face of the FD's sustained accompaniment none of the LFMCs established have collapsed, though they have variously faced and been tested by membership, accountability and resource challenges and at least one (Pencar) has experienced protracted stagnation. One of the issues that the FD is currently grappling with is how to create conditions that enable the development of effective community organisations, in the face of challenges to community organisational development discussed in section 9, without enabling and perpetuating patterns of dependency.

Capacity building

The FD recognises that the LFMCs require systematic skill and capacity building in certain areas if they are to become well-functioning, independent and self-sustaining organisations. There is, therefore, an ongoing training and capacity-building component to the FD's accompaniment of the LFMCs. Whereas during the organising and mobilisation stages the focus is on awareness building, once the LFMCs are established, the focus shifts to specific competencies and themes such as building relationships between members and the wider community, proposal writing, capacity building for governance and accountability, basic forest management, enforcement, project identification and management, entrepreneurship, tourism development, and tour guiding. Where appropriate, the Department also includes LFMC members in training workshops for foresters in such areas as tree identification and forest fire prevention. Training is tailored to the needs of each LFMC and while this has allowed for a certain level of responsiveness, it has meant that the LFMCs have not all received the same kind of training, including on general topics from which they all could benefit, such as project identification and management, and proposal writing.

Integration with other FD programmes

LFMCs have benefited from other FD initiatives, like the Private Planting Programme, the provision of seedlings for nurseries and demonstration plots, as well as from in-kind support such as the provision of lumber and transportation for people and materials.

Shared effort and inputs

The FD's work with the LFMCs has not been a unilateral undertaking, neither in terms of effort nor financial resources. It has worked in partnership with state, donor and non-governmental organisations at all stages of animation.

At the point of first contact with communities, the FD engages and works with and through those agencies and organisations that are already active on the ground, be they state agencies or NGOs. In the case of Spring Bank/Plantain Garden, for example, the FD worked closely with the SDC, the Women's Resource and Outreach Centre (WROC) - a national NGO that is active in the area, and the Department of Health, all of which had established working relationships with the community. The strong agro-forestry orientation of many of the LFMCs has led to ongoing collaboration with RADA for training, marketing and the provision of seedlings and technical advice.

The FD has also been able to draw on external donor support through, for example, the TFT Project (CIDA) for work in Buff Bay, Pencar and Northern Rio Minho, and the TNC/USAID PARE Project for work in the Cockpit Country. These agencies provided and managed funds, personnel and logistical support for research, mobilisation, training, and infrastructural support for livelihood development. The collaboration enabled a wide array of resources, skills—local and foreign—and a focus that might not have materialised in a timely manner given the constraints of government budget and procedures.

The genesis of the Spring Bank/Plantain Garden LFMC from within the Community Development Committee has more recently allowed for significant collaboration with the Social Development Commission.

The Cockpit Country LFMCs currently benefit from ongoing support from the Windsor Research Centre, which has received grant funding from the John D. and Catherine T. MacArthur Foundation to strengthen community involvement in conservation of the Cockpit Country and Martha Brae Watershed. This support finances the ongoing meetings of the three LFMCs in the Cockpit Country, which is important given the terrain and the distances that people have to travel to come together as a group. The Windsor Research Centre is a member of the Northern Cockpit Country LFMC.

Collaboration with the Inter-American Institute for Cooperation on Agriculture (IICA) on the agro-tourism “Heritage Corridor of the Blue Mountains” project afforded Buff Bay LFMC members access to tourism development training, including to the Tourism Product Development Company’s Team Jamaica Training Programme, which is now mandatory for all workers in the tourism industry. Members of the Cockpit Country LFMCs (North and Southwest) also received Team Jamaica training as part of the PARE Project.

Cost

The processes of setting up the LFMCs and sustaining the intervention are both time consuming and expensive. Up until FY 2008-09, the FD’s budget did not have a specific line item for LFMCs. The Department’s current accounting procedures make it difficult to extrapolate the full economic cost of its support for and investment in the LFMCs over the past decade.

3.6 Organisational components

Legal status

The LFMCs’s legal status comes from sections 12 and 13 of the Forest Act (1996) (see Appendix 2). Recognition and official sanction by the FD has been a legitimising factor for many of these groups. Some groups have sought, or are seeking, other legal status: The Cockpit Country LFMCs are registered as a limited liability company in order to carry out their planned eco-tourism activities and the group in Buff Bay is in the process of becoming registered as a Benevolent Society under the Friendly Societies Act (1966).

Internal governance

Each LFMC is meant to be governed by a set of by-laws which lay out its structure and operating procedures, including the role of officers and committees and the system for paying dues. The executive of each LFMC typically comprises a chairperson, vice chair, secretary, assistant secretary, treasurer, and public relations officer. At least one LFMC has a management committee with responsibility for oversight of project implementation (Buff Bay) and the groups in the Cockpit Country have a Finance Committee. All the LFMCs charge nominal membership dues. The rate is set by each LFMC and ranges from J\$50/US\$0.58 per meeting (Buff Bay) to J\$500/US\$5.80 per year (Dolphin Head). However, an effort is being made to examine the feasibility of standardising the membership fee across all the LFMCs.

Each LFMC is an independent community organisation. LFMCs are not accountable to the FD. The committees are, however, expected to submit copies of their regular (monthly/bi-monthly) and annual meeting reports to the FD. Department personnel usually attend the LFMC meetings and apprise the groups of activities undertaken or proposed in the local reserve. FD personnel provide technical assistance or information, as required.

Membership

All stakeholders in the watershed — individuals, government, non-government, private sector and community representatives — can become members of the LFMC. Groups and organisations may designate representatives to sit on the committee. At the start of the LFMC programme, the emphasis was on organisational membership, as mentioned earlier, but this was identified as a possible weakness that could lead to exclusion of individuals who were not affiliated with a group or organisation; the criteria were therefore broadened to include

individuals (Geoghegan and Bennett, 2002). Organisations typically designate primary and secondary (alternate) representatives; both are expected to attend special and annual meetings. The size of the LFMCs varies, most have a membership of between 20 and 30 people, but the Buff Bay group currently counts as many as 143 people on its rolls⁵ and Pencar as few as 15.

Meetings

LFMCs hold business meetings each month or every two months as well as annual general meetings. The Buff Bay/Pencar LFMCs hold joint annual meetings. A meeting of all the LFMCs was held for the first time in July 2009 and this gave the groups an opportunity to learn from each other's experience, exchange ideas and create inter-LFMC linkages. This meeting and formal study/exchange visits in which the LFMCs have participated have helped instil in the individual LFMCs a sense of belonging to a wider group and encouraged cross fertilisation of ideas.

