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**Risking Change:
Experimenting with Local
Forest Management
Committees in Jamaica**

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THE GATEKEEPER SERIES of the Natural Resources Group at IIED is produced by the Sustainable Agriculture and Rural Livelihoods Programme. The Series aims to highlight key topics in the field of sustainable natural resource management. Each paper reviews a selected issue of contemporary importance and draws preliminary conclusions for development that are particularly relevant for policymakers, researchers and planners. References are provided to important sources and background material. The Series is published three times a year – in April, August and December – and is supported by the Swedish International Development Cooperation Agency (Sida). The views expressed in this paper are those of the author(s), and do not necessarily represent those of the International Institute for Environment and Development (IIED), The Swedish International Development Cooperation Agency (Sida), or any of their partners.

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EXECUTIVE SUMMARY

Throughout the world, forestry departments have been rethinking the way they work to meet the challenges of a changing sector. Management that emphasises collaboration with stakeholders rather than regulation makes sense in this new context, but it involves risks. Jamaica is notable for its willingness to meet these risks head on, and in doing so has begun to create a new and positive dynamic between the Forestry Department and the people it serves.

This paper presents the results of research by the Caribbean Natural Resources Institute and the Jamaica Forestry Department (FD) on one component of Jamaica's new approach: the establishment of two Local Forest Management Committees (LFMCs) to involve stakeholders in managing forest reserves. Eighteen months after their establishment, the LFMCs have become a channel of communication between the FD and local stakeholders that is valued by both. They have contributed to the Department's watershed management plan; suggested ways in which forest management can be improved through collaboration with stakeholders; identified opportunities for increasing the contribution of forest reserves to local development; and translated some of these into small but ambitious projects. They are also having some influence on national policy and the institutional culture of the FD.

Despite their progress, the LFMCs face a range of challenges. The main lessons from the experience of the LFMCs that can be useful in developing them further and in extending the approach more widely include:

- Advisory bodies require mechanisms to involve individual stakeholders, and to ensure that the voices of stakeholders are balanced fairly and do not reinforce inequitable local power structures.
- Objectives need to be clear before the structure of a management institution can be considered; that structure should be based on the local institutional context, which will vary over time and from place to place.
- Continuous improvement approaches are a flexible alternative to rigid management plans, and can respond to changes in the natural, socio-economic, and political environment.
- A commitment to participation requires changes in the way organisations are structured and operate.
- Participatory forest management requires the full, knowledgeable and equitable participation of all appropriate stakeholders.
- Incentives and benefits are the key to getting and keeping stakeholders involved.
- External influences need to be taken into account in the design of participatory approaches. While the involvement of external assistance agencies and advisors can be valuable, it can also skew agendas and create unrealistic standards and expectations.
- Forest management that benefits stakeholders cannot be separated from other aspects of environmental management or local development, and requires a diversity of partnerships.
- Effectiveness on the ground should feed back into policy.

RISKING CHANGE: EXPERIMENTING WITH LOCAL FOREST MANAGEMENT COMMITTEES IN JAMAICA

Tighe Geoghegan & Noel Bennett

As forestry in many countries becomes less about timber production and more about watershed protection, biodiversity conservation and tourism, the range of stakeholders grows larger and more diverse, while regulation and enforcement become more difficult. Management that emphasises collaboration with stakeholders over regulation makes sense in this new context, but it involves risks. Jamaica's Forestry Department stands out for its willingness to meet these risks head on, and in doing so has begun to create a new and positive dynamic between itself and the people it serves.

