

MODULE 7: COMMUNITIES and BIODIVERSITY CONSERVATION

Learning Objectives

Students will be able to:

- Define and explain what is meant by ‘community.’
- Identify and constructively engage with stakeholders in relation to conservation issues.
- Recognize and identify relevant stakeholder groups within a community.

Key Topics

- Participatory approaches to decision-making
- Social Surveys
- Conflict management
- Management of protected areas with community participation (participatory management)
- Community Forestry
- Livelihood options

Social factors play a critical role in almost every conservation problem. There is a pressing need for conservation researchers and practitioners to understand both the ecological and human dimensions of their systems in order for projects to be successful. At the same time, many conservation professionals come from a natural science background with little training in or limited access to social research methodologies. The purpose of this module is to review the principal methods of social science field research relevant for biological conservation: key informant interviews, oral histories, surveys, focus groups, participant observation, and participatory research.

There is much contention surrounding the relationship between protected areas and people, with conservationists and those concerned with human welfare locked in debate. Conservationists argue that environmental regulations are essential to ensuring the sustainability of the planet’s biological systems and the health and welfare of people, and that PAs are an indispensable tool in that regulatory toolbox. Social advocates, on the other hand, contest the establishment and management of PAs, and support the belief that: (1) only initiatives related to poverty alleviation will lead to successful biodiversity conservation since poverty is a root cause of environmental destruction; (2) PAs have been frequently established at the expense of local communities (in and around PAs) through displacement and dispossession, and are responsible for perpetuating poverty by the continued denial of access to land and other resources; and (3) even if parks do generate economic value, the distribution of these benefits is so skewed against poor rural people that the role of parks in local development is negligible, and they neither justly compensate for lost property and rights nor contribute to poverty alleviation.

READING: Fouladbash and Currie, “Agroforestry in Liberia”

- Costs of PAs

Critics of PAs point out that the creation of PAs causes (a) Displacement of people, where people are geographically relocated; and (b) Dispossession, where people are deprived of access to resources such as land, timber, and wildlife. They claim that indigenous communities are denied their traditional rights and responsibilities for the stewardship of those resources, thus exacerbating all the dimensions of poverty. Communities adjacent to protected areas may suffer from crop-raiding animals or predators

that kill their livestock. This in turn can result in ill-feeling and resentment that increases threats to the survival of the PA through illegal incursions to collect fuelwood or to hunt, or through encroachment by agriculturalists or pastoralists.

Economists refer to the on-going loss of access to land and resources by the creation of PAs as opportunity costs, which can exacerbate and perpetuate poverty. Estimates at a national level have shown that states can incur considerable opportunity costs from the loss of agricultural land to protected areas. However, the costs to people at a local level generally remain poorly researched.

- Poverty and PAs

Overall, our understanding of the actual impacts of PAs on human welfare is still very incomplete, and it is difficult to show causal links between PAs and poverty, or to prove that PAs themselves perpetuate poverty. It is many times simpler to demonstrate that poverty often has a deleterious effect on PAs. More often than not, PAs are expected to contribute significantly to economic development and alleviate human poverty in addition to fulfilling their primary mandate for biodiversity conservation. However, many believe that the goals of economic development and poverty alleviation strongly conflict with the goal of conserving biological diversity, and that protected areas cannot effectively fulfill a mandate beyond that of biodiversity conservation. In general, the conflicting mandates imposed on PAs pose significant challenges for their management and effectiveness. In particular, the relationship between parks and people will continue to dominate international and national dialogues on biodiversity conservation and stimulate the evolution of innovative approaches for reconciliation.

Protected areas may not be able to alleviate poverty, but they may have an important role in sustaining the livelihoods of the poor, and preventing further impoverishment. Some argue that poverty is a national and regional concern that needs to be addressed through targeted and integrated programs across all sectors. There may be too great an emphasis placed on PAs as a solution to surrounding poverty, while in fact they may only constitute a part of the solution. They can significantly help to prevent and reduce poverty by maintaining ecosystem services and supporting livelihoods. However, outcomes depend on complex factors including the demographics of local or surrounding populations as well as some indigenous people's cultures and beliefs. The management skills, authority and resources are not available to PA agencies to treat poverty reduction as a principal objective alongside biodiversity conservation. In general, there is need for broader policy reform beyond the boundaries of PAs for them to become effective in conserving biological diversity and sustaining local livelihoods. PAs could be viewed as a tool for promoting effective planning of land and water use so that they can better contribute to broader socio-economic development plans. This broader landscape approach could potentially enable PAs to be linked to poverty alleviation.

ICDPs represent one of the earliest approaches that aimed to integrate conservation with development in and around PAs. Although ICDPs vary considerably in form and size between sites, the underlying model throughout is to establish "core" protected areas in which uses are restricted and in the surrounding areas (buffer zones) promote socioeconomic development and income generation compatible with park management objectives.

Reviews of ICDPs have consistently found limited success in achieving biodiversity conservation or in improving social welfare. Most of the projects have been hampered by design and implementation problems, and many have identified serious problems with the ICDP approach. However, many conservation agencies remain broadly committed to ICDP approaches and lessons from ICDPs will

continue to influence future projects addressing poverty alleviation. New models have started to incorporate elements of adaptive management, new types of partnerships with stakeholders, and integration of site-level work with policy initiatives and institutional development.

There is other evidence to suggest that sustainable development and biodiversity conservation within PAs may not always be compatible. For instance, analyses of the potential for forest-based sustainable development through forestry and non-wood forest products have shown that there are few synergies between natural forest use and poverty alleviation. There have been few successful examples of sustainable harvesting regimes for non-timber forest products (NTFPs), although overall expectations for NTFPs in poverty reduction have subsequently been criticized as unrealistic, and, in some cases, counter-productive.

