

Ecotourism for Sustainable Development:
Highlighting Setbacks of Community-based Ecotourism

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Abstract

This paper serves as an analysis of actors (individuals) and actor incentives that influence the implementation of ecotourism projects at the community-level in underdeveloped countries. As its baseline, the paper uses the fact that it is the actors and actor incentives that largely determine the outcome (success or failure) of such projects, and focuses on the breakdown of local institutions and the powerful incentive strategies that come into play when implementing a community-based ecotourism (CBE) program. The paper analyses specifically a CBE project in Ghana, West Africa, and focuses on the community actors and the incentives the actors have to participate in the project. The paper shows that acts of self-interest, and specifically that of traditional leaders making use of their status in the community and subsequently taking advantage of the ecotourism project, undermine the democratic spirit and the overall success of CBE projects. Communal, rather than individual benefits, given to the community are shown to allow room for free-riding which further undermines the project's success. In addition, strong government intervention and high costs incurred by community members in implementing a CBE project are calls for warning that successful outcomes will be difficult.

In the paper, pitfalls and setbacks of CBE are countered by an analysis of an ecotourism project implemented by a nonprofit organization in order to argue that under certain conditions where a community-based project is likely to fail, a nonprofit organization can alter the actor/actor incentive structure and achieve the goals of environmental protection and economic development. The paper stresses the need for achieving these goals and offers a call for close assessment of community and community actors *prior* to implementing a CBE project in order to increase the likelihood of successful outcomes.

1.0 Introduction

We live in a world with ever-growing pressures placed on the environment and an ever-widening gap between rich and poor. Given this status, many questions must be raised in regards to the solutions to this global predicament. How do we solve the problems of biodiversity loss? Resource depletion? Deforestation? And how do we combine our attempts with solving the pervasive threat of poverty and a globally unequal wealth distribution? What measures can we adopt and which policies shall we support that attempt to mitigate environmental degradation and promote development of underdevelopment countries and communities? The concept of sustainable development toils with solutions to these questions. One of sustainable development's many facets is the focus on developing countries and ways in which proper economic and political development can be adopted so that environmental protection and social protection is assured.

This paper takes a look at sustainable development at the community-level in underdevelopment countries. As a means of achieving economic development as well as environmental protection at the community-level, many developing countries have supported the use of tourism. Specifically, they have supported the use of environmentally-sound tourism, or ecotourism, in achieving such goals. Ecotourism is tourism that incorporates conservation, responsibilities of the tourist, and/or linkages to the sustainable development of local peoples (Campbell 1999). As an example, ecotourism at the local-level can provide alternative incentive to the immediate benefits of wildlife kills, forest felling, and general environmental degradation. In some cases, communities are provided the incentive to instead *protect* wildlife, forests, and/or other natural resources, in exchange for the benefits that ecotourism can bring. These benefits

usually come in the form of improved infrastructure—such as schools, electricity, and roads—but may be directed to certain individuals in the form of cash compensation.

The concept of ecotourism has been heavily implemented in South and Southeast Asia, Central and South America, and East Africa. Ecotourism constitutes 7% of the international tourism revenue and is growing at an annual rate 3 to 10 times as fast as overall tourism. Ecotourism is becoming a crucial means for underdeveloped nations to grow economically by greatly increased national revenues (International Ecotourism Society 2001). In some cases, ecotourism has been a huge success in achieving its goals—natural resources are protected and community-level infrastructure is developed as a result of tourism revenue. However, in other cases, due to either a breakdown of local institutions, intervention of individual incentive strategies or external influences (i.e. government or poor natural environment) failure is of common occurrence (Nash 2001).

In this paper, I take a close look at the breakdown of local institutions and the powerful incentive strategies that come into play at the local-level within community-based ecotourism (CBE). I argue that acts of self-interest, and specifically that of traditional leaders mobilizing their traditional political status in the community and subsequently taking advantage of the ecotourism project, undermine democratic spirit and the overall success of CBE projects. Communal, rather than individual benefits, given to the community as a result of the an ecotourism project are shown to leave room for free-riding which further undermines the project's success. In addition, strong government intervention, high costs incurred by community members in implementing a CBE project, and a breakdown of community cohesion are setbacks to the success of CBE. The purpose of such analysis is to present the intricacies of

CBE and attempt to isolate areas and incentives within CBE that must be considered for successful implementation of ecotourism projects at the local-level.