The Spring Bank/Plantain Garden LFMC in the south-eastern parish of St. Thomas and the Dolphin Head group in the western parish of Hanover have independently established linkages for cooperation and technical assistance.

A practice among the LFMCs has been to rotate the location of meetings to facilitate the participation of members from all the communities covered by the groups. While this helps make the meetings accessible to more people, it has contributed to a lack of consistency in meeting attendance, particularly in those LFMCs where the terrain makes travel expensive and time consuming (Cockpit Country and Pencar).

Institutional arrangements

Legal management and enforcement authority in the forests and watersheds where the LFMCs are established rest with the FD. None of the FD's official management functions are delegated to the LFMCs, although they do play a role in implementation by assisting the Department with tree planting and plot maintenance. And while they do not actively patrol the forests, their presence and vigilance help deter and detect illegal activity. Forest lands are formally made available to the LFMCs through MOUs for mutually agreed purposes. The Pencar, Buff Bay, Northern Rio Minho, and Dolphin Head LFMCs all have current MOUs with the FD for use of forest lands.

⁵ Of which 35 people are consistently active.

4. Degree and type of participation

The LFMCs have been established as a mechanism for community participation in forest management and therefore an interesting and relevant question to ask is what kind of participation in forest management and forest policy have they facilitated? Measuring the effectiveness and influence of a participatory mechanism can be complex because of differing perceptions about the meaning of 'participation,' and the extent to which the rationale for participation is context-specific (Siraj, 2005). However, one widely-used framework used for assessing the degree and kind of participation is the typology developed by Jules Pretty (1995) which is presented in table 1 below. The seven types of participation range from passive, where people are told what to do, to self-mobilisation, where people take initiative to change systems, independent of external institutions.

Based on this typology, the predominant form of participation that characterises the participatory arrangement that the LFMCs facilitate is functional participation. The LFMCs do not participate in management decision-making, which is retained by the FD, although they do inform it. And even though the LFMCs establish their priorities for local action and develop local plans of action, these fall within the parameters set by the FD, which the LFMCs have played no part in developing. The management structure defined by the Forest Act (1996) is a centralised one, albeit one that allows for community input (Geoghegan and Bennett, 2002).

Although functional participation predominates, this is not the only form of participation that the LFMCs facilitate. There are also elements of interactive participation and self-mobilisation, particularly in the LFMCs's broader community development role and functions, where they set their own agendas within the wider livelihoods framework as discussed in section 6 below. At the project implementation level within the LFMCs, however, the community groups are the drivers, determining what they want to do and at what pace. While the LFMCs are a mechanism for community participation in forest management, they are also a vehicle for advancing community development aims, some of which go beyond the direct scope of forest management. The experience of the LFMCs in Jamaica illustrates that community participation in processes can be quite nuanced, with varying degrees of participation coexisting with each other, even if a particular form of participation predominates.

Table 1. A Typology of Participation

Typology	Characterisation of each type
1. Passive Participation	People participate by being told what is going to happen or has already happened. It is a unilateral announcement by an administration or project management without any listening to people's responses.
2. Participation in information giving	The information being shared belongs only to external professionals. People participate by answering questions posed by extractive researchers using questionnaire surveys or such similar approaches. People do not have the opportunity to influence proceedings, as the findings of the research are neither shared nor checked for accuracy.
3. Participation by consultation	People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision making, and professionals are under no obligation to take on board people's views.
4. Participation for material benefits	People participate by providing resources such as labour, in return for food, cash or other material incentives. Much on farm research falls in this category, as farmers provide the fields but are not involved in experimentation or the process of learning. It is very common to see this called participation yet people have no stake in prolonging activities when incentives end.
5. Functional participation	People participate by forming groups to meet predetermined objectives related to the project, which can involve the development or promotion of externally initiated social organisation. Such involvement tends not to be at early stages of project cycles or planning, but rather after major decisions have already been made. These institutions tend to be dependent on external initiators and facilitators, but may become self-dependent.
6. Interactive participation	People participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple objectives and make use of systematic and structured learning processes. These groups take control/ownership over local decisions, and so people have a stake in maintaining structures or practices.
7. Self-mobilisation	People participate by taking initiatives independent of external institutions to change systems. Such self-initiated mobilisation and collective action may or may not challenge existing inequitable distributions of wealth and power.

Source: Pretty, 1995 cited in Bass *et al.* 1995.

5. Delivery on role and function

The role and function of the LFMCS, as set out in the Forest Act (1996), fall broadly into the categories of providing advice to the FD, assisting with management of forests, and advocacy and public education, as outlined earlier in section 1.2. But there has been some lack of clarity about how what is defined on paper translates into action on the ground. And although this shortcoming was identified and acknowledged very early on (Geoghegan and Bennett, 2002:9), it has never been fully resolved.

Over time, a number of things have become clearer to the FD, however. One is that it wants the LFMCS to play a more active and defined management role. The second is that it wants to find a way of bridging what it sees as the disconnect between community and FD's perceptions of how

forest conservation, in a traditional sense, and the livelihood aspirations of the LFMC communities can co-exist and complement each other.

5.1 LFMCs as advisors to the Forestry Department

The advisory role of the LFMCs has been limited. The advisory function has mainly been at the field level, with the LFMCs making suggestions to foresters and wardens, including through LFMC meetings.

The main mechanism that was identified for facilitating the advisory function of the LFMCs was the local forest management plan. In fact, the two most important roles initially proposed for the LFMCs were assisting with the development of the plans and monitoring their implementation (Headley, 2003:4). However, there have been challenges associated with developing the plans and putting them into operation. The plan for Buff Bay/Pencar, for example, was developed by foresters and was too technical for the community, or even most laypersons to understand (Geoghegan and Bennett, 2002). Plans developed more recently for the Northern Rio Minho and the Cockpit Country LFMCs need to be scaled back to more manageable proportions.

The ownership of the planning process is an important consideration for the FD and the LFMCs as they move forward and indeed, a delicate balance of joint ownership has to be forged from the very outset of the planning process. Where the FD representation in community-led processes has not been strong and ownership of the process by FD personnel has been limited, there have been problems with the technical soundness of the plans, which have contributed to delays in approval. On the community side, where there is recognition that the plan can provide a legitimising framework for the group's actions and can lend credibility in their fundraising efforts, delays in the approval of plans by the FD can be frustrating.