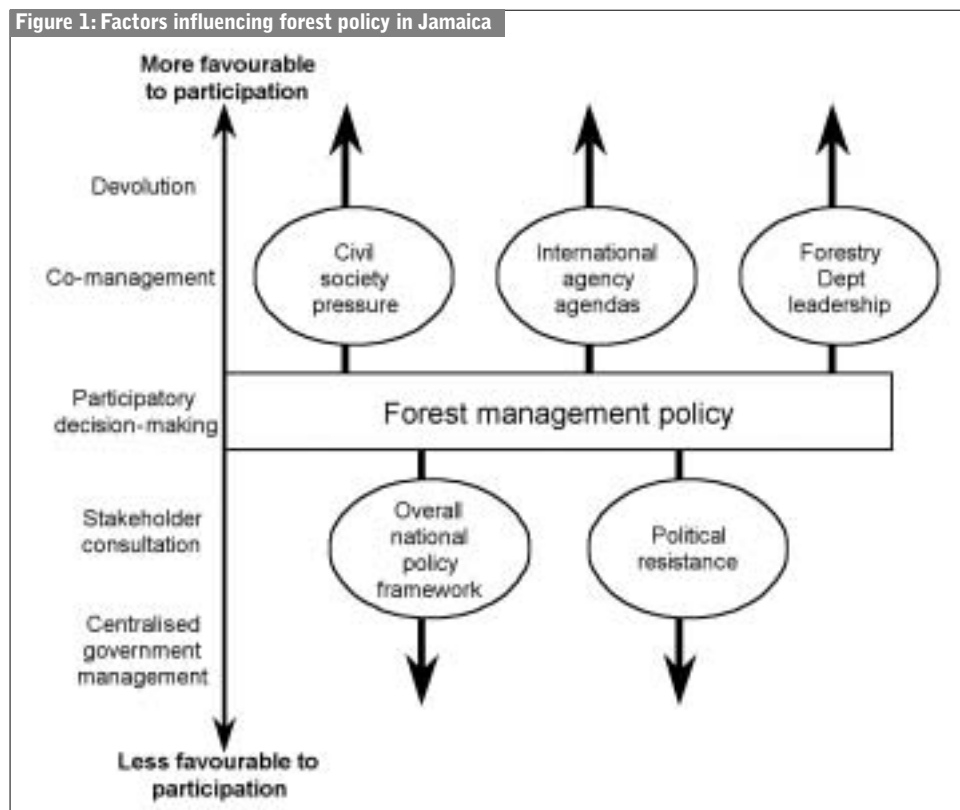
This paper presents the results of research by the Caribbean Natural Resources Institute (CANARI) and the Jamaica Forestry Department (FD) on one component of Jamaica's new approach: the establishment of Local Forest Management Committees (LFMCs) to involve stakeholders in managing forest reserves.

The research, which took place between June 2000 and May 2002, followed the establishment of Jamaica's first LFMCs from the planning stage until they were meeting regularly and beginning to undertake their own activities.

POLICY BACKGROUND

The modern trend towards stakeholder participation in natural resource management has spread throughout the developing world as governments have tried to come to terms with growing demands on natural resources in the face of their own human and financial constraints. In Jamaica this trend has produced policy rhetoric in support of decentralisation of decision-making and devolution of management responsibilities to local entities. However, the rhetoric is not matched by the

institutional context, where authority is centralised within the government ministries. This situation reflects a continuing debate within government and society generally on the appropriate extent of stakeholder participation in management and decision-making. While the country's active NGO community and international donor agencies have effectively pushed for policies more favourable to stakeholder participation, politicians and civil servants have largely resisted the structural changes required to implement them, and this resistance acts as a 'glass ceiling' to policy reform (Figure 1). The forestry sector illustrates this well.



Structural adjustment during the 1970s and 1980s led to the transfer of forest reserve lands, managed largely for watershed protection, to commercial timber and coffee production companies; and budget cuts that reduced the capacity of the FD. Without adequate management during a period of national economic crisis, remaining reserves were illegally exploited for timber and fuelwood and squatted for agriculture and residential use. The results of the conversion of forestland and lack of

management included increased soil erosion, landslides, flooding and declining water quality.

The FD was revitalised in the 1990s with support from the United Nations Development Programme and the Trees for Tomorrow (TFT) project, funded by the Canadian International Development Agency, which emphasised the development of participatory approaches to forest and watershed management. This assistance supported a new Forest Act in 1996, which defines a centralised management structure, in which all responsibility for management of public forest lies with the FD and all authority with the Conservator on behalf of the Minister. But it also provides for stakeholder input through forest management committees. The new Act was followed by a National Forest Management and Conservation Plan (Headley, 2001) and updated Forest Policy. Adopted by Cabinet in 2001, these documents outline a central role for stakeholders in managing forest resources, and drawing on the provisions of the Forest Act, indicate that the primary mechanism for implementing the strategy of community participation is the establishment of Local Forest Management Committees (Box 1).

Box 1: The role of LFMCS

The 1996 Forest Act permits the Minister responsible for forest management, in consultation with the Conservator of Forests, to “appoint a forest management committee for the whole or any part of a forest reserve, forest management area or protected area”. The functions of these committees as defined by the Act include:

- monitoring the condition of natural resources in the relevant forest reserve, forest management area or protected area
- holding discussions, public meetings etc. about these natural resources
- advising the Conservator on the development of the forest management plan and regulations
- proposing incentives for conservation practices in the area
- helping to design and execute conservation projects in that area

ESTABLISHING THE LFMCS

In early 2000 the FD decided to test the LFMCS concept in the Buff Bay/Pencar watershed. This pilot watershed had previously been selected by the TFT project, based on a range of biophysical, social and logistical criteria, to introduce new approaches to watershed management. Since the FD wants to develop LFMCS in other watersheds, it has taken a learning approach that includes the research described in this paper, as well as participatory assessments by the LFMCS and FD staff.