In carrying out such an investigation I provide an analysis of two strategies for achieving the goal of environmental protection and community development. The first of the strategies is that of CBE, and specifically a CBE project in a village of Ghana, West Africa. At this site, I carried out a research study which examined the historical context and the community resident's perception of an ecotourism project that began there. From the information and data provided from this research, I present an analysis that describes the institutional problems within the ecotourism project in order to highlight several pitfalls and setbacks that may occur in CBE projects in general. The setbacks pinpoint specific details that must be considered prior to implementing a CBE project in order to strengthen the probability of producing successful outcomes.

The second strategy is that of an ecotourism project that is operated by a nonprofit organization. This second strategy is provided with the purpose of showing how some of the pitfalls of CBE may be altered with the change of individual actors and new incentives that can arrive through the use of nonprofit organization-based ecotourism (NPE). The two strategies run along similar lines, in that they both make use of tourism as a market for sustainable growth at the community-level; however they differ on a fundamental basis—that being the *means* of achieving such goals using tourism. One strategy relies on *community-based* means of using tourism to promote sustainable development, while the other relies on *nonprofit organization-based* means of achieving the same goal. In other words, one strategy uses the participation and decision-making powers of the local communities, while the other uses a nonprofit organization, in place of community, to make decisions and achieve the goals of sustainable development.

The analysis is carried out by documenting the actions and incentives of individual actors that affect each of the two strategies. At the community-level, success and failure is largely determined by what choices each individual actor or actor group makes, and what actions they choose to carry out. Furthermore, these actions are largely determined by the incentive structure each actor has to accept and participate in the particular strategy (Agarwal et al. 2001). The breakdown of individual incentive structure commonly leads to defection by the individual from the project, and subsequently failure of the project itself.

This paper is especially useful for those implementing and assessing CBE projects in underdeveloped countries. It provides specific marks of weakness in CBE to encourage proper analysis of community-level institutions are made *prior* to implementation. The paper comes as a warning to those believing that CBE is a simple means of solving environmental and economic development problems in underdeveloped countries. The paper is also relevant to all those concerned with options by which conservation of natural resources and environmental protection, as well as the economic development of people in underdeveloped countries, can be provided

1.1 Current Literature

In reviewing current literature, an important question we must ask is what makes community-based conservation work? By answering this question we can better realize the factors within community-level institutions that lead to the successful use of natural resources and the promotion of community development. At the same time, the pitfalls of community-based conservation can be better identified, and voids may be better filled by use of other institutions—for instance a nonprofit organization, in the case of this paper.

In answering the above questions current literature focuses on the specific factors or characteristics of the community itself, the institutions of the community, the resources the community uses, and the external institutions that influence community participation (Gibson et al. 2004). Gibson, Ostrom, and Williams (2004) arrive at the conclusion that specifically, rule enforcement is a crucial factor for successful resource management. Through analysis of 178 communities the authors argue that regular monitoring and sanctioning of rules is a necessary condition for communities to protect resources. Rule enforcement reduces the temptation for individuals to defect from proper participation and step beyond what the rules allot (Gibson et al. 2004).

The ability to create and enforce rules and monitor community member actions is then crucial. Elinor Ostrom in her *Governing the Commons* conveys the importance of these characteristics (1990). Ostrom provides a list of what she terms *design principles illustrated by long-enduring Common Pool Resource (CPR) institutions*, which describe common characteristics among numerous case studies examining communities that conserve an open-access resource. Ostrom states that communities exemplifying these principles will be more likely to successfully manage their natural resources (1990). Of the eight principles that Ostrom provides, the principles that are particularly applicable to the analysis of this paper are noted in the Table 1.

