Integrating socio-economic benefits into forest resource management

An overview of current approaches

supporting
Living Legacy Trust FP 4: Forest Science Data Collection and Research
Science priority 9: Socio-economic benefits

by Linda Ehrichs
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This brief paper outlines current approaches integrating socio-economic benefits into natural resource management (forests). Approaches that integrate socio-economic considerations for stakeholder populations differ mainly in the way they include and frame stakeholders in forest resources, specifically the entities of 'institution' and 'community'.

Approaches, some containing specific models, can be delineated into four conceptual areas – managerial, market-based, community-based, and livelihoods-based – which I outline below. Understanding the differences, strengths and weaknesses within each suggests paths for future research that Living Legacy Trust could support. Complex modelling efforts in the literature, for example in Fall et al. (2001) could be adapted to the Ontario context. Developing local livelihoods analysis or livelihood impact matrices as suggested in Smith (2001) could contribute to project/program planning and decisionmaking. Critical analysis of the social criteria and indicators developed by CIFOR (see Prabhu 1999; Colfer et al. 1999a, 1999b) and those already used in Ontario (i.e. in the 2001 report on Ontario's forests) would also be a potential research contribution.

1) Managerial Approaches

These are approaches that focus on the management of natural resources/forests in a traditional sense but aim to incorporate socio-economic considerations for a variety of stakeholder populations, one of whom is usually a local or community entity. There is an assumption that stakeholders or actors operate on a level playing field or come to the table as equals. Cooperation , plural representations and decisionmaking are idealized goals and to some extent serve as ends in themselves.

This however, is also the major critique of this approach, in that the power of stakeholder groups to contest and gain support for their particular interests and forest uses is assumed as equal. Accurate assessment of social impacts requires identifying differences between social groups. Within each group, be it indigenous resident, recently settled cultivators,

local business, regional non-profit interests, or wider public interests, will have a differential power to impact associated with economic position, social and community status, age and gender (Barraclough and Ghimire 1995). Another critique is that actors and institutions in these approaches tend to be represented as static entities and it therefore can not incorporate the dynamism and complexity of what is happening on the ground in uses and practices of everyday living. Such critiques have been responded to by attempting to incorporate a 'user' or 'livelihoods' focus into management plans and analyses, approaches I discuss further below.

1a) Co-management, Collaborative Management, Joint-forest management
These are examples of managerial approaches which aim to be participatory and include local stakeholders in management structures and decisionmaking. The community is represented at meetings and in decision-making functions usually by a single person or a few representatives (i.e. one man and one woman to be gender 'equal) as one among a variety of stakeholders alongside public, private, non-profit/conservation group entities.
The critique is that this model of representation is not necessarily conducive to reflecting realities of what is happening in the everyday use of natural resources. The representations of stakeholders are homogenised, and they are assumed as equals in terms of power to impact decisions-making structures.

1b) Sustainable Forest Management through Criteria & Indicators, 'model' forest
Since the 1992 UNCED Conference several processes in different regions of the world are attempting to define criteria and indicators to assess social economic and ecological sustainability of forest management. The Centre for International Forestry Research (CIFOR) has carried out tests in the effort to produce a generic 'master' set. This attempt to harmonize different systems (WWF, WB, FSC[1]) and 'glocalise' is driven by an overarching goal of sustainability based on terms (like 'sustainable development' and 'deforestation') which have been set in the global/international arena. CIFOR's attempts to develop a set of useful criteria and indicators and tested in their Forest Management Unit found social sets of indicators were much more difficult to apply than ecological/policy and forest management sets. The social set exhibited much lower rates of commonality across location, regions and nationalities (see Prabhu 1998: 4).
Critiques state that these approaches also remains largely managerial, extending bureaucratic structures, and driven by terms and discourses defined globally by entities (i.e. international, national, advocacy-oriented NGOs etc.) deemed outsiders by users in the forest/natural resource area. It is necessary to recognize that even overall enhanced sustainability will not necessarily or always benefit all groups (and will not benefit all groups *equally*) especially more marginalised or powerless ones. This approach tends to leave differences in access, control and accrued benefits to varieties of actors in the forest 'landscape' unnuanced and unaddressed.

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[1] World Wildlife Fund, World Bank, Forest Stewardship Council

2) Market-based approaches (i.e. certification, Forest Stewardship Council)

Central to this approach is the promise of a sophisticated marketplace, with people and organizations seeking to choose ecologically responsible products. Markets would pay the cost of certification, and provide 'eco-foresters' with a premium for their investment in environmentally-sound harvesting and production practices. The Forest Stewardship Council (FSC) is a major driver of this approach and it has been followed through on a global scale. Some reports say the demand for FSC wood products is far greater than the supply. It is based on the rationale that economic pricing policies and market-driven approaches can ensure environmental protection. It also sees no necessary conflict between goals of environmental protection and trade/consumerism, and sees the issue rather as one of appropriate institutional design.

