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Recognizing Community Heterogeneity When Designing Community Conservation Projects

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Introduction

Though not always called so, community based conservation (CBC) has existed for a long time. Evidence of conservation by indigenous peoples has been found in many regions of the world. These conservation practices were often borne out of necessity (Sharpe, 1998), as part of religious rites and sacred sites (Lebbie & Guries, 1995) or even unintentionally as part of harvesting and agricultural activities (Alieu, 2010; Campbell, 1998). Community based conservation as we have come to know it began to be recognized by the western world in the 1980's (Alcorn, 2005) during the global movement for environmental responsibility. Citizens living in urban areas began to understand more about how their actions impacted the environment and that they could play a part in working towards a healthier environment. The term community based conservation came a bit later, and has been in use since the early 1990's (Alcorn, 2005). Community based conservation aims to conserve biodiversity through the participation of the community; the community may benefit economically when conservation practices are implemented (Campbell & Vainino-Mattila, 2003). More currently, a common method of early "western conservation" practices was to close off areas and make national parks. In the beginning, this was frequently done without any involvement of the local community and was often in conflict with locally implemented CBC that functioned more on a "managed use" type of system (Sharpe, 1998) rather than restricted access. It was found that in order for a protected area to be successful, the community needs to be consulted regarding its design and development (Adetoro et. al., 2011). The impetus for conservation by communities was usually due to an economic need, whereas conservation projects imported by external groups were designed with the well-being of nature in mind (Sharpe, 1998). In order to reduce conflict and improve the conservation result, there is a need to better understand the diversity of communities and stakeholders in the context of CBC.

Identifying Stakeholders and the Role They Play

Who are the stakeholders? This question is not very meaningful unless paired with another question: What resource(s) is/are under consideration? The term 'local stakeholder' is used often in CBC jargon, yet it links the stakeholder to a specific geographic area (Geoghegan & Renard, 2002) when the resource may actually impact people in other towns, islands, or countries. Although addition of the word 'local' lends some intimacy to the issue, it may be better to stick to the simple term of 'stakeholder' and realize that a stakeholder is any person who is impacted by the issue or resource, regardless of where they reside (Geoghegan & Renard, 2002). Campbell and Vainino-Mattila (2003) noted that it is often the case that not all stakeholders have the same level of influence over management decisions or even the same opportunity to become involved, so this is something to be cognizant of when planning CBC projects.

Community Heterogeneity

Despite the wide dispersion of some stakeholders it is often necessary for some conservation NGO's to focus their efforts on a specific community or town, because of restrictions with time, funding and staffing. This does not necessarily simplify the project. Assumptions are sometimes made during the development of conservation projects regarding the similarity of stakeholders (Campbell & Vainino-Mattila, 2003, Geoghegan & Renard, 2002). Commonly referred to as 'the public' or 'the community' they are treated as a single entity, yet in actuality communities are usually a complex ecosystem made of diverse people with varying backgrounds (Sharpe, 1998; Geoghegan & Renard, 2002). At the simplest level, community members of assorted backgrounds may have their own definitions of what the resource is, or have different terms for it (Sharpe, 1998) which can complicate outreach. The involvement of community members (and, in some cases, their comprehension of the conservation project) may vary depending on their level of education, past experiences, gender, or their job status and amount of free time, e.g. full-time, retired (Alesina & La Ferrara,

2000; Onianwa, Wheelock, & Hendrix, 1999). Unfortunately, there is no cookie cutter approach to community conservation; projects need to be developed with the diversity of the local community in mind, and with their input, in order to increase their level of success (Adetoro *et. al.*, 2011; Campbell, 1998; Geoghegan & Renard, 2002; Granek *et. al.*, 2008; Waylen et. al., 2010). However, difficulties in measuring community heterogeneity can impact the accuracy of gauging conservation success when community heterogeneity is a factor (Waylen et. al., 2010). Alesina and La Ferrara (2000) use a degree of heterogeneity, but this is simplified by isolating characteristics such as race and wealth, when in actuality multiple factors may be influencing heterogeneity. Interestingly, in their study on community participation Alesina and La Ferrara (2000) found that the more heterogeneous (in terms of race and income) the community, the less likely they are to participate in social clubs. This is relevant to The Bahamas where many communities include locals, transplants from other Bahamian islands, immigrants, and second home owners (typically from North America, Europe and Britain).