The FD has recognised the challenges associated with the preparation of the plans and is now promoting the development of shorter and more simplified plans. The Department's own planning capabilities are being strengthened with the introduction of a formalised planning process and planning staff.

5.2 LFMCs as managers of the resource

Although the management role of the LFMCs has been greater than their advisory one, there has been unrealised potential in this area as well. The LFMCs have assisted with specific activities such as tree planting, weeding and maintenance but have not been given full authority for managing an area or for oversight of particular activities within an area.

The LFMCs have also been instrumental in reducing pressure on forest resources and reducing illegal activity in the reserves, but they have not played a formal role in patrolling or enforcement. Notwithstanding the lack of a formal role, LFMC members often see their role as one of protecting *their* forest; they therefore often question FD personnel about activities they see taking place in the forest. While some officers/wardens are ruffled by this, those who embrace community involvement are encouraged by it, and seek to make the most of the extra coverage provided by committed community actors.

In short, while the LFMCs may be involved in forest activities, they have not been very involved in forest *management* activities.

Some of the LFMCs, notably Buff Bay and Northern Rio Minho, have been clamouring for a greater management role and have even wanted to have a portion of the forest reserve turned over to them for management. In the absence of an instrument that would allow such devolution, however, the LFMCs have had to content themselves, to date, with the MOUs. But where there have been delays in the approval of the local forest management plans, there has been some degree of frustration on the part of the community as they are constrained in their activity, including their fundraising efforts.

And even while there has been this frustration at the local level, it seems that there has been an expectation among the FD's senior management that the LFMCs ought to have been playing a more active role in managing the forests. This, however, should be the case going forward as the Strategic Forest Management Plan 2009 – 2013 calls for involving LFMCs in the

management of forest resources under formal agreements with the FD (Forestry Department, 2009:16) and the revised Forest Act is expected to support a stronger management role for the LFMCs than the current Act.

The gaps that exist between the legislation, expectations within the FD, and viewpoints among staff regarding the management role of the LFMCs are not new. In the 2002 review of the LFMCs, Geoghegan and Bennett noted that key policy documents spoke about the role of the LFMCs as “advisors and supporters, rather than a full management partners” even though early internal FD documents highlighted the management role of the LFMCs. This seeming inconsistency was explained at the time to be due to the “expectation that through the LFMCs, elements of the community [would] take on or assist with certain management responsibilities, particularly monitoring of activity within forest reserves 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 not in the short term” (Geoghegan and Bennett, 2002:9). But it appears the inconsistency was never really resolved and that viewpoints among FD staff remained divergent, leading to a situation where certain expectations have not been met.

5.3 LFMCs as advocates for the resource

Perhaps the role in which the LFMCs have been most successful is that of advocates for the forest and its resources. The LFMCs have become champions for the forest and for environmental stewardship. Most have a strong environmental education and outreach component and are active in area schools, churches and community groups. The LFMCs’s education and awareness activities complement the FD’s own awareness raising programme. The LFMCs’s education and awareness programmes have successfully influenced behaviours in the surrounding communities and created a demand for forestry services. For example, the Buff Bay LFMC’s Navel String Tree Planting Project, which builds on cultural practices⁶ to encourage tree planting within families, has not only raised awareness of the importance of trees among school children and helped them understand how to look after trees; it has also stimulated a demand for trees among students and their families.

Anecdotal evidence from FD staff in the Buff Bay and Northern Rio Minho areas, where illegal logging had been a long-standing problem, indicates that the LFMCs have successfully helped to reduce this kind of activity. Similarly, there are reports of fewer offences taking place in the Dolphin Head area.

The Cockpit Country LFMCs have played a role in lobbying against bauxite mining in the Cockpit Country, lending their support to a broader coalition of groups and individuals that has been very vocal about protecting the area, the Cockpit Country Stakeholders Group.

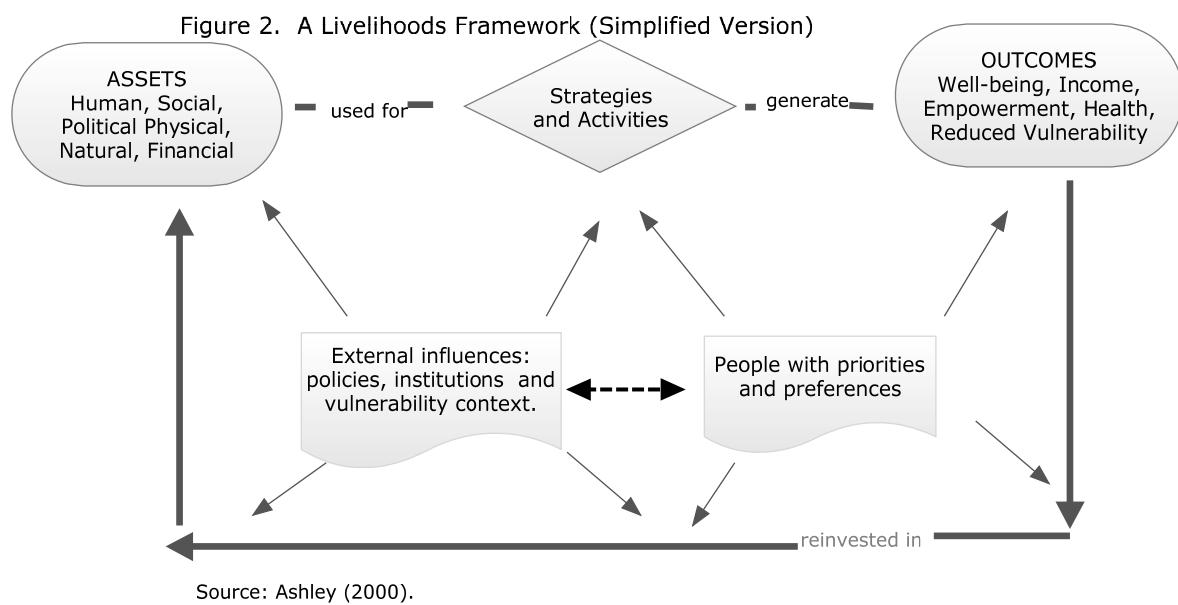
Mining is not the only issue that an LFMC has coalesced around. The Buff Bay group took on the issue of improper disposal of garbage in its communities and became a forum for resolving the problem. In addition to urging citizens to refrain from dumping in the river, the group addressed the root cause of lack of waste disposal facilities by lobbying the National Solid Waste Management Agency (NSWMA) to begin regular garbage collection. Garbage collection began in 2009, after five years of lobbying the NSWMA.