- Participatory approaches to decision-making
 - Stakeholder consultations and engagement

PRACTICUM: Documenting local knowledge

READING: “How to Engage Stakeholders and Mainstream Biodiversity” (p. 156-173)

Stakeholder Consultation

Consultation with stakeholders can play a critical role in all stages of the baseline, from scoping onwards. Early consultation can help identify biodiversity values that are important to stakeholders for inclusion in the scope of the baseline study. Local knowledge can reveal important information relevant to understanding the biodiversity values within the project area of influence and the dependence/use of this biodiversity value and/or ecosystem services by project-affected communities. Stakeholder consultation can help ensure that stakeholders support the scope and design of the biodiversity baseline, increasing the likelihood that they will support the results of the environmental assessment. The following types of stakeholders may be relevant to the biodiversity baseline:

- Indigenous groups
 - Community groups
 - Recreational users within the baseline study area
 - Hunters/fishers
 - Farmers
 - Governments
 - Scientists and academics not serving as expert advisors
 - NGOs that are locally active on the issues of biodiversity, community development, and other related concerns.
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- Social Surveys
 - Survey objectives and sample population
 - Survey design
 - Types of questions – closed, ranked, open-ended, demographic

Quantitative social assessments in the conservation planning are typically focused on answering “what” questions. What questions require a descriptive answer; they are directed toward describing the characteristics of patterns in social phenomena (e.g., what knowledge, beliefs, values or attitudes do land managers hold; what is their characteristic behavior; and what are the patterns in the relationships between these characteristics?). Descriptive-level or survey research designs are often employed to describe these characteristics. However, what questions do not enable us to understand the causes or reasons for these characteristics nor how to bring about changes in values, attitudes, beliefs, or behavior.

PRACTICUM: Assessing Community Conservation Attitudes

To address these goals, we encourage conservation planners to also consider why and how questions. Why questions seek to explain the causes of or the reasons for the characteristics of social phenomena (e.g., Why do people think and act this way? Why did these patterns come about?). How questions are concerned with bringing about a change, with practical outcomes (e.g., How can these characteristics, social processes, or patterns be changed using an intervention?).

Different types of research designs in the social sciences (whether qualitative or quantitative) have various strengths and weaknesses. It is important to document the strengths and weaknesses of the research designs applied for integrating conservation and social science constructs.

In-depth interviews and semi-structured interview designs are useful when the goal is to explore a conservation issue on the basis of the interpretations that people give of their experiences and when generating new theory. However, these methods are time consuming and costly and do not address why questions whereby the relationships among phenomena need to be explained or generalized to other contexts. In contrast, survey research enables a breadth of data to be collected, but it does not provide the depth and richness of data collected through interviews and is subject to nonresponse bias.

In the majority of studies integrating conservation-planning and social science constructs, survey instruments have been used. Robust survey design and administration is a complex process that should involve multiple tests of validity and reliability. This testing may include (a) semi-structured interviews with key informants to identify the multiple dimensions of conservation opportunity, (b) multiple rounds of discussion to explore relationships that exist among these dimensions, (c) the presentation of a new theory to support the observed relationships among these dimensions, (d) peer review and pilot testing to ensure their validity.

Social research is critical for developing an understanding of conservation problems and assessing the feasibility of conservation actions. Social surveys are an essential tool frequently applied in conservation to assess both people’s behavior and to understand its drivers. However, little attention has been given to the weaknesses and strengths of different survey tools. When topics of conservation concern are illegal or otherwise sensitive, data collected using direct questions are likely to be affected by non-response and social desirability biases,

reducing their validity.

Questionnaires frequently assess behavior through direct questions (e.g. “Have you done X” Yes/No). However, when the topic under investigation is illegal or otherwise sensitive, both non-response and social desirability biases can reduce the validity of data. For example, a non-random proportion of respondents may refuse to participate partly or wholly in the survey creating non-response bias; or respondents may provide dishonest answers in order to conform with prevailing social norms, introducing social desirability bias. This tendency of respondents to answer questions in a manner that will be viewed favorably by others may result in under-reporting of undesirable behavior, such as rule breaking, or over-reporting of desirable behavior, such as rule compliance.

- Survey implementation

Interview setting and the presence of an interviewer or of other people whilst a questionnaire is being administered are also important factors that may affect people’s responses, particularly when the topic is sensitive. The behavior and characteristics of the person delivering a questionnaire to a respondent can contribute to misreporting, for example survey responses may be influenced by the way in which a question is read out (interviewer behavior), or the gender of the interviewer (interviewer characteristic).

Because the presence of a third party also affects reporting on sensitive topics, ideally, no one but the interviewer and respondent should be present during the administration of the questions, particularly if that third person is not familiar with the information the respondent has been asked to provide and if the respondent fears any repercussions from revealing it to the bystander.

- Conflict management
 - Human-Wildlife Conflicts

READING: Brottem + Unruh, “Rainforest conservation, postconflict recovery and land tenure in Liberia”

International, national and local legal frameworks have impacts on wildlife conservation and the livelihoods of locals that share their existence with wildlife. Human-wildlife conflict is any interaction between wildlife and humans which causes harm, whether it is to the human, wild animal, or property.

Ethical dilemma: what is best for conservation of wildlife species may have detrimental effects on livelihoods, in particular where locals are unable to effectively address human-wildlife conflicts with the tools at their disposal or when they lack motivation to participate in conservation efforts because the relevant commodity does not economically benefit them.