The 20,000 hectare watershed includes two major drainages that run from around 2000m in the northern Blue Mountains to the coast. Some of the upper watershed is forest reserve and overlapping portions of the Blue and John Crow Mountains National Park, but much of the forest, especially on the Buff Bay side, has been converted to coffee plantations over the past 20 years. The land drops steeply to the sea, and deforestation appears to have increased the frequency and severity of landslides and flooding that periodically damage crops and infrastructure in the area. The middle and lower reaches are dominated by small mixed-crop farming. Most of the substantial income from the Blue Mountain coffee grown there goes to absentee landowners, and the area is ironically among the poorest in Jamaica, with poverty rates estimated to be in excess of 25%. The watershed's population is around 30,000 and farming is the major occupation. Because the Buff Bay and Pencar portions of the watershed are separated by their geography and lack of road connections, individual committees were established in each.

Having received positive interest from stakeholders, the LFMCs began meeting in November 2000. Membership is open to “*all community groups, organisations, NGOs and private sector entities present in the Buff Bay and Pencar sub-watersheds whose members are willing to participate*” (Forestry Department n.d.). Invitations were extended to a wide range of organisations identified during earlier sociological fieldwork. National and local government agencies with an interest in watershed management were also invited.

The FD broadly identified the watershed stakeholders as small and large farmers, local communities, government departments, community institutions including schools and churches, and non-governmental and community-based organisations. The assumption was that the interests of individual stakeholders could be represented by existing local and national organisations. While in theory, membership in the LPMC is open to all stakeholders, it is legal entities and formal organisations that have been targeted and invited to join.

The LPMC members opted for a formal structure, and the FD drafted constitutions that the committees finalised and accepted. The committees elect their own officers and meet bimonthly, with joint meetings of the two sub-watersheds twice a year. The FD serves as the secretariat for the committees.

WHAT STAKEHOLDERS WANT FROM THE LFMCS

Forestry Department: management support

Following some initial ambiguity in its expectations regarding the LFMCS, the Forestry Department has developed a clearer consensus. It intends their main role to be advisory, but also expects that through the LFMCS, stakeholders will take on or assist with certain management responsibilities, particularly monitoring activity within forest reserves or helping to manage specific sites. The FD does not expect the LFMCS or their members to be involved in technical aspects of forest management, or that legal authority will be vested in them, at least not in the short term. On the other hand, some staff hope that the input of the LFMCS will make the FD's policies and practices more relevant to local development.

Local residents: economic opportunity

In the late 1970s, in order to make Jamaica self-sufficient in lumber, the Government established the Forest Industries Development Company (FIDCO) and transferred to it more than 20,000 ha of public land, including forest reserve, for timber production. Approximately 1,750 ha were in the Buff Bay/Pencar watershed. Between 1978 and Hurricane Gilbert in 1988, which destroyed about half of its plantations across the island, FIDCO employed many local people in cutting and planting trees and building roads. Upon completion of salvaging following Gilbert, FIDCO went into decline, and with it the jobs that people had depended on to supplement their other economic activities. The FD's increased recent presence as a result of TFT-supported outreach has raised hopes, especially among the poor, for a new era of economic benefits through work in the forest.

LFMC members: solutions to local environmental problems

LFMC members have expressed concern about the link they perceive between deforestation and poor land use in the upper watershed and landslides and flooding during the rainy season. They would like the LFMCS to support watershed protection through environmental education and reforestation. Members would also like more local economic opportunities through timber harvesting, jobs with the FD, and indirect use of forest resources for activities such as ecotourism. At the same time, they are concerned about biodiversity conservation and would like the local population to take greater responsibility for forest protection. And some members see the LFMCS as a potential vehicle for achieving long standing local development objectives, for example increased community-based governance and decentralised development planning.

EARLY RESULTS

What has worked well

The LFMCs are still in their infancy; their role and purpose are not yet clearly defined. The two committees have not established individual identities and they cannot yet help much in dealing with complex forest management issues. In their first eighteen months they have, however, met regularly and addressed a range of matters, including making licenses to harvest trees within forest reserves available to local people, the expansion of the FD's free seedling programme to include fruit trees, and the creation of opportunities for local people to assist with reforestation and serve as honorary forest wardens. Perhaps most importantly, they have made small but important contributions to the watershed forest management plan being prepared by FD technical staff (Forestry Department, 2001). LFMC discussions also have resulted in a project by the Pencar LFMC to establish a plant nursery and demonstration agroforestry plot on forest reserve land. Encouraged by the Pencar LFMC's success in obtaining funding, the Buff Bay LFMC is preparing a proposal for an ecotourism project in its portion of the watershed.