6. Social and Economic Impacts of the LFMCs

The livelihoods framework offers a useful way of assessing the social and economic impacts of the LFMCs. The approach is based on the idea that human well-being is determined by the extent to which individuals and households have access to a range of types of “assets,” be they human, social, political, financial, natural, or physical. Assets have been defined as the “building blocks upon which people develop their activities” (Ashley, 2000). These activities and the strategies for implementing them, in turn, lead to outcomes that include increased well-being, increased income, empowerment, improved health, and reduced vulnerability. A simplified version of the livelihoods framework appears in Figure 2. Section 6.1 below presents a broad

⁶ Traditionally in Jamaica, a baby’s umbilical cord is planted at the root of a tree to “root” him/her to a place.

picture of the impacts of the LFMCs on assets, while the more specific case of the Buff Bay LFMC is summarised in Table 2.



6.1 Impact on assets

Human: *Training and capacity building for farmers and community members.* The FD has provided training for LFMC members in forest-related areas, and through partnerships with other organisations it has also facilitated training for the LFMCs in other areas. Through the collaboration with the TNC/PARE Project, for example, LFMC members were trained in small business development and operations; product development; customer service and commercial food preparation; craft work, sewing and product presentation; and tourism and tour guiding. Specialist agencies provided training in each area. For example, the Small Business Association of Jamaica (SBAJ) provided training in business operations; the HEART Trust/National Training Agency provided training in commercial food preparation and customer service; and the Tourism Product Development Company (TPDCo) was responsible for the tourism-related training.

Social: *Organisational development and networking.* The LFMC process has led to the formation of community groups that have been able to transcend established patterns of organising at the local level. Although local, the LFMCs have not been parochial in reach or in the scope of activities pursued. By drawing on membership from individuals and organisations, it goes beyond the traditionally defined community interests, albeit to bring people together around a set of common stakes related to use of forest resources and forest management activities.

The LFMCs have successfully facilitated the coming together of groups of people who might otherwise not have done so. For example, the Buff Bay LFMC is the only organisation that works in all 18 communities in the Valley. The Cockpit Country LFMCs have provided a mechanism for community association across the 450 km² conservation area. The first ever national meeting of all LFMCs in July 2009 provided the springboard for the proposed annual conference of LFMCs, which is being actively pursued. And though not long in operation, the newly launched Spring Bank/Plantain Garden LFMC has been inspired by the work of the group in Dolphin Head and has set up a technical assistance relationship.

Increase in community confidence. In Buff Bay, for example, dependency on the FD has decreased over time. The LFMC now gives the FD advice on what to plant in certain areas and the group's capacity to maintain the sample lot in the area has increased, with the LFMC now determining what maintenance activities need to take place, instead of waiting to be told what to do by FD personnel.

The Buff Bay group has successfully lobbied for the improvement of services in the area, as described in section 5.3 above. The committee also lobbied one of the local cellular telephone phone service providers to extend coverage to the Buff Bay Valley. The Cockpit Country LFMC has taken the initiative to improve communications within group (see physical assets below).

Conflict resolution and mediation of disputes. The LFMCs are also used as fora to air and resolve disputes, as well as mediate with state agencies. This has been the case in Buff Bay, in particular. The LFMC executive has, on occasion, approached farmers that are beginning to encroach on forest lands and encouraged them to withdraw. It has also helped mediate between local landowners and a state agency to clarify land ownership and tax obligations that were complicated by the closure of a state enterprise which had agreed to purchase the lands (see social and political assets below).

Table 2 Impact of the Buff Bay LFMC on Livelihoods

ASSETS (CAPITAL)	BENEFITS
Human	<p>Training in: establishment and maintenance of agro-forestry plots; tree planting and maintenance; tree identification; fire prevention; tour guiding; business development; proposal writing; wine and liqueur making.</p> <p>Projects currently overseen by 1 full-time employee trained in project management through LFMC programme.</p>
Social & Political	<p>Networking and networks within and between communities have increased: the LFMC is the only group that works across all 18 communities in the Buff Bay Valley.</p> <p>Relationships established with other LFMCs; strongest ties have traditionally been with Pencar, but through networking opportunities such as the 2009 national meeting of LFMCs and study visits, connections have been forged with other groups, including community-based organisations in other Caribbean countries.</p> <p>Leadership for the LFMC has come from existing capacities within the communities, which has resulted in organisational cross-fertilisation. For example, the principal of one of the local primary schools is a member of the LFMC and the school has given the LFMC space for its nursery and agro-forestry demonstration plot. Student meals are supplemented with fresh produce from the plot. The principal plans to use the nursery for demonstration for life science classes.</p> <p>The LFMC successfully lobbied for the improvement of services (garbage collection and cellular phone coverage) in the area.</p> <p>The LFMC was instrumental in settling an ownership and tax liability matter between landowners in the community and the Tax Administration Services Department (TASD) over lands that had been slated for acquisition by the (now defunct) Forestry Industry Development Company (FIDCo). The community members believed that the lands had been taken over by FIDCo and that they were no longer liable for the property taxes levied on the lands, and were thus surprised to be held responsible for the payment of the taxes. The LFMC worked with the TASD to ascertain the true status of the lands, which had never been transferred out of the original owners' names, and clarify current tax liabilities.</p> <p>The LFMC has also settled disputes between community members. In one instance it was the forum used to resolve a problem between the original owners of FIDCo returned lands and squatters who had taken possession of the land in the mistaken belief that the land was owned by FIDCo (or Government of Jamaica).</p> <p>The LFMC also participated in IICA Corridor Management Council for the development of the agro-tourism "Heritage Corridor of the Blue Mountains."</p>

ASSETS (CAPITAL)	BENEFITS
Natural	<p>The LFMC has formal access to Lancaster Nature Reserve for development as a recreational/nature tourism site through MOU with FD.</p> <p>It has opened up a trail between the Nature Reserve and the recreation area of the Blue and John Crow Mountains National Park.</p>
Financial	<p>Beginning to be able to attract significant sums of donor support for multi-year initiatives. Three-year J\$6m/US\$70,000 grant from the Forest Conservation Fund. Awarded a J\$20m/US\$234,000 follow-up grant for phase 2 of the project.</p> <p>[It has the potential to generate earnings from construction, sale of craft items, tour guiding, sale of herbs and medicinal plants.]</p>
Physical	<p>Office</p> <p>Nursery and agro-forestry plot</p> <p>Equipment and tools</p>

Political: Influence on FD decision-making. The LFMCs have provided communities with an avenue to communicate their priorities to the FD, and this in turn has influenced the Department's decision-making, as discussed in section 7. The LFMC communities are now perceived differently by foresters, are considered active co-stewards and are valued for the contributions that they have made to forest activities, particularly their role in reducing illegal activity in the reserves and for their ability to leverage funding for forest and biodiversity conservation work from sources that are not available to the FD.

