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FIELD NOTES

Measuring the Costs and Benefits of Conservation to Local Communities

JIM IGOE

Paradigms of community-based conservation that emerged in the 1990s proposed to link the twin goals of conservation and sustainable development under a single rubric. This was and is a very sexy idea, linking as it does the protection of biodiversity and the alleviation of poverty for the most marginal human societies. More specifically, it links the protection of wildlife and wild landscapes with the protection of traditional indigenous peoples. In fact, ideas of wilderness and traditional societies are inextricably linked in the western psyche. To quote Niezen (2003:5), indigenous peoples are “the estimated three hundred million people from four thousand distinct societies, strongly attached to what were recently, and in a few instances still are, the world’s last wild places.”

This is a paradigm out of which international conservation organizations have squeezed a lot of mileage in the past ten or fifteen years. In fact, the World Wildlife Fund (1997) went so far as to suggest that the future of biodiversity conservation and the future of indigenous societies are inextricably linked on a global scale. The secretariat of the Convention on Biological Diversity (2004) also goes to great lengths to emphasize the importance of protecting biodiversity and the livelihoods of those people who still depend on direct access to natural resources for their livelihoods (see Nugent 1994 for a comprehensive and accessible critique). Indigenous activists have also used this linkage in advocating for their rights and in building a global indigenous people’s movement, but with limited, and sometimes self-defeating, results (Conklin and Graham 1995; Igoe 2005b; Niezen 2004).¹

Not surprisingly, the past ten years have seen an explosion of anthropological work on traditional environmental knowledge and the promotion of ‘people-centered’ biodiversity conservation. As a graduate student doing research with Maasai communities in the mid-1990s in Tanzania, I was very excited when I heard the idea of community-based conservation. The people with whom I worked were fed up with traditional approaches to conservation. Many of them had been evicted from Tarangire National Park when it was gazetted in 1971. It seemed to me that a new approach to conservation, one that would prioritize community needs and incorporate local people’s environmental knowledge, was definitely needed in my research area.²

However, local people believed that community-based approaches to conservation were simply a new ploy for limiting their access to the natural resources. So far, I haven’t seen anything that would contradict that notion. Large conservation organizations, the Tanzanian Government, and a few of the Maasai activists have used the idea of community conservation to promote themselves and their agendas—especially in terms of fundraising. In the meanwhile, Maasai and other rural Tanzanians continue to be marginalized and divested of land and other natural resources. It took me some time to come to terms with this schism between what I actually saw in the field and what I expected and wanted to see.³

I have since learned that the types of problems I saw in Tanzania are far from unique. In response, I have been working within Dan Brockington’s research project called the Social Impacts of Protected Areas.⁴ The project emphasizes the need

to recognize that protected areas have displaced and impoverished people on a global scale. Before we can understand the benefits of conservation to communities, we must first understand the opportunity costs of protected areas—otherwise we cannot know whether communities are experiencing a net loss or a net gain (Brockington et al. 2006; Brockington and Igoe forthcoming).

As Brockington, myself and others have argued elsewhere, little is actually known about the social impacts of protected areas. There are very few systematic studies, let alone anything like a global understanding of these processes. As such, discussions of whether conservation harms or benefits communities often take place in the absence of good empirical data; e.g., to argue that protected areas provide ecosystem services that are valuable to local people without addressing whether local people actually have access to those ecosystem services (Convention on Biodiversity 2004, especially chapter 3). It also makes it possible to argue that indigenous people are living in timeless harmony with nature, without addressing the realities of contemporary indigenous communities (Igoe 2005b). Finally, it makes it possible for hard line conservationists to dismiss reports of human rights violations associated with conservation as anecdotal and hearsay, which they often do (Igoe 2005b).

In the absence of empirical and systematic understandings of these processes, such arguments are of little value in advancing our understanding of community-based conservation, and especially its specific impacts on communities and the environment. As anthropologists involved in these debates, we have a significant role to play improving our knowledge in this area. It is essential, however, that we take a leading role in doing so—and that we not get mired down in defending untenable positions supported by little empirical evidence (Igoe 2005a).

So if someone is interested in doing this kind of research, how should they proceed? To begin, it is essential to leave your own desires and expectations at the door. As I have already said, community conservation is a sexy idea. New anthropologists often study community conservation

because they are committed to it. They also often enter the field in association with international conservation NGOs or with grassroots organizations involved in community conservation. If one is excited about an idea, it is difficult to see beyond the rhetoric of these organizations to see what is really going on.

Another challenge you will face is the fundamental tension between generalizing about what we see in the field and remaining true to the unique circumstances of our specific field site. Here I would echo Tsing's (2004) assertion that the putative divide between the local and the global are both misplaced and misleading. We should not speak of generalizing or not, but of finding a better understanding of how global institutions like protected areas and their accompanying knowledge systems are "charged and enacted by the sticky materiality of everyday encounters" (Tsing 2004:1). From this perspective, it is impossible to generalize from field data in the way one might generalize from a physics experiment; the events and phenomena we observe as field researchers are neither unique nor random. They present patterns that can be understood with enough data and attention to detail. It becomes possible to say something about the types of things that are likely to occur under certain types of circumstances—why, for instance, protected areas appear to have displaced far more people in Africa than in Latin America (for a detailed discussion see the conclusion section of Igoe 2005b; Brockington and Igoe forthcoming).