Table 1 Design Principles for Successful Community-based Conservation Projects

(1) Collective choice arrangements—Those that are affected by the operational rules can participate in modifying the operational rules
(2) Minimal Recognition of right to organize—The rights of appropriators to make their own institutions are not challenge by external governmental authorities
(3) Congruence between rules made by appropriators and the local conditions

Adapted from Ostrom 1990

These principles are an important tool in recognizing the potential successes and failures of CBE projects. In particular, (1) Collective choice arrangements is crucial to this analysis, as I show how individual actors (specifically the village chiefs) undermine the democratic spirit and also the successful outcomes of CBE projects by taking decision-making power into their own hands and disallowing the participation of the entire community. Ostrom states that those who are affected by rules can better tailor the rules to local conditions and environment if most of them can participate in changing the rules. Lack of access to the decision-making processes may lead to people being forced to carry out rules that do not necessarily fit the local conditions, and subsequently lead to failure (Ostrom 1990). The second principle in Table 1 points out that governmental institutions must give at least minimal recognition of a communities ability to create and enforce its own rules. Ostrom states that if governments presume that only they have the right/power to make and enforce rules, communities will struggle to sustain their autonomy (1990). This principle is displayed in this analysis as government intervention is shown to detract from revenues generated the CBE project discussed in this paper, as well as detract from the community's ability to make their own rules. The third principle taken from Ostrom stresses the importance that the rules created fit the conditions of the community, the project, and the environment at hand (1990). The principle stresses the importance of most of the community making these rules, so that proper (more fitting to local conditions) rules will more easily be created.

Clark Gibson presents an interesting account of local-level wildlife management in wildlife protection programs in Zambia (1999). Gibson's account is important for this analysis because it analyses the actions of *individual actors* in protecting a natural resource at the local-level, rather than the overall characteristics of the community or the resource (Gibson 1999).

Successful conservation of natural resources at the community-level is highly dependent on the actions of the individual actors that can influence collective action. These actors may very well have different desires and interests which can negatively affect goals that require collective action (Agarwal et al. 2001). It is the individual actors who choose whether to play by the rules, to participate, to enforce rules, to defect from the rules, to cheat, or to free ride; and it is therefore the individual actors that influence the success of projects such as the ones described in this paper. Gibson takes a close look at three important actors in local-level wildlife management—rural resident, wildlife scout, and chief—and argues that two Zambian wildlife protection programs failed because the programs provided “collective rather than individual” benefits and did not realize the incentive strategies of individuals in each of the three groups.

Gibson shows that the Zambian programs misunderstood the control that each actor-group had over the success of wildlife management as well as the costs and benefits that wildlife management provides for each group. Each individual, under the conditions of the programs, had the incentive to act upon self-interest in such a way that the benefits of acting in a certain way outweighed the costs. Gibson states that the condition of the programs “prompted locals to continue hunting, chiefs to monopolize program benefits, and scouts to maintain their adversarial relationship with the residents” (1999).

To provide a background as to how some incentive strategies work, the individual incentive strategies presented in Gibson’s account are summarized as the following: for the local residents, the benefits from hunting wildlife were greater than the individual benefits accrued as a result of the program, and therefore it was better from locals to defect from the program. For the scouts, there was greater incentive to enforce anti-poaching, but as a result of poor reward structures, hopes of a common relationship with residents did not come about. For the chiefs, the

strongest incentive was that of self interest, and included accruing as much benefits and as much control of the project as possible. In addition, Gibson makes the point that because the benefits from the program (in the form of schools, clinics, wells, and mills) were *communal* instead of *individual*, incentive to properly participate was weakened and the opportunity to free ride became available. This led to the failed management of the wildlife resources (Gibson 1999).

Overall, many authors stress the importance of looking at how individuals within community-based projects act under certain circumstances and what incentives make them act in the way they do. If the incentive strategies can be better realized, problems that arise from the breakdown of proper incentive structures with the implementation of a CBE project can be mitigated.