According to a participatory evaluation held at the second annual joint meeting of the LFMCs, the process of developing the LFMCs has also resulted in important benefits, particularly in enhancing local understanding of the value of forests and the requirements for effective management. Committee members feel that they have personally learned a great deal about watershed management, and that the FD's outreach to schools and community-based organisations (CBOs) has made a significant local impact.

This success came at a substantial cost of FD staff time and TFT project funds. The awareness campaign, designed and led by TFT and FD rural sociologists, included 88 field visits to promote the idea of the LFMCs prior to their establishment, as well as training programmes and presentations at schools and communities. In addition, the FD provided local farmers with over 30,000 tree seedlings through its private planting programme. Agroforestry demonstration plots were set up in conjunction with local schools and farmers throughout the watershed. The groundwork for community engagement was laid over the two years prior to the establishment of the LFMCs through activities which included a forest inventory and socio-economic and agroforestry studies.

This outreach work has depended on the commitment and coordination of the FD

field staff, from the local forester to the regional officer. This team has been unusually open to change and to adapting work habits and hours to the requirements of participatory forest management. Team members also appear to have developed strong relationships of mutual trust with the members of the LFMCS. They are realistic about stakeholders' expectations and the FD's limitations in meeting them, and have been creative in finding ways to make a difference.

TFT's reimbursement of LPMC members' travel costs and provision of refreshments for meetings and special events has been an important contribution to the process. The need for this type of support when seeking the involvement of poor rural stakeholders, however, raises concerns about sustainability when international funding is no longer available.

What has not worked well

Despite the FD's efforts at inclusion, some important stakeholders have been left out of the process. These include the poorer segments of the community who tend not to be involved in associations but who were a major target of the FD's outreach work. Other stakeholders who are not directly represented include private forest landowners and direct and indirect forest resource users, such as timber harvesters, water abstractors and most tourism enterprises (see Appendix). The FD continues its outreach to many segments of the community, but the issue of representation of these stakeholder groups has not yet been addressed. The problem is compounded by the weakness and instability of many member organisations. A study of the Pencar watershed (Mills, 2001) estimated that 14 of the 19 original community-based members were dormant or very weak one year after the LPMC was established.

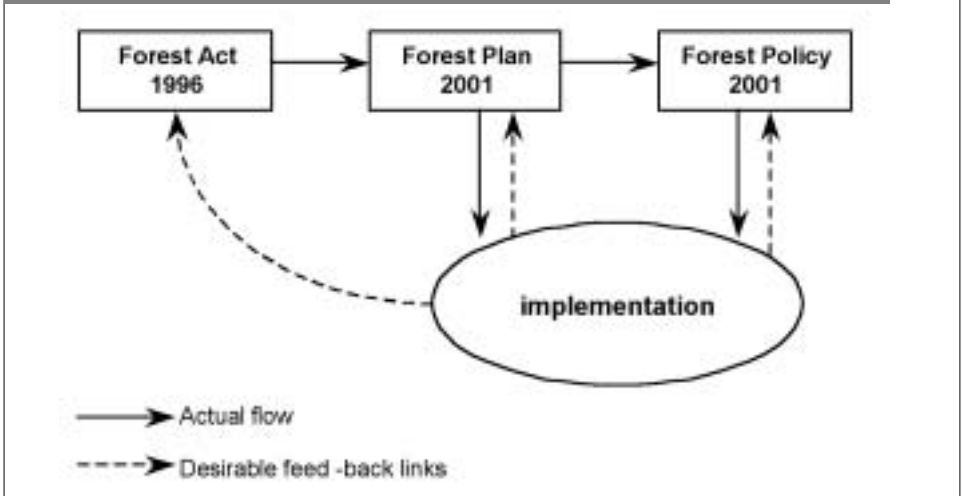
Another concern is the poor participation by national and local government agencies other than the FD. Many issues being addressed require information or coordinated responses from a number of agencies, and their lack of involvement has been felt. Given the constraints that they work under, all of Jamaica's government agencies must prioritise their limited human resources. It seems that the FD and the LFMCS have not yet been able to make a strong case for commitment by these agencies.

Delays in presenting the watershed forest management plan to the LFMCS for review and input have also been an obstacle to the LFMCS' development. These delays have left the LFMCS without a clear purpose or agenda for their meetings and hindered their ability to contribute meaningfully to management.