In order to see these kinds of patterns, however, it is necessary to gather data on comparable phenomena. In my own work, I am interested in the specific costs and benefits of protected areas and how these are to be measured and compared. From this type of data, I believe it will become possible to talk about the kinds of patterns that exist in the social impacts of protected areas on a global scale. In my work in Tanzania for the past year, I approached this question using something called the DFID Sustainable Livelihoods Framework.⁵ It's not a perfect instrument by any means, but it is useful for infusing some clarity into discussions of the costs and benefits of conservation.

The framework argues that poverty is a context, not a condition. In other words, poverty is not an inherent trait of poor people, but a context in which they live—one that has historical causes. In short, before you can talk about the benefits of conservation to a specific community, you have to know your history. Have people been historically displaced or otherwise denied access to resources as a result of conservation? If so, how did these historical processes impact their livelihoods? This is often difficult information to obtain, especially if evictions occurred in the past. However, oral histories and archival research are good places to start. In case of more recent evictions, it may be possible to quantify livelihood cost in terms of lost livestock, crops, etc. Also, it is important to determine which people were most impacted by these processes (Brockington 2002).

This type of work is essential since conservationists frequently talk about poverty as a baseline—they automatically consider anything that they give to local people to be a benefit. This is often the basis for fundraising propaganda claiming to have improved the lives of rural people, featuring pictures or videos of smiling villagers. However, if people previously depended heavily on resources enclosed by nearby protected areas, it is unlikely that these kinds of benefits will offset the livelihood costs of conservation. Furthermore, claims that people are benefiting from ecosystem services often ignore historical displacement and reduced access. The protection of forests, for instance, is of little value for local people unless they are allowed to harvest forest products—and often they are not. Local people are most likely to benefit from ecosystem services in the case of parks that protect high mountain peaks, to which they seldom go, but the snowcaps recharge springs and aquifers on the lower slopes where people farm.

The DFID Framework provides additional tools for assessing the positive and negative impacts of these types of historical processes, and whether or not people are positioned to take advantage of the types of benefits offered from community conservation interventions. Specifically, it emphasizes the ways in which historical processes and other external forces have influenced people's access to different kinds of capital, including:

Natural Capital: *Land, other natural resources, and ecosystem services:* This type of capital is especially important to rural communities in most parts of the developing world, and even the developed world. It is also the most likely to be lost to protected areas.

Financial Capital: *Cash, credit, and other easily liquefiable assets (especially livestock):* Financial capital is particularly important, as it can be easily converted into other kinds of capital. It can also be used to reduce food insecurity and gain political influence.

Physical Capital: *Infrastructure, infrastructural services, and tools:* Roads and transportation are of particular importance, since they facilitate access to tourist revenues. They also represent access to markets, which provide additional livelihood opportunities as well as goods and services. Communication services give people access to information, which in turn helps them take advantage of community-conservation programs and other economic opportunities.

Social Capital: *Access to networks, as well as relationships of trust, reciprocity and exchange:* While relationships of trust are important to community-based conservation, access to networks is more likely to determine the distribution of benefits. Connections to NGOs, government structures and private tour companies strongly influence who is able to benefit.

Human Capital (aka Capacity): First, people need to be aware that community conservation programs exist, and then they need to understand the specifics of how they work. This knowledge increases the possibility of positioning themselves to take advantage of the benefits offered by a specific intervention, but also of assessing whether or not the intervention is a good deal for them in the first place. Also, the more people are aware of their rights vis-à-vis a specific intervention, especially in terms of legal authority over natural resources, the more likely they are to be able to negotiate a better deal for themselves. Of course, negotiation skills matter a great deal as well.

By specifying these types of capital, the framework gives us specific indicators that we can look at and measure—thereby making more informed assessments of the relative costs and benefits of protected areas in different contexts and ultimately make comparisons across contexts.

In my work, I noticed that most conservation costs are felt in terms of access to natural capital. Most of the benefits, however, are experienced frequently in terms of financial and physical capital. The challenge for me, therefore, is to figure out how to measure gains in one type of capital against losses in another kind. We are trying to accomplish this through household surveys, which look at things like the amount of income derived from different sources, food security, and whether or not people can afford to send their children to school. Of course we have to rely very heavily on people's perceptions of how these conditions have changed over time.

Another aspect of whether or not people realize benefits from conservation is their ability to convert different kinds of capital (e.g., to use social capital to gain access to financial capital—and sometimes vice versa). Social and human capital are especially important in this regard. Specifically, an uneven distribution of social and human capital within communities is likely to result in an uneven distribution of the benefits from community conservation interventions, especially those that are externally driven. Another thing we look at in our work, therefore, is the types of institutional networks that exist in communities (e.g., NGOs, church groups, local government structures, etc.) and how these influence access to conservation benefits.