2.0 The Comparison

The analysis takes a close look at two strategies of using tourism as a means of promoting community-level development and reducing environmental degradation of natural resources such as wildlife, forests and drinking water. Each strategy in the paper is an individual example of one type of sustainable development strategy. In other words, the community-based strategy in this paper is one example of many examples of community-based natural resources management. Although many similarities exist between the community-based project discussed here and other community-based projects elsewhere, a complete extension of the outcomes of this analysis to *all* other projects is not possible. The same holds true for the nonprofit organization-based example.

2.1 Community-based Ecotourism

CBE is a concept that makes use of community-level participation and potential capital from foreign and domestic visitor as a means to achieve the goal of rural development. The Nature Conservation Research Centre (NCRC), a non-governmental organization (NGO) in Ghana, West Africa which I worked with closely, explains the concept by saying, “Community-based ecotourism integrates conservation and rural development by helping to protect valuable natural areas, scenic landscapes, sensitive rural sites and cultural practices” (GWD 1997). Community-based projects strive to establish a means of empowering local communities to conserve natural resources and participate in their own economic development without control by external participants (GWD 1997).

The community-based example in this paper uses data and information taken from a CBE project implemented in a rural village in south-eastern Ghana. I carried out a research study of this ecotourism project while living with and studying the inner-workings of the village and its project in 2004.

The village, known as Tafi Atome, is located in the Volta Region of Ghana and provides an interesting example of CBE. Before the introduction of the ecotourism project, the erosion of traditional beliefs as a result of the gradual influx of Christianity translated into the degradation of the traditionally protected sacred forest that surrounds the village (Abraham 1997). Economic incentive and socio-cultural fluctuations altered what was once a long-standing and uncontested form of nature conservation—traditional religion. The traditional religion of the community recognized the forest and the monkey population as sacred and prevented any use of the forest, except those allowed by the sacred guard to the forest, the fetish priest. During the transition from traditional to Christian religious beliefs, the forest and the monkey population that is

housed there, came under particular pressure as it was not longer considered sacred. Forest land was cleared for farm use, forest material was extracted, economically viable trees were sold for profit, and monkeys were killed in an attempt to display the falsities of traditional religion and for personal food use. It was not until the arrival of the ecotourism project that new economic incentive for conservation began to replace the motivation to use the sanctuary forest following the erosion of traditional religious governance of the forest (Agbesi per comm).

2.1.1 Methodology and Analysis of Data

The data and information present in this section of the paper are largely taken from questionnaires and interviews administered to a number of community members living within the study area, Tafi Atome. The objective of the inquiries was to assess issues ranging from possible changes in occupation, forest use, and the cultural cohesion of the community to costs and benefits that have arisen as a result of the arrival of tourism. The questionnaires were also meant to assess the perceptions of the community towards the monkeys, conservation, levels of participation and general issues concerning community organization.

Questionnaire Administration and Design

The questionnaires were administered between October and November 2004. The questionnaires were administered individually, in the company of a local community member who served as a translator, and by whom the questions were read in *Ewe* and answers were translated back into English for the interviewer (myself) to write the responses. The interviewees were assured of the confidentiality of their responses upon introduction. Along with asking basic demographic information (age, religion, occupation, etc), the questionnaires

were made up of open-ended/free response and closed-ended questions. Closed-ended questions included both *yes* and *no* responses, along with a small variety of multiple-choice options.

Population Sampling

The translator and I attempted to obtain a random selection of community members, as we walked throughout the village, entered homes, and sought other areas within the study area. Certain biases that arrive during such a sampling must be noted such as a bias against the sick, for example. A wide variety of age groups and occupations were targeted for the study, although no prerequisites were established. I attempted to gather a *random* sample, although some biases do exist. To obtain reasonable responses for some of the specific questions that refer to changes within the past eight years, no community member younger than 15 was interviewed. Considering the limited time available for the study and the length of time needed for each personal interviewing session, a total sample size of 30 was obtained.