Impact on national policy

As explained earlier, the Forest Act provided the basis for the 2001 National Forest Management and Conservation Plan, but the process of developing the Plan was a consultative one and resulted in a revised Forest Policy that places much stronger emphasis than the Forest Act on local participation and management partnerships, with the formation of LFMCs given prominence within an overall strategy of community participation. The establishment of the LFMCs is the concrete result of this policy guidance. The failure of the Forest Act to permit delegation of management authority is now seen by the FD as a potential constraint to implementing aspects of the Policy and the Plan, and the Department is looking into having the Act amended. This reflects a dynamic interaction between legislation, policy and experience on the ground (Figure 2), as well as an activist stance towards policy by the FD.

Figure 2: Actual and potential links between Jamaica's forestry legislation, policy, and experience



Impact on the institutional culture of the Forestry Department

The LFMCs are part of a wider effort, led by the Conservator under the impetus of TFT, to transform the way the FD works and its staff perceive their roles. The implementation of policies and plans that emphasise community participation and cooperative management arrangements requires different attitudes and skills than were needed in the days of strict protection and enforcement. While some members of staff realised early on that most issues facing the Department have a social dimension that cannot be addressed solely with technical forest management skills, others felt threatened by the proposed change and initially resisted it. A training programme

and manual on community outreach and participatory forest management, for staff at all levels, have however done much to change perceptions and attitudes.

The staff directly involved in the development of the LFMCs have been profoundly influenced by the experience and are now among the Department's most outspoken proponents of participatory forest management. One factor contributing to their changed attitudes was the extensive support and field training that they received from the TFT and FD rural sociologists during the initial stages of the project. Although impossible to assess, it also appears that the Buff Bay/Pencar staff were personally unusually open to participatory approaches.

The development of the LFMCs has had little impact on other staff, however. This may be because there are few opportunities to share experiences across the Department, due to geographic dispersion and the lack of effective intra-departmental mechanisms for information sharing. Efforts to build on the Buff Bay/Pencar experience through the transfer of staff to other areas slated for LFMCs have not had the expected impact. Given existing resources, it has not been possible to provide the same support to field staff in other areas as was provided in Buff Bay/Pencar.

As the local staff have become more committed to participatory forest management, they have made increasing demands for the resources required to carry out the work. With a grossly inadequate budget and TFT resources stretched thin, this has resulted in some tension between management and the field. While this has not yet significantly affected staff morale, it has the potential to do so.

CHALLENGES TO OVERCOME

Although the response to the FD's outreach work in the watershed was positive and the concept of the LFMCs well received, there was no local demand for the Committees' establishment, and local organisations give other development issues higher priority than forest management. The LFMCs were 'sold' to local stakeholders, who are still working out how they can be most useful in achieving local objectives.

Participation in LFMC meetings has declined, and some of the reasons are logistical or structural, such as meetings being held at inconvenient times or representatives leaving the area and not being replaced. But there also are more fundamental obstacles to stakeholders' capacity to participate.

The first of these constraints is poverty. Socio-economic studies (Mills, 2001; Wright, 2002; Box 2) indicate that a substantial portion of the population of the watershed may be constrained from participating in the LFMCs, or taking advantage of what they have to offer, by poor education, the limitations and daily demands imposed on their lives by poverty, and their lack of involvement in the organisations that comprise the LFMCs' membership.

Box 2. Forests and sustainable livelihoods: how can the LFMCs contribute?

The watershed's development needs are substantial. More than half the population is living in or at risk of falling into poverty, and the educated 'middle class', most likely to be active in community development, comprises 10% or less (Mills, 2001; Wright, 2002). High levels of illiteracy (estimated at close to 50%) and of migration by the better educated impede economic advancement. Poverty is concentrated in the upper watersheds, where transportation and communication infrastructure is poor and watershed management issues most critical.

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

- marginal returns from farming, partly caused by poor land use on steep slopes
- lack of adequate farmland or secure tenure
- poor access to resources and markets
- limited educational opportunities
- vulnerability to landslides and flooding (which may be tied to deforestation and poor land use), crop theft, and natural disasters
- attitudes of dependency

Despite traditions of occupational multiplicity, the poor and near-poor focus their livelihood strategies on agriculture, and do not consider the use of forest resources (aside from illegal farming in reserves) as a compelling option.

While the watershed's deep-seated economic problems require integrated solutions, opportunities for improving livelihoods through forest resources exist, and some are being developed by the LFMCs.