However, significant barriers to its success remain say several authors (Brewer 2002; von Mirbach, 2000) The certification approach does not address unsustainable consumption patterns and instead relies on consumerism, albeit 'green consumerism' to maximize its impact. This means that promoting certification actually works against programs that might seek to reduce the use of forest products in those countries where per capita consumption is highest. Also, a major demand for certification products is from big industry going 'green' (i.e. Home Depot) and using eco-certification as a compelling selling point. This type of greening favours large timber operations as suppliers as small, local eco-forestry operations have a hard time meeting the large-scale demand and are therefore still excluded from this market. There are 'gaps' related to volume, consistent supply, processing, distribution, and coordination that individual eco-certified woodlots or community forests must bridge in order to have access to large, industrial markets (Brewer 2002). Therefore, the underlying assumption that the benefits of eco-consumerism will fall to 'all' equally with 'beneficiaries' remaining a relatively undifferentiated mass, is not borne out in practice so far.

3) Community-based natural (forest) resource management (CBNRM) approaches

This approach aims to be 'more' grassroots, and participatory than the managerialist approaches, more than just 'involving' local stakeholders but privileging their knowledge and skills in managing the resources in their immediate surroundings over those of outside interests. This is based on an underlying belief that local people know best what to do with the resources based on a history and tradition of doing so. There are underlying images of a community living in harmony with an environment and that environment has been disrupted –usually by development or 'over' exploitation of resources. Operating within this are elements of common property theory and rational actor models.
While this image can be employed to the strategic benefit of the community and enhance its power, in practice the 'community' tends to get homogenised and presented as a structure rather than a differentiated mass with a variety of actors, interests that play out over variously over time and space (Mearns et al. 2000; Agrawal and Gibson 1999). Power relations *within* communities get glossed over. Questions such as who attends in forest-user committee meetings, who speaks, for how long, who gets 'heard', how decisions

actually get made, who within the community is ultimately benefitting and why remain unasked, unaddressed.

4) Livelihoods-based approach (also called 'systems approach')

4a) Entitlements approach

This approach to analyzing socio-economics of resource use brings together elements of other approaches and gives credence to the regularized behaviour patterns and relationships going on around forest resources, both intentional and unintentional, local and 'global'. It is currently being integrated into analysis and practices community-based natural resource management (CBNRM) to address some concerns mentioned above.

The environmental entitlements framework maps the use of forest resources (framed as environmental goods and services) by people, who are 'actors' operating through institutions at macro, meso, and micro levels (diagram in Mearns et al. 2000). Institutions are defined as distinct from organizations; institutions are the regularized behaviours shaped by formal and informal entities operating at the three levels. These include 'rules' that shape people's behaviours and behaviours the shape the rules; behaviours may be intentional or unintentional and produce 'legacies' that build on one another. Through institutions, the resource endowments become entitlements employed by people towards their own well-being.

The approach includes a focus on issues of *access* and *control* by various actors (i.e. who has access, who has control, how and why) as well as management of resources. It treats the forest landscape as a dynamic and complex entity constantly transforming through interactions between ecological and social processes. Trajectories are within a range, not precise. The entitlements approach can extend and provides additional analyses to other NRM approaches.

4b) Sustainable livelihoods framework

The sustainable livelihoods framework is an analytical approach that puts people's livelihoods, meaning their interaction with their environment at its centre. A 'livelihood' comprises the capabilities, assets (including material and social resources) and activities required for living (Carney 1998). The framework has evolved through the entitlements approach with the idea that each person is entitled to livelihood security. Its impetus is social and economic, with renewable natural resources seen as managed ecosystems, and the management modes and technologies used in their exploitation as important as the social distribution of access to them and their benefits. Through this framework, NRM is linked with other sectors of the local economy, the social system, and the wider regional, national and international system from which markets, employment, policy and other forces emanate.

The framework incorporates five elements of analysis (diagram in Scoones 1998):
- Context and policy analysis
- Analysis of livelihood resources – natural, human, economic/financial, and social

❑   Institutions and organizations (formal and informal)
❑   Livelihood strategies – agricultural, livelihood diversification, migration
❑   Sustainable livelihood outcomes (and trade-offs)

This conceptual analysis aims to deliver and justify entry points for intervention and shape the processes of people's resource use towards sustainability. A livelihood is considered sustainable when it can recover from stresses and shocks, and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Carney 1998).
Critiques of this approach focus on its transfer to practical application. There is debate over which of methods of analysis (i.e. PRA methods) and interventions make for effective outcomes. There are also issues of scale and whether the approach is most suitable for micro-level but fails at larger scales. Assessment of the institutional aspects, formal and informal, has also been criticized as a largely subjective process, raising questions of who is identifying and interpreting them. Specific and contextual definitions of 'capabilities' and 'assets' are also vaguely defined and therefore potential subjects for localised research.

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