Natural: Access to forest lands. The LFMCs have provided communities with a mechanism for formal access to forest lands and use of forest resources. In some instances this has regularised traditional use and access, as in the case of the Northern Rio Minho where the community stages an annual festival on Ash Wednesday in the Bull Head Forest Reserve. The Northern Rio Minho's Local Forest Management Plan, which is pending approval, includes a component to establish an eco-tourism site in the reserve that will generate employment for tour guides, forest stewards, and craft and other vendors from the community.

Financial: Access to funding. The LFMCs have been able to raise funds from various local and international donors for their activities. To date they have raised more than US\$600,000 from sources such as the CIDA/ Enhancing Civil Society Project, the Forest Conservation Fund, the Environmental Foundation of Jamaica, the International Institute for Environment and Development, and USAID/JAFARMS. The grant sizes have ranged from approximately J\$135,655 (US\$1,596.00) to J\$20m (US\$234,000). The FD recognises that the LFMCs have the potential to access funding from sources that the Department is unable to tap into and several staff members consider this one of the benefits of the LFMCs.

And it is not only the FD that recognises the potential of the LFMCs to leverage funding: the Windsor Research Centre in Trelawny, for example, has successfully used its affiliation with the Cockpit Country LFMCs to obtain funding for its work.

Physical: Community infrastructure. Several of the LFMCs have acquired infrastructure through project funding for their activities. For example, the Dolphin Head LFMC has constructed a gazebo as part of its site development work in the Dolphin Head Reserve (the group in Spring Bank/Plantain Garden plans to do the same). The Pencar LFMC has acquired a nursery and a greenhouse and the group in Buff Bay has an office and a greenhouse. The Cockpit Country LFMCs have a Visitor Centre at Flagstaff, an office in Litchfield, and three small greenhouses for medicinal plants. The Cockpit Country LFMCs have developed a community-led tour featuring three trails radiating from the town centre in Flagstaff, St. James. Additionally, they

have taken the lead in arranging a *closed user group* with a major cellular telephone service provider to facilitate more cost effective communication among LFMC members.

6.2 Strategies and activities

The LFMCs appear to have shown a preference for certain kinds of income-generating activities, notably ecotourism and agro-forestry, and little interest in lumber extraction and production. The Northern Rio Minho LFMC showed an early interest in lumber activities and work in this area began but was short-lived, due in part to the relationship between local FD personnel and the community. Very early on in the LFMC process when the subject of timber harvesting and lumber production was broached, the LFMC position in Buff Bay was that they had to plant before they could consider reaping. At the time it was also felt that the capital outlay for those activities was out of the reach of most LFMC members, both individually and as a group. There is the potential for tensions between community visions for their local forest area and the FD's conservation and forest management aims.

6.3 Livelihood outcomes

The benefits of the LFMCs in the short term have been mainly in the sphere of building or enhancing community assets. The full potential for positive livelihood outcomes is yet to be realised. And indeed, except for the older LFMCs, it is perhaps unrealistic to expect any significant livelihood outcomes to have accrued to the communities as it takes time for any community development venture to mature and become self-sustaining. Experience has shown, moreover, that this takes longer than a typical three-year project cycle. The USAID/PARE Project in the Cockpit Country is a good illustration of this. Over the project's three-year life span, this dedicated livelihoods initiative was able to lay the groundwork for sustainable livelihoods through building elements of the communities' capital or assets. The communities now have a foundation to build on, but will require additional support before becoming self-sustaining.

Income

The impact on incomes has been modest. LFMC members have benefitted from occasional employment within Forest Reserves. But this is not a radical departure from past practice: there is a long tradition of the FD hiring residents of communities adjacent to Forest Reserves for occasional labour to assist with tree-planting and maintenance. And when the FIDCo was in operation, it was a significant source of employment in areas, such as Pencar, where it had large commercial plantations.

Project funding has also been a source of occasional income for LFMC members, albeit on a limited basis. However, the level of project funding that the Buff Bay LFMC has managed to attract allows the group to hire a full-time project manager. Similarly, as of 2010, the Dolphin Head LFMC has been able to hire a staff person through project funding. These are the only two LFMCs with full-time employees.

In most of the LFMCs, financial benefits have fallen short of expectations. And although they have all succeeded in getting project funding for specific activities, none has so far created a sustained income-generating initiative, although many have plans to do so, particularly through the development of eco-tourism sites. The road to self-sustainability is a long one, however. Some of the hurdles that have to be overcome include the following:

- It takes a long time to foster a cooperative spirit for income generation in a cultural context characterised by strong individualistic traditions.
- The capacity of groups is not built overnight and the very process of coalescing and learning to function effectively as a group takes time.
- Low levels of educational attainment in many rural communities present a capacity constraint for community-based organisations and influence the pace at which organisations can move and develop.

- Poverty in rural communities can preclude participation in voluntary initiatives, particularly where participation means foregoing income from one's customary livelihood sources. Additionally, the absence of a personal safety net may cause some individuals to be wary of new ventures that have not demonstrated their income-generating capacity.

Empowerment

Strong leadership is emerging from within the LFMCs and FD personnel have observed the growth and development of key members within the LFMCs over the years.

Notwithstanding the limited tangible financial benefits of the LFMCs, the advantages of LFMC status are beginning to be more broadly recognised. The first LFMCs were established at FD's initiative (Geoghegan and Bennett, 2002; Headley, 2003); however, the most recent to join the fold, Spring Bank/Plantain Garden, approached the FD. And the demand appears to be growing as at least four other community organisations are currently in discussions with the FD about becoming LFMCs. The legitimacy of the LFMCs has also attracted partner support and funding: the reach and representativeness (inclusive and broad-based) of the membership of the Cockpit Country LFMCs was an influencing factor in the USAID/PARE Project's decision to partner with TNC to work in the area.