2.1.2 Actors and Incentives

As discussed earlier, the success of CBE projects is mostly determined by the actions of the actors that influence the project. It is these actors that make decisions that affect community cohesion, community leadership, and altogether the outcome of the project. In this section, the individual actor-groups are analyzed, with special attention paid to the actor-group's relationship to the project and to other actors, as well as the incentive structure that each actor group has to participate in (and not defect from) project rules. The data and information taken assist this analysis. The actor-groups in the case of Tafi Atome fall under three categories: Chiefs, Community residents, and the Government. All three are discussed individually, and will

altogether highlight potential pitfalls and specific points of concern within CBE and the incentive strategies that come into play.

2.1.2.1 *Chief Actor-Group*

The political structure of Tafi Atome is the similar to most traditional political systems within Ghana. Heading the chieftaincy order is the Village Chief, who does not actually reside within the village, but has great influence on local decisions and politics. The Regent takes the authority of the Village Chief in his absence. The Village Chief, Regent, and Secondary Chief, along with multiple sub-chiefs and elders, work in collaboration in the creation of a broad range of decisions extending from town development to punishment issues. A Paramount Chief also resides within Tafi Atome, and represents the four villages of Tafi Atome, Tafi Abuipe, Tafi Agume, and Tafi Madora. The Paramount chief serves to solve conflict between villages, but does not necessarily have authority over the villages or within-village activities. Apart from the traditional chieftaincy system, the presently active Unit Committee partakes in political issues of the village, and serves as the “spearhead” of the chiefs (Egbeako per comm.).

The Village Chief

The Village Chief (VC) has the greatest power of any actor-group in the Tafi Atome village. Although the political system within Tafi Atome is becoming increasingly democratic, the VC reserves a substantial level of authority in the village, including the power to make and enforce rules. The VC is also highly revered among the community, which increases his influence over community decisions that are made both inside and outside the ecotourism project.

With regards to the ecotourism project, the extent of the VC's authority is seen through the responses given during interviews with the community-members. When asked whether the respondents felt they had enough say in community-decisions, the slight majority of respondents (53.3%) felt that they did not have enough say in community decisions. Although only a slight majority, the fact that a significant proportion of the population sampling did not feel they had enough say in community-decisions is sign for concern. The majority of those dissatisfied with their level of say in decisions were those that were approximately 45 years and younger and noted that the chiefs and elders hold most of the decision-making authority. One middle-aged respondent said that "whatever the chiefs and elders plan and decide, we take and do accordingly", while another middle-aged respondent agreed that "we are told what we are doing and don't sit down to meet for the welfare of the village," signifying dissatisfaction due to lack of decision-making power. Much decision-making power remains in the hands of the VC.

This potentially excessive authority of the VC has and may continue to undermine one of the fundamental distinctions of CBE—mainly the fact that the *community* makes decisions, rather than specific individuals within or outside the community itself. The VC seems to be undermining the essentially democratic processes of CBE. The VC was a significant player in the creation of the present rules that govern the ecotourism project. With power held in a single hand, both the rules and regulations and the distribution of benefits carried at the discretion of an individual, rather than the entire community. This problem points to one of Ostrom's (1990) design principles discussed earlier that those who are affected by the rules must participate in modifying the rules. Presently local rules may be tailored to specific individuals (namely, the VC), instead of the local conditions. Without the rules being tailored to local conditions, which

is better accomplished through the participation of the community, the CBE project is difficult to sustain in the long term.

The VC played a significant role in deciding how the revenue generated from the ecotourism project would be distributed. The VC presently receives 5% of the total profits to be used at his discretion, although theoretically meant specifically for chieftaincy-related clothing and travels (Foli per comm). The personal monetary benefits generated from the project as well as the prestige that arises with a growing village provide the incentive structure for the VC to support the ecotourism project. Altogether, the VC has the power to influence the distribution of benefits by having a voice in deciding where revenue should be spent. However, complete authority is prevented through the use of a Tourist Management Committee (TMC) created by the community members themselves, which helps decide where and when money shall be spent.