The Pencar LFMC's nursery and pilot agroforestry plot should provide economic and training opportunities, particularly for women and young people. The project evolved in part from the FD's free seedlings programme, which revealed a demand from local farmers for training in watershed conservation techniques. Long-term plans include an ecotourism component. The Buff Bay LFMC's ecotourism and sustainable forestry project will also provide local employment.

In both projects, forest reserve land is being allocated for sustainable economic uses. The benefits that accrue will depend on the measures taken to attract target groups and the ways in which the projects are implemented. As the first efforts in

this direction, the lessons learned can be applied to other initiatives involving sustainable uses of forest reserve land.

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

Other obstacles to stakeholders' capacity to participate include:

- The lack of effective stakeholder associations. Few LFMC member organisations appear to be active and democratic stakeholder representatives. Some represent the interests of only a small number of individuals, and there are no groups representing some critical stakeholder groups.
- The lack of monetary compensation. Despite efforts to arrange the times of meetings around representatives' schedules, members must sometimes choose between their work and attending meetings. Given the already marginal returns that many make from farming, any time away from work can be a sacrifice.
- Limited technical knowledge and skills. The LFMC members need a much stronger grounding in forest management if they are to contribute meaningfully on technical issues, including completion and ongoing refinement of the watershed management plan.

LESSONS TO GUIDE FUTURE ACTION

As a pilot effort, the Buff Bay/Pencar LFMCs were expected to yield lessons to guide the FD's approach to participatory forest management. Some of the most important lessons that have emerged appear to be widely applicable both within and outside Jamaica.

Local organisations have limitations as stakeholder representatives

Stakeholder bodies made up of organisational representatives may fail to include important stakeholders. They also can mimic the power structures within society

by giving the most powerful the greatest voices while leaving out the poor and marginalised.

The LFMCS have not achieved equitable stakeholder representation through their organisation-based memberships. Members are not equally capable of representing their constituents, and there are no organised groups to represent some stakeholders. And certain stakeholders, including those with political connections or legal mandates, have other avenues for influencing decisions about forest resources and may prefer to stay out of the LFMCS in order to avoid trade-offs that they would not otherwise need to make.

Given their current make-up, the LFMCS could eventually become irrelevant or dominated by their most powerful members, thereby leaving behind the very stakeholders they were created to most involve. They could also become co-opted by local politicians, a common occurrence in politically charged societies like Jamaica.

Avoiding such eventualities will require finding ways to equitably involve all stakeholders, including those not represented or poorly represented by existing organisations; and increasing the role and authority of the LFMCS to make them the most legitimate avenue for stakeholder input into forest management planning. It will also be important to involve politicians in ways that balance their influence with the objectives and priorities of other stakeholders, and to monitor political undercurrents that may affect operations and decisions in ways that marginalise some stakeholders.

Changing power balances requires caution, however, as it can have unintended side effects, particularly when weak organisations are propped up without an understanding of the (often very valid) reasons for their weakness, or when new organisations are created to represent the interests of stakeholders who have themselves seen no reason to organise.

In structuring collaboration, form should follow function and respect the local institutional context

In the original discussions about the LFMCS, more attention was given to their structure than their purpose. Through reflection and dialogue, a consensus eventually emerged on the groups' roles and functions. It would now be useful to assess whether this structure is the most appropriate for performing these roles, particularly given the deficiencies of the structure in representing all stakeholders.

For other watersheds, local objectives and the institutional landscape may dictate different structures. One option might be strategic partnerships with effective local NGOs to reach out to unrepresented stakeholders and develop and manage LFMCs. Alternatively, existing local institutions that include legitimate representatives of a watershed's stakeholders could take on the role of LFMCs. Many options are possible; what is important is to avoid entering into the process with a preconceived structure in mind.

It is also important to be alert to how changes in the watershed affect the composition of its stakeholders, with new stakeholders emerging while others may become more marginal. Systems for ongoing stakeholder identification and analysis, and adjustments in the structure and composition of stakeholder bodies when needed, can protect them from becoming stagnant and irrelevant over time.

Stakeholder forums like the LFMCs can be vehicles for a continuous improvement approach to management planning

The LFMCs offer a unique opportunity for continuous negotiation among stakeholders on the management and use of forest resources and their own management rights and responsibilities, within the framework of the national forest policy. As economic, social and environmental conditions change in the watershed, the forest management issues will also change. And as the capacity of local stakeholders to engage in forest management activities increases, so will their potential to take on new roles and responsibilities. Dynamic planning instruments rather than rigid management plans are needed to respond to such changes within the context of defined (although periodically reviewed and renegotiated) conservation and sustainable development objectives. This approach is technically challenging, but can bring important benefits, particularly in sustaining stakeholder involvement and addressing social issues and needs.