7. Impact of the LFMCs on the Resource

There are no empirical data available from the FD to assess the impact of the LFMCs on the health and change in state of the forest resource, but anecdotal evidence from foresters suggests there has been improvement in the conditions of the resource. All LFMC projects incorporate reforestation components and even prior to getting grant funding, the LFMCs have been involved in tree planting on forest land on a volunteer basis. A reforestation initiative by the Buff Bay LFMC is restoring areas in two forest reserves that were destroyed by hurricanes. Improvements in ground cover and reduction in soil erosion as a result of reduced encroachment and reforestation have been reported in both Buff Bay and Pencar and the condition of trees that have been planted in the area through reforestation activities in which the LFMCs have been involved are reported to be in "excellent" condition.

The Southwest Cockpit Country LFMC developed a live yam stick project, with support from TNC, to reduce the harvesting of tree saplings for use as support posts in yam cultivation. Yam stick harvesting is one of the pressures on the forest reserve: the estimated demand is six million sticks per year.

The LFMCs have played an important role in forest protection. One of the areas where there has been a noticeable change has been in the incidence of illegal offences, particularly unauthorised timber extraction. This has apparently been very noticeable in the Buff Bay, Pencar and Rio Minho LFMCs, where illegal logging was a particular problem.

8. Impact of the LFMCs on the Forestry Department

The LFMCs are widely regarded as the "eyes and ears of the FD" by Department staff and Committee members. In areas where the LFMCs are established, the need for active enforcement by the forestry department has decreased.

The LFMCs have been good for the FD's community relations and have helped transform the way the Department is viewed. The FD is seen as less of a 'policing' agency and more as part of the community in some areas. LFMCs have been a direct link between the FD and communities, acting almost as agents of the FD at times. In Buff Bay, for example, where 75 farmers recently benefitted from a Forest Conservation Fund-sponsored agro-forestry project, foresters report that the LFMC has become the first port of call for farmers wanting advice and seedlings.

Decision-making is informed by community interests and not only by forest management considerations. Before taking decisions, foresters engage community members and farmers in discussions about what to plant and where. In selecting the mix of trees to be planted in any

given area, the FD now takes into account what trees might benefit the community/or meet community needs. Consequently, the FD now has a strong mixed forest approach. However, although decision making has been broadened, it has not been decentralised.

Other FD programmes have gained momentum because of the LFMCs, notably the Private Planting Programme, which promotes the development of forests on private lands.

FD staff members have developed an appreciation of the benefits of working with people to manage forests, and participation has come to be accepted as the norm. When the LFMC pilots began in 2000, there was uncertainty, scepticism and even resistance to the new approach among some staff. The approach is no longer considered a new way of working, but rather a part of how the FD operates.

The Department has made an investment in training and capacity development so that staff can work effectively with communities. The adoption of participatory forest management techniques has helped to bring out new competencies among FD staff.

9. Enabling Factors and Lessons Learnt

9.1 Enabling factors

Some of the factors that have enabled the growth and development of the LFMCs include the following:

- **Legislative and policy environment:** Jamaica's forest policy and legislative framework are supportive of community participation and pending changes in legislation and at the institutional level within the FD point to a deepening of this support, as discussed in section 1.2.
- **Leadership within the FD:** An enabling legislative and policy environment on its own would not have been enough to create conditions favourable for the growth of the LFMCs. Incorporating community approaches to forestry required a cultural shift within the FD and the commitment of the senior management of the FD in bringing around this change was crucial. The Conservator's strong support and leadership in this regard has set the tone for the rest of the organisation.

Strong support for community approaches by senior staff at the regional level has translated into better outcomes on the ground. The relationship between the FD and the LFMCs in the eastern and westerns sections of the island is stronger than that between the FD and the Northern Rio Minho LFMC. When this LFMC was established it did not have the support of FD regional/local personnel. This led to a strained relationship between the local FD staff and the community and hindered the LFMC's development. However, with changes in personnel the situation is much improved and the LFMC currently enjoys support from local FD staff.

- **Institutionalisation of Forestry Department involvement:** The institutionalisation of many of the elements of the TFT Project has ensured that the LFMCs were not end of project orphans in 2006. Animation and sustained accompaniment of the LFMCs have been integrated into the Department's operations. This commitment has translated into a significant investment of time, human and financial resources by the FD and partner organisations.

The Department has invested in re-orienting and building the capacity of its traditionally trained foresters so that they can better work and communicate with people and facilitate processes. Much of the formal training that has been done took place between 1999 and 2006 under the TFT Project; however, foresters have subsequently learnt by doing and have benefitted from interactions in the field with the Rural Sociologist who, while "not training foresters to be sociologists" provides advice and guidance on the ground. The Department has identified a need for additional training of

foresters in skills and techniques for rural/community development forestry in order to deliver the objectives of the Strategic Forest Management Plan 2009 – 2013.

Even before the end of the TFT project in 2001, the job descriptions of foresters were changed to include community action and there will be even more emphasis on community activity by foresters under the Department's executive agency status.

Further evidence of institutionalisation are the inclusion of allocations for LFMC mobilisation and support in the Department's estimates of expenditure since FY 2008-09 and the integration of LFMC-related performance indicators in the current strategic plan.

- **On staff sociologist:** Having a full-time sociologist on staff within the Department has allowed for a greater prominence of social and cultural issues in forestry and the building of "bridges of understanding" between foresters and communities adjacent to forests. Although many of the LFMC communities had a relationship with the FD prior to the start of the Committees, the relationship was based on wage labour. A participatory forestry approach has required a new type of relationship to be forged and the Rural Sociologist has been an integral part of this. The Sociologist is a resource person for officers in the field and has led training sessions based on a participatory forestry manual prepared for the FD under the TFT programme.
- **Availability of local funding for conservation and livelihoods**
The emergence of the EFJ and the FCF as local sources of funding has been an important development for community-level activity, particularly given their willingness to support both conservation and livelihoods. The FCF, for example, has channelled J\$45m/US\$529,723 into the LFMCs.