Based on our work so far, we have come up with a number of working hypotheses. First, some groups within communities are likely to have experienced the costs of evictions more than others. Second, evictions are likely to have unevenly affected different groups within households, especially as men are usually better positioned than women to take advantage of more distant types of economic opportunities, and as women are often directly dependent on access to

natural resources for cooking fuel, building materials, and traditional medicine. Third, some groups within communities are better positioned to take advantage of conservation benefits than others, and these are often not the same groups who have borne the biggest costs of conservation. Fourth, some communities are better positioned to take advantage of conservation benefits than other communities. Finally, conservation benefits do not usually strengthen the types of livelihoods that were weakened by exclusion from protected areas. As such, the possibility of the benefits of community conservation offsetting the costs of protected area exclusion depends on conditions allowing people to translate access to new kinds of capital into positive livelihood outcomes, and on people actually taking advantage of these conditions.

Not all of these observations may be relevant to your research design, but at least they can serve as a sort of rough guide. Here are some other basic guidelines that should help you to get good data. As I have already mentioned above, it will be necessary to park your desires, assumptions and penchant for working with specific groups of people at the door. Always suspend your conclusions, and never believe anything until you have heard it from a large number of independent sources.

Next, because communities are diverse, and because not everyone is equally well positioned to take advantage of conservation benefits, it will be necessary to talk to a diversity of people within a community. Go to every part of the community, and go at different times of day. Get away from paved roads and village centers. Make a special effort to talk to the most vulnerable people, and remember that community elites may not initially appear as elites to you. Also keep in mind that members of the most vulnerable groups are most likely to tell you things that you don't want to hear about community conservation. Be prepared to listen.

In addition to economic and ecological data, it is also important to record people's perceptions of conservation. Whether or not they are accurate, and they are often more accurate than you will initially

want to believe, they will help you understand and explain why local people respond to conservation as they do—taking into account that they will not all respond the same way.

Finally, and importantly, if you do a good job at this kind of work many people aren't going to like what you have to say. Of course, the negative impacts of protected areas vary from place to place, but they are far more common than large conservation organizations and other vested interests would like other people to believe. As such, you are likely to discover that you have a large numbers of detractors. I have been in contact with a lot of researchers, some new and some old, and we have all heard similar arguments: you are behaving irresponsibly and recklessly, you are playing into the hands of the conservative right, why don't you talk more about successes? Can't you be more constructive? You are also likely to hear things like: rural people always complain and there are always winners and losers. Also, the positive spin on community conservation is so loud and so prevalent that you may find yourself wondering if you got it all wrong. In such situations it helps to talk to other researchers who have recorded similar data. Finally, it is important to keep in mind that being critical of conservation can harm your career and funding opportunities.

This being said, however, I strongly believed that the types of research approaches briefly outlined in this essay are crucial to more effective approaches to conservation that also benefit the most marginal societies on our planet. As the knowledge that this type of research produces runs up against vested interests and dearly held ideas, it will no doubt continue to be received with consternation and disdain in some circles. One thing I have noticed over time, however, is that detractors of this kind of work rarely address its specific content, highlighting instead its potential to undo everything that conservationists have achieved over the past century. As we were all taught in our introductory graduate seminars, paradigm shifts rarely occur without these kinds of struggles.

Notes

- ¹This has to do with the fundamental contradiction between having to evoke the western archetype of the noble savage—people living in timeless harmony with their environment—and the less than harmonious reality of contemporary indigenous communities and transnational indigenous activism.
- ²For comprehensive accounts of the extent of this kind of problem on a global scale, please see Dowie (2005) and visit <http://www.worldwatch.org/node/565> [7 August 2006- password required].
- ³I still have not managed to completely come to terms with the gap between my ideals about community conservation and the actual practice of community conservation in Tanzania and elsewhere. Since leaving Tanzania in 1997, I continued to work on these issues in the United States with the Oglala Sioux in South Dakota. For the past year I have looked at village-based protected areas in other parts of Tanzania. I have seen nothing in these cases that contradicts anything I have said in the paragraph above (for detailed discussion see Igoe 2004).
- ⁴Schmidt-Soltau (2004); also see http://www.poverty-andconservation.info/en/biblio/org_Ac.php [7 August 2006]. There are many different kinds of protected areas. For a summary of the types officially recognized by the IUCN please visit: http://www.unepwcmc.org/protected_areas/categories/index.html [7 August 2006]. Of course, the strictest categories recognized by the IUCN are likely to have the most obvious social impacts. However, other categories, including community-conserved protected areas, often have surprisingly negative consequences. Finally, it is important to note that these IUCN categories automatically exclude more traditional types of protected areas. For a more detailed discussion please access our paper on this topic at: <http://www.qeh.ox.ac.uk/pdf/qehconf/brockington.pdf> [7 August 2006].
- ⁵DFID stands for Department for International Development (the UK Government's International Aid Agency). This essay is not intended as an exhaustive guide to the DFID framework and how it may be applied in different circumstances. For more detail please visit: http://www.livelihoods.org/info/info_guidancesheets.html [7 August 2006].

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