Processes of continuous improvement must be accompanied by systems for ongoing monitoring and evaluation. These should include baselines against which to measure change, as well as accountable procedures for following up on the points raised in the LFMCs' periodic self-assessments.

Participatory management calls for a new set of tools for forestry administrations

A commitment to participation requires forest management agencies to rethink their structures, methods of operation and budget allocations, as well as staff

responsibilities, training requirements and working conditions. Establishing LFMCS in a watershed with diverse stakeholders and issues required the FD to increase its outreach capability. It demanded flexibility from staff regarding work hours and responsibilities. It required staff training in forest extension, socio-economic survey methods, participatory forest management and conflict management; training which contributed to their enthusiasm for the work as well as to their effectiveness. Fortunately for the FD, TFT was able to support much of this retooling.

Given its budgetary constraints, the FD will not be able to replicate this labour-intensive approach in other watersheds. Partnerships with organisations already working with local stakeholders are one way to optimise limited resources. The FD can also draw on the experience gained by staff working with the LFMCS to train others in the Department.

In implementing its strategies of community participation, forestry administrations need not only well-trained forest officers, but also persons with social science and community development training and skills to design and monitor interventions, provide basic training and guidance to staff and analyse outcomes. They also need avenues of communication between management and field staff, and transparency over operational decisions that affect work with stakeholders.

Participatory forest management requires full and knowledgeable stakeholder participation

Participatory approaches depend on all partners having the ability to contribute meaningfully and equitably. This is not yet the case with the LFMCS. The FD not only has the legal mandate to manage forest reserves but also the bulk of the technical knowledge, skills and human and financial resources. Achieving effective participation will entail strengthening the positions of other stakeholders through such measures as:

- training and field opportunities to enhance understanding of forest management issues and develop skills
- strengthening the capacity of stakeholder groups to identify needs, set priorities, develop plans and effectively negotiate between themselves and with other stakeholders
- amendments to the Forest Act to permit delegation and co-management when they are the most appropriate options
- a commitment from the FD to accept and when possible act on the recommen-

dations of the LFMCs, as long as they are compatible with the legal and policy framework

■ greater involvement of the LFMCs in the watershed forest management plan, which may require a different approach and format to be more accessible to laypersons.

While the allocation of power within a participatory management arrangement will never be totally balanced, it should fairly reflect the levels of the different groups' stakes. In addition, since the FD alone has the legal mandate to manage forest reserves, it must ensure that the LFMCs are clear about when they will and will not be consulted; and how, and by whom, different types of decisions are made.

Incentives and longer-term benefits are needed to get and keep stakeholders involved

Initiatives like the LFMCs will only succeed if they are perceived to respond to local needs. Education programmes can demonstrate linkages that make sense to people, such as the link between good forest management and the provision of clean water or control of landslides.

Incentives can encourage participation by offsetting the costs to stakeholders. Effective incentives could include access to forest resources for uses compatible with management objectives, or opportunities for training and technical assistance on aspects of watershed management and soil conservation.

In countries like Jamaica, poverty issues need special attention. The poverty in the watershed is the result of a complex mix of factors that are largely beyond the capacity of the FD or the LFMCs to address. However, it is possible to insert a 'pro-poor' dimension when determining how and by whom forest resources might be used, as well as the target beneficiaries of incentives. The two economic development projects the LFMCs are embarking on provide the opportunity for doing this.

The influence of external factors needs to be taken into account

International assistance agencies, technical advisors and other 'outside' forces exert a powerful influence on participatory processes. In developing the LFMCs, the contributions of the Canadian-funded TFT have been enormous, but present dangers for the future by creating standards that may not always be possible to meet. The watershed management plan, for example, is based on extensive research and meets international standards in its content and detail. In preparing future local

forest management plans, the FD will need to take into account both its own technical limitations and the potential for a continuous improvement planning approach that participatory forest management offers. It may also need to set more modest objectives for itself once the support from TFT has ended.

Forest management that benefits stakeholders cannot be separated from other aspects of environmental management or local development

Participatory management requires forestry administrations to work with a diversity of agencies and sectors in order to address the range of issues that link stakeholders to forest resources. In the Buff Bay/Pencar watershed, the achievement of stakeholders' forest management objectives is related to, among other things, soil conservation, public education in schools and communities, provision of local economic opportunities, protection of rivers and fauna, and capacity-building of stakeholder groups. None of these are issues that the FD is equipped to tackle alone, and several fall outside its mandate. This points to a need for new partnerships with government agencies and NGOs dealing with environment and development issues. For this to happen, potential partners need encouragement to become involved.