Paramount Chief

Although the Paramount Chief (PC) is mainly meant to serve as a figurehead with only limited influence over the four Tafi villages and even less influence within village activities, the present PC has made strong attempts to manipulate the ecotourism project at Tafi Atome. In 2003, a conflict within the community occurred that had been gradually unfolding for some time before. In late March of that year, Tafi Atome experienced what I will term a “coup” in which approximately twenty youth of the community took over the visitors’ center, sacked the TMC, and controlled the project as a whole. The conflict stemmed from many issues, but mainly that of the TMC not reading accounts to the entire community (which the TMC was told they should be doing), which led many of the youth to conclude that the TMC was taking money from the project.

Many community residents stress that it was the Paramount Chief that persuaded and organized the youth to storm the visitors' center and sack several guides and the entire TMC of that time. The group that took over then proceeded to form their own TMC without the approval of the community, and therefore without representatives from each community clan, limiting community participation (Asumah per comm). The involvement of the Paramount Chief in such affairs is unheard of in traditional Ghanaian customs, but community members believe that he desired to be included in some form of revenue sharing; and subsequently began taking funds from the project. The new TMC and guides who began to control all affairs, attempted to run the project just as before, as tourists still arrived unaware of the situation (Fumey per comm).

The importance of this occurrence is to highlight the action of self-interest. When actors do not receive benefits from projects, they in many cases will manipulate situations so that they may gain in some manner or another, regardless of the actors' normal status in the community. The PC did not receive any benefits (monetary or infrastructure) from the project, and in turn, used his power and authority to institute major changes in the project and essentially take control. The incentive was that of self-interest and resulted in limiting power of village residents to make decisions. This change in incentive to defect from the ecotourism project and work to gain economically from the project is a potential pitfall of CBE. Individuals may act on self-interest regardless of how the entire community will benefit.

2.1.2.2 Community Residents Actor-Group

Although a broad category, the residents of the community can be seen as being composed of male youth, females, landowners, and the elderly, each with individual incentives and levels of authority within the community. To begin, I believe a note on the level of

participation of residents within the ecotourism is necessary. Because of this rather broad categorization, the level of participation for each actor is varied. As touched on earlier, much of the decision-making power is held within the traditional chieftaincy system. This leaves the majority of the residents, with exception of the TMC which holds much authority with regards to the ecotourism project, with only limited power. This is especially true for the residents under 45 years of age, women, and foreigners (Ghanaian residents of different ethnicity living in Tafi Atome).

In general, in response to whether the respondent felt he/she had enough say in community decisions, the youth (under age 45) seemed to agree with one youth who stated, “I have an idea but because I am young I cannot say it. Youth cannot make decisions.” Another person said, “[because] I am not a real native here I am not entitled to community decisions.” It is very important to note that 62.5% of those who felt that they did not have enough say in community decisions were females, making up 83.3% of the total females interviewed. This highlights the limited authority of women to make decisions and exert power in regards to the ecotourism project—an extension of women’s status in the traditional system. Furthermore, all male respondents answering *no* to this question were under the age of 45. The remaining 46.7% of respondents agreed that they had enough say in community decisions. This group mostly responded with answers in line with one person who stated, “I raise my hand up at community meetings and say what I wish.” Responses regarding community member participation are given in Table 2 and Table 3.

As shown, all community members of Tafi Atome are presently not fully involved in the issues concerning rule-making, distribution of revenue and benefits, decisions on how to spend community development revenue, and any other tourism-related concern. It must also be noted

however, that presently, following a resolution of the coup incident that occurred within the village, residents are mostly satisfied with the distribution of money from the project and do not wish to change any rules

Table 2 Question regarding community participation

Question	Response (%)		
	Yes	No	No Response
Do you feel as though you have enough say in community decisions?	46.7	53.3	--

N=30

Table 3 Analysis of question regarding community participation

Analysis of Question from Table 1	Response (# of respondents)		
	Yes	No	No Response
Female response to above question:	2	10	--
Under age 45 Male response to above question	5	6	--
Over age 45 Male response to above question	7	0	--