9.2 Lessons learnt

- The LFMC experience has shown that **communities are willing to participate in forest management activities, if given the opportunity to do so.** Communities that use forest resources will adopt and support sustainable practices if empowered to do so through formalised access to forest resources and if there are channels for communicating their concerns and value is placed on their contribution.
- **Community initiatives for managing forest resources can support asset-building for sustainable livelihoods.** The nature of community assets or capital is such that they have a multiplier effect on household and community well-being. Mobilisation of community members around one issue can have spin-off benefits for other areas of community development.
- **Income benefits are important to community groups, but they are not the only kind of benefits that matter.** Even without significant income benefits there has been a sustained and growing interest in the LFMC programme. The capacity-building and other social and political benefits of the LFMCs at the individual and community levels are valued. Community and individual empowerment can be an important outcome.
- **Community processes can be derailed if integrity and trust are compromised.** The experience in Pencar has shown that an early breach of confidence can set an initiative back, particularly if little or no tangible income or other benefits from the process have been derived. There has been some level of loss of confidence and enthusiasm in the Cockpit Country because of the problems of misappropriation of funds there, but swift and decisive action and the improvement of accountability mechanisms within the groups has minimised the negative fall-out and ultimately strengthened the groups' management capacity.

- **Capacity constraints of the LFMCS influence the pace and scope of their development.** The constraints faced by the LFMCS are no different from the constraints faced by community-based organisations. Most of the LFMCS have a limited capacity for group management and development; organisational management, including financial management; and the technical side of forest management and stimulating livelihood outcomes. There is a need for stronger administrative and management procedures and internal accountability mechanisms.

And although strong leadership is emerging in some of the LFMCS, there is a need for succession planning as well as a need to buck the trend of group dependency on leaders.

In some instances it has been challenging for the LFMCS to identify sustainable livelihood opportunities and strategies for taking advantage of them. Additionally, all-volunteer community groups are constrained in the amount of time and effort that members can dedicate to volunteer activities, especially when participation in these activities means forgoing income or neglecting a component of one's livelihood strategy.

- **The LFMCS approach is a long-term investment of time, human and financial resources.** It requires strong leadership and institutional buy-in at the level of the FD. At the level of the community, it requires commitment over the long term.
- **FD personnel's engagement with LFMCS has to be consistent and proactive.** Notwithstanding the acceptance of participatory forestry within the FD, there is a lingering perception among some foresters that community mobilising and organising is the purview of the Rural Sociologist. Where local foresters have played an active and integral role in the mobilisation and accompaniment of the LFMCS the outcome has generally been better than where there has been little or no FD engagement. Even minimal networking activities can yield significant results. An initial period of distrust or strained relations between FD personnel and the community can be hard to overcome, even when personnel changes.
- **Participatory processes take time and do not necessarily fit bureaucratic time frames.** Building new community organisations takes time, as does the process of engaging and securing the buy-in of major stakeholders. And even when this buy-in exists, certain decisions may require negotiation among different interests. Additionally, as the LFMCS are all-volunteer groups (with the exception of Buff Bay and Dolphin Head, which both have paid staff), the planning and implementation of project activities has to fit in and around how members organise their livelihood strategies. Decision-making processes may therefore be lengthier than in a 'corporate' environment.

10. Key Challenges and Recommendations

10.1 Challenges

A key issue that the FD is currently grappling with is when to wean the LFMCS and at what pace to do so. This is indeed a valid concern for the FD, particularly as it sets out to stimulate and facilitate the formation of additional groups. Even with an additional Rural Sociologist on staff and increased responsibility for community activity by the local forest officers, the FD will have to ensure that over time the form of its support to the LFMCS changes as does the nature of its relationship with them.

At present there is a high level of reliance on the Rural Sociologist and over time, the ideal would be decreasing reliance on this office and the forging of even stronger relationships between other FD personnel and the LFMCS, in support of even strengthened *institutional* ties between the FD and the LFMCS. The FD's experience with the LFMCS has shown, however, that sustained accompaniment and support (as provided by the Rural Sociologist, in particular)

has been a key element in the longevity of the groups. This is not unlike the experience of other successful community organisations where a key success factor in their development and sustainability has been access to ongoing support by an intermediary organisation or individual.⁷

Strategic partnerships with other supporting organisations have been and will continue to be an important aspect of the FD's work with the LFMCs and the process of taking them from nascent to mature organisations. In going forward, however, the FD may have to look at how this can be done on a broader and more systematic basis without losing any of the values and strengths of its current approach. For example, the LFMCs have managed, for the most part, to remain politically neutral in a national context where community leadership and volunteerism often have political linkages and community development activists or 'movers and shakers' are also often political activists. It would be important for the FD to ensure that as it forges new institutional partnerships, political neutrality is preserved. (On the LFMC side, it will similarly be important for them to guard against co-optation by local political interests, which could be a risk of their success.)

As the FD sets about defining a larger management role for the LFMCs there could be some tension within the FD as some foresters believe the FD still has a role to play in "guiding the LFMCs on the right a path and that they should not be left alone." And indeed, they are correct to a certain extent; the LFMCs do not all possess the skills needed to effectively carry out a full management role. But the fact that they do not currently have the skills does not mean they cannot acquire them. The LFMCs have to be supported in acquiring the necessary skills and brought in to undertake management responsibilities at an appropriate level.

There is a strong trend towards ecotourism development across the LFMCs, but in almost all cases these initiatives are taking place outside of the traditional tourist resort areas. The ecotourism sector is less developed than the traditional tourism sector in Jamaica, which presents tremendous opportunities for the community groups. Indeed, as the tourism sector begins to examine how it might respond to the threat of climate change, there could be more scope for the development and promotion of products that do not rely on the coastal ecosystems that are likely to be hard hit by climate change-related impacts. However, to be successful, the LFMCs will need to have the ability to operate at a professional standard and develop competitive products for the tourism marketplace. They will also need to have a strong marketing strategy for their product, as a "build it and they will come" approach will not be enough to ensure that they have the number of visitors required to make their product financially viable.

The income outcomes of the LFMCs are an important motivator for community participation in forest management, although not the only influencing factor. But as most of the LFMCs draw their membership from rural, subsistence farming communities the financial consideration will always be an important one. A challenge facing the communities and the FD will be to ensure that forest conservation and income generation imperatives support each other and that neither is sacrificed or compromised for the other over the long term.

As the livelihood outcomes of the LFMCs begin to be more significant, the LFMCs will have to address the issue of distribution of benefits to the wider communities that they are part of. This will include building linkages with other community groups and the local providers of goods and services to ensure that "value added" can be increased within the community economy.

A future and perhaps unexpected challenge could come from the FD's income generating requirements now that it is an Executive Agency. There is the potential for competition for space if the Department were to decide to hold on to revenue generating scenery and infrastructure as part of its own revenue generation strategy.

⁷ For example, Nature Seekers in Trinidad has on several occasions called upon CANARI to assist with different phases of its organizational capacity building, including a comprehensive strategic planning process. CANARI has also had considerable success with providing local mentors to community groups in their early stages of development, who have retained an interest in and connection to the group.