Effectiveness on the ground should feed back into policy

The LFMCS and similar mechanisms have the potential, through well-designed feedback loops, to influence national policy and the views of politicians in ways that are favourable to participatory approaches. The lessons from the establishment of the LFMCS have already begun to influence forest policy. Influencing broader national policies will require that the experience be widely shared and used for sensitisation and advocacy. NGOs have an important role to play in this policy advocacy work.

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APPENDIX: BUFF BAY/PENCAR FOREST LANDS STAKEHOLDER ANALYSIS

Interests/ Objectives	Stakeholders	Sources/basis of power	LFMC Representatives	Gaps
Watershed resource management agents				
Resource sustainability Watershed protection	Government	Laws governing watershed use	FD, National Environment and Planning Agency, National Water Commission (NWC)	None, but participation of some agencies has been sporadic
	Jamaica Conservation and Development Trust (NGO manager of Blue and John Crow Mountains NP)	Delegation instrument and co-management agreement	None	Was invited but has not participated
Forest resource owners				
Protection from landslides, flooding, etc. Acceptable use of neighbouring lands	Private landowners	Large landowners have access to political directorate; smaller landowners have little power		Not directly represented, as no organisations exist specifically for private forest landowners
	Government	Power to determine how public lands are allocated and used	NWC	National Land Agency, responsible for unallocated state lands, has not participated. NWC's participation sporadic
Forest resource owners				
Access to resources Sound management to maintain supply and quality	Timber harvesters Fuelwood and charcoal producers	Mostly poor; sometimes operate illegally; little power; few advocates with power		No representation (and no recent timber harvesting licenses issued)
	Tourism enterprises	Mostly small-scale; access to limited support from Ministry of Tourism.	One small ecotourism operation (River Edge)	No representation of sector except River Edge
	Water abstractors	Licenses and agreements with the National Water Authority	NWC	NWC (no private abstractors operating in watershed)
Off site forest resource enterprises				
Maintenance of supplies	Sawmills	Very little, since much of their lumber comes from illegal operations		Saw millers are not organised and tend to avoid the attention of government

Interests/ Objectives	Stakeholders	Sources/basis of power	LFMC Representatives	Gaps
Watershed (non-forest) land users				
<p>Access to land</p> <p>Protection from erosion, landslides, flooding, etc.</p> <p>Access to adequate supplies of clean water</p> <p>Revenue earning opportunities from forests</p> <p>Social and economic opportunities through use of local resources and employment in forest management initiatives</p>	<p>Farmers (large and small, landowners and tenants)</p>	<p>Large operators have access to political directorate; Coffee Industry Board is powerful advocate for coffee farmers; other small farmers must rely on (often weak) Jamaica Agriculture Society chapters for advocacy support</p>	<p>Coffee Industry Board</p> <p>Jamaica Agricultural Society chapters</p> <p>St. Mary Banana Co. (large plantation operation)</p>	<p>Most farmers represented only if members of an active JAS chapter</p>
	<p>Residents (legal and illegal)</p>	<p>Largely through their national political representatives; local government being reactivated but still weak</p> <p>Residents derive security and support from local government institutions such as schools and police</p>	<p>Local citizens associations and development NGOs</p> <p>Government service agencies (schools, police, National Works Agency, Public Health Dept.)</p>	<p>Representation dependent on status of local organisations and individuals' participation in them; many associations are weak</p> <p>Illegal residents (squatters) are not easily identifiable and not organised</p> <p>Participation of government service agencies sporadic</p> <p>Churches represent widest spectrum of communities, but are not members of LFMCs (although some church leaders have been supportive)</p>
Watershed resource enterprises				
<p>Access to primary products</p>	<p>Agricultural producers and marketers</p>	<p>Co-ops receive some support from politically-connected local development NGOs</p>	<p>Local agricultural cooperatives</p> <p>Coffee Industry Board</p>	<p>Local co-ops are members of the LFMCs but tend to be weak and poorly supported by farmers</p>
Forest conservation advocates				
<p>Biodiversity protection, natural resource conservation, sustainable use</p>	<p>Interested citizens (local and national)</p>	<p>NGO advocacy organisations</p>	<p>Portland Environmental Protection Agency</p>	<p>Some environmental NGOs operating in area are not members</p>
	<p>International agencies operating in Jamaica</p>	<p>Control of funds for major environmental initiatives</p>	<p>Trees for Tomorrow Project (Canadian International Development Agency)</p>	<p>U.S. AID manages a national watershed project; has attended LFMC meetings but not a member</p>

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