Involving Communities

Arnstein's ladder (Arnstein, 1969) was developed as a means to discuss sociopolitical issues, but it is relevant to conservation because it addresses the fact that there are varying degrees of citizen participation. The ladder could be a useful tool in identifying the current level of participation and setting goals for improvement. Adetoro *et. al.* (2011) surveyed a group of Nigerians to determine their opinions as to which stage stakeholders should be involved in conservation planning for a local national park. The majority of respondents answered "all stages", namely decision making, implementation and monitoring and evaluation (Adetoro *et. al.*, 2011). In order to initiate CBC projects with local communities it may be necessary to help remove barriers for their participation (Adetoro *et. al.*, 2011; Steelman, 2002); for example, providing transportation so that those without access to a vehicle may attend meetings. Incorporating successful indigenous practices into natural resource management as

Alieu (2010) suggests may help increase the interest and involvement of indigenous peoples. Building on successful local programs may also increase buy-in for conservation initiatives (Campbell, 1998). It is also important to identify how knowledge transfer typically occurs in the community. In Sierra Leone, village elders and religious personalities are looked to with respect, so they would be useful conduits for information (Alieu, 2010). A review of the involvement of recreational fishermen in conservation planning and implementation by Granek et. al. (2008) found that information provided during fisherman consultations improved conservation planning and acceptance of the resultant programs and policies by fishermen (in most cases). Fostering partnerships with these prominent community elders/groups could be useful in ensuring project sustainability. Collaboration is important between conservation organizations, community groups, government agencies and industry. All parties must communicate well and play a part for effective conservation. The community groups have a large role to play in biodiversity conservation because they are the stakeholders who are immediately impacted by the loss/recovery of the resource; they also provide on the ground support for continuing conservation projects (Granek et. al., 2008; Steelman, 2002). When challenges with community involvement exist, identifying and implementing basic conservation projects such as community gardens (which can improve the quality of life for communities) can help open the doors to educate about and involve community members in other conservation issues (Ohmer et. al., 2009).

Conclusion

Analysis of the literature reveals that while community based conservation is not a perfect model it can be a useful option for biodiversity conservation projects (Granek *et. al.*, 2008; Steelman, 2002). The users of the resource are most directly connected to the problem and have a large stake in its conservation and management (Steelman, 2002). The issue of the user is a big one since the user(s) need to be identified and involved in order to properly develop conservation plans. Many community conservation initiatives cite consultation through interviews or surveys as a means to

involve the community (Adetoro *et. al.*, 2011; Ohmer *et. al.*, 2009; Sharpe, 1998; Turner & Downey, 2010). Arnstein (1969) criticizes involvement solely through consultation and suggests that participation go beyond consultation to "partnerships and citizen control", which provide community members with a greater influence on the issue at hand (Geoghegan & Renard, 2002). Steelman (2002) notes that CBC projects can be expensive and time consuming; in order to maximize gain, organizations should carefully choose which communities to work with.

In order to use CBC projects to their full potential, community heterogeneity should be taken into account during project planning phases (Steelman, 2002). Rather than targeting whole communities or specific socio-economic groups within communities it may be more appropriate to look at user groups, such as fishermen and farmers. While it is possible that members of these user groups will have different socioeconomic backgrounds they will all likely speak the same "language" and have a collective motivation for joining the issue, because of their connection to the resource under question. A great example of this are the community pride campaigns developed with the assistance of the group RARE out of Virginia, USA. These campaigns are initiated all over the world using a social marketing approach for resource conservation by choosing a flagship species to focus the campaign around (RARE, 2013). A pride campaign recently took place in The Bahamas to reduce the amount of undersized and juvenile spiny lobsters caught by fishermen (Friends of the Environment, 2013). This campaign primarily targeted fishermen; a change in behavior was brought about by increasing fishermen's pride in their product and barriers were removed by providing gauges for the fishermen to measure their catch (Friends of the Environment, 2013).

In summary, success is achievable with community based conservation programs when those undertaking the initiative (1) are aware of the community setting that they are working within and how that can help or hinder project participation, (2) identify and engage stakeholder groups, (3) remove barriers to community participation, and (4) seek true partnership with stakeholders in conservation, management and education.