10.2 Recommendations

- ***Increase FD capacity to support sustainable livelihoods***

The expanded role that FD staff are expected to play in supporting community forestry in implementing the Strategic Forest Management Plan 2009 – 2013 and the inclusion of community development/sustainable livelihoods as a performance measure will demand that local forest officers have greater community animation capacity and skills. It will also be important that the terms and conditions of employment of the relevant personnel facilitate their expanded community forestry role.

- ***Improve FD mechanisms for monitoring and evaluating the impact and effectiveness of the LFMCs***

The FD should consider introducing internal accounting and monitoring procedures to track inputs and measure social forestry impacts. By adapting and mainstreaming participatory forestry and including sustainable livelihoods and community development performance measures, the FD now has social objectives in addition to forest and biodiversity conservation objectives. It will be important for the Department to monitor both. Indeed, the livelihoods framework offers a useful starting point for tracking social and economic impacts. Equally important is being able to generate empirical data about the impact of or contribution of the LFMCs to the health and condition of forest resources. The systematic documentation of processes and outcomes will contribute to the FD's monitoring and evaluation processes as well as to building the body of knowledge about participatory forest management in the Caribbean.

- ***Support community capacity for forest co-management***

As the FD explores the possibility of entering into co-management or other types of agreements that will increase the management role of the LFMCs, it will be important to ***identify management practices that are appropriate for communities and to provide adequate support for the acquisition of the skills needed by the community groups to carry out their function***. Jamaica's experience of parks and protected area management has shown that when groups do not have the correct mix of skills to carry out management functions they are being set up for failure (Hayman, 2007). Indeed, the LFMCs operate at a different level than, and within a different context, from professional NGOs. It would therefore be unrealistic to expect that their capacity for managing an area would be the same as a professional NGO with a full-time staff that includes technical personnel. It is important to focus on the comparative advantages of the LFMCs, including their local presence and strong connection to their local area, and maximise these to engage them in appropriate management activities.

As part of its support to the LFMCs, the FD should ***prepare a standard operating procedures manual for the establishment of LMFCs and create a basic, standardised course for members to ensure a common understanding of the programme, as well as a basic level of knowledge of forest management and environmental awareness***. The course could be designed to be delivered in modules and ought to include a series of core modules which would be delivered to all of the LFMCs prior to and within a certain time frame after launch, as well as optional or elective modules on topics that may be of interest to many of the LFMCs, but are not critical to forest management and proper management and functioning of the LFMCs. Such standardisation in programme delivery will become more important as more people become involved in LFMC animation due to staff additions and changes in the roles and functions of current personnel.

- ***Establish a formal LFMC instrument that can be given to communities at the LFMC launch stage and which confirms in writing their status as an LFMC.***

At present, there is some uncertainty in the wider society about the legal status of the LFMCs, as the more widely recognised indicators of legality are registration with the Department of Co-operatives and Friendly Societies under the Friendly Societies Act

(1968) or with the Registrar of Companies. When the LFMCs set up bank accounts, for example the now needs to have a verification letter from the FD.

11. Conclusion

Ten years after the first experiments with LFMCs, the FD in Jamaica can point to a body of evidence that demonstrates that communities can be engaged in forest management and such an approach can be beneficial to communities, the resource, and the FD. The institutionalisation of community-based forestry within the FD marks an important cultural shift within the organisation. The experience of the past decade has not been without challenges, and indeed, the FD has before it a few pending old challenges and issues as well as new ones that need to be addressed in order to achieve both a deepening and a broadening of current gains, as well as advancement of the participatory forestry and livelihoods agenda.

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Appendix 1 List of people interviewed

1. Ms. Karyll Aitcheson, Former PARE Project Coordinator
2. Mr. Peter Anyansi, President Northern Cockpit Country LFMC
3. Mr. Rupert Binger, Chairperson, Northern Rio Minho LFMC
4. Mr Eric Campbell, Chairperson, Dolphin Head LFMC
5. Ms. Yvonne Campbell, President Pencar LFMC
6. Mr. Charles Dunkley, Forest Inventory and Utilisation Officer, Forestry Department, Ministry of Agriculture
7. Mr. Samuel Fraser, Project Manager, Pencar LFMC
8. Mr. Owen Evelyn, Director, Forest Resources Management and Planning, Forestry Department, Ministry of Agriculture
9. Mr. Roy Lumsden, President, Spring Bank LFMC
10. Mr. Llewellyn Hall, Forest Supervisor, North-eastern Subzone, Forestry Department, Ministry of Agriculture
11. Ms. Marilyn Headley, Conservator of Forests, Forestry Department, Ministry of Agriculture
12. Mr. Charles Howell, Assistant Public Relations Officer and Executive Committee Member, Northern Rio Minho LFMC
13. Ms. Primrose James, Secretary, Southwest Cockpit LFMC
14. Ms. Donna Lowe, Zonal Director, Eastern Zone, Forestry Department, Ministry of Agriculture
15. Mr. Keith Porter, Principal Director, Forest Operations, Forestry Department, Ministry of Agriculture
16. Mr. Patrick Reynolds, Forester – Clarendon, Forestry Department, Ministry of Agriculture
17. Ms. Barbara Richardson, Chairperson. Buff Bay LFMC
18. Mr. Mike Schwartz, Treasurer, Northern Cockpit Country LFMC and Director, Windsor Research Centre
19. Mr. Danny Simpson, Forest Manager, North-eastern Subzone
20. Mr. Phillip Thompson, Project Manager and Public Relations Officer, Buff Bay LFMC
21. Mr. Ian Wallace, Forest Manager, North-western Subzone, Forestry Department, Ministry of Agriculture
22. Mr. Lemuel Williams, Forest Supervisor, South-eastern Subzone, Forestry Department, Ministry of Agriculture

Appendix 2 Forest Act (1996) Sections 12 and 13

Appointment of local forest management committees

12. (1) For the purposes of this Part the Minister may, after consultation with the Conservator, appoint a forest management committee for the whole or any part of a forest reserve, forest management area or protected area.

(2) Whenever possible, each forest management committee shall include at least two members having local knowledge of the area, or part thereof, in which the forest reserve, forest management area or protected area is located.

(3) The Conservator shall, from time to time, make available to any forest management committee such technical advice and assistance as may be necessary to assist the committee in its functions.

Functions of forest management committees

13. The functions of a forest management committee shall include:

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