References

- Adetoro, A. O., Lawal, M. S., & Jenyo-Oni, A. (2011). Biodiversity conservation and community participation in Kainji Lake National Park, Nigeria. *Advances in Applied Science Research*, 2, 218–226.
- Alcorn, J. B. (2005). Dances around the Fire: Conservation Organizations and Community-based Natural Resource Management. In J. P. Brosius, A. L. Tsing, & C. Zerner (Eds.), Communities and Conservation: Histories and Politics of Community-based Natural Resource Management. Walnut Creek, CA: Alta Mira Press.
- Alesina, A., & La Ferrara E. (2000). Participation in Heterogeneous Communities. *The Quarterly Journal of Economics. August.* 847-904.
- Alieu, E. K. (2010). Building on local foundations: enhancing local community support for conservation. *Unasylva*. 236(61), 22-27.
- Arnstein, S. R. (1969). A Ladder of Citizen Participation, *Journal of the American Institute of Planners*, 35(4), 216-224.
- Campbell, L. M. (1998). Use them or lose them? Conservation and the consumptive use of marine turtle eggs at Ostional, Costa Rica. *Environmental Conservation*, *25*(4), 305–319.
- Campbell, L. M., & Vainio-Mattila, A. (2003). Participatory development and community-based conservation: Opportunities missed for lessons learned? *Human Ecology*, 31(3), 417–437.
- Friends of the Environment (2013, June 17). Size Matters. Retrieved from http://www.friendsoftheenvironment.org/page-1/marine-resources/size-matters/
- Geoghegan, T., & Renard, Y. (2002). Beyond community involvement: lessons from the insular Caribbean. *Parks*, *12*(2), 16–27.

- Granek, E. F., Madin, E. M. P., Brown, M. A., Figueira, W., Cameron, D. S., Hogan, Z., Arlinghaus, R. (2008). Engaging Recreational Fishers in Management and Conservation: Global Case Studies. *Conservation Biology*, *22*(5), 1125–1134.
- Lebbie A. R., & Guries R. P. (1995). Ethnobotanical Value and Conservation of Sacred Groves of the Kpaa Mende in Sierra Leone. *Economic Botany, 49*(3), 297-308.
- Ohmer, M. L., Meadowcroft, P., Freed, K., & Lewis, E. (2009). Community Gardening and Community Development: Individual, Social and Community Benefits of a Community Conservation Program. *Journal of Community Practice*, *17*(4), 377–399.
- Onianwa, O., Wheelock, G., & Hendrix, S. (1999). Factors affecting conservation practice behavior of CRP participants in Alabama. *Journal of Agribusiness*, *17*(2), 149–160.
- RARE. (2013, June 17). About RARE: Conservation on a Human Scale. Retrieved from http://www.rareconservation.org/about
- Sharpe, B. (1998). "First the forest": conservation, "community" and "participation" in south-west Cameroon. *Africa*, *68*(01), 25–45.
- Steelman, T. A. (2002). Community-based involvement in biodiversity protection in the United States. In T. O'Riordan & S. Stoll-Kleeman (Eds.). *Biodiversity,*
- sustainability and human communities: protecting beyond the protected. Cambridge University Press, Cambridge, United Kingdom, 142–167.
- Turner, P. J. & Downey, P. O. (2010). Ensuring invasive alien plant management delivers biodiversity conservation: insights from an assessment of Lantana camara in Australia. *Plant Protection Quarterly, 25*(3), 102-110.
- Waylen, K. A., Fischer, A., Mcgowan, P. J. K., Thirgood, S. J., & Milner-Gulland, E. J. (2010). Effect of Local Cultural Context on the Success of Community-Based Conservation Interventions. *Conservation Biology*, 24(4), 1119–1129.

Discussion Questions

- **1.** For conservation project design is it appropriate to isolate particular groups of stakeholders based on their socio-economic or educational status? Or should projects try to be comprehensive?
- **2.** What are some ways to bridge the gap between community consultation and true community participation?
- 3. For CO's it is necessary to have some structure for project planning, funding etc. How does this impact the way we approach communities?
 Is it better to approach the community with:
 - **a.** An outline for a conservation project targeting a specific issue, then ask for input.
 - **b.** The issue itself, then discuss how to approach it.