N=30

One of the most important of Ostrom's design principles for successful use of CPRs discussed earlier is that those affected by rules can help change and modify them (Ostrom 1990). This point stresses the importance of community participation in most or all of a community-based conservation project to ensure that the rules created fit local conditions and that the democratic, rather than authoritarian, nature of CBE is exercised. The lack of participation in all, or at least most, aspects of the ecotourism project at Tafi Atome is partly a reason for the coup incident discussed above. The "youth" of the community were not involved in the accounting process, and as a result, accounting authority was able to be held by a few individuals who could take advantage of their position. This occurrence highlights the importance of community participation and community awareness in all, or at least the most important, aspects of an

ecotourism project. The situation also stresses the pitfalls that can occur in community-based projects with lack of proper participation and distribution of information.

It is now important to focus on the incentive structure of the residents. As participation of community members in community-based projects is highly dependent on whether the benefits of participating outweigh the costs of participating (Gibson et al. 2000), at least some of the benefits and costs will be noted. The benefits that have arisen as a result of the ecotourism project have come largely arisen from philanthropic tourists coming to the village and desiring to sponsor educational and infrastructural projects. The school in the village has been completely renovated, while over 100 students have been sponsored to attend school (Agbesi per comm). Other benefits that villagers noted were increased sales in food stores, interactions with tourists, school supply donations, cash given to landowners of the forest, and small gifts given to residents from tourists. An important issue to note is that most of the benefits are communal and they do not always arrive to the individual, as said by Gibson (1999) earlier in the paper. This can lead to the problem of free-riding, in which individuals defect from some of the rules but still receive benefits (better schools for instance). This can be seen at Tafi Atome, as several farmers have slowly begun to farm within the outer boundaries of the protected forest, yet still are able to reap the benefits of the ecotourism project.

From the total number of respondents, 23.3% claimed to have received *no* benefit from the project. Not every person's children have received a sponsorship and not every person receives some direct benefit from tourists. The perception of no benefits by individuals is an alarm for conflict.

Dissatisfaction with project may eventually lead to defection from the rules, especially when coupled with several costs that have arisen to the villagers as a result of the project. One of

the largest costs that has arisen to the villagers is the fact that since the introduction of ecotourism, the villagers have been prohibited from any kind of use of the forest that surrounds the village. This has meant that residents must travel much further than previously (up to 10km) to one of few open-access forest to get the materials they need. Another cost explained by the residents is the worsening farmland that is continuing as a result of using the same portion of land repeatedly. Whereas previously, farmers were able to expand their farmland into the forest area, farmers are now constrained by the rules that prevent any use of the forest. Many residents note their farms degrading from excessive use and limited space to expand. At this point however, the majority of respondents stated that the benefits from ecotourism are greater than farming within the forest, displaying that non-use of the forest has a relatively low cost associated with it. This issue highlights the rather variable nature of the CBE project at Tafi Atome. If farmland begins to degrade drastically, incentive to participate in the project will be weakened and probability of defection will increase, as the costs may outweigh the benefits. However, if farmland quality is sustained, defection will be made highly unlikely.

2.1.2.3 Government Actor Group

The government, although external to the project itself, is an important actor as it can drastically affect the project's long-term success. One of Ostrom's (1990) design principles is the idea that the communities must have the right to organize on their own without control by outside forces, such as governmental powers. In the early stages of the project, the Hohoe District Assembly (Tafi Atome falls within this district) had intentions to get involved in the project following their partial funding for a guesthouse in the village. Since this time, the District Assembly has and continues to put substantial pressure on the community to include

them in the distribution of revenue. The District Assembly has requested 40% of the revenue on numerous occasions and at one point was given 20% for a period of four months in 2002. The community discontinued this payment following support from non-governmental organizations and after realizing the District Assembly was not giving any aid in return (Agbesi per comm). At the present, the District Assembly desires some level of payment from the project. This was made apparent by Nutrugah Obed, the District Planning Officer of the Hohoe District Assembly, who states, “Because Tafi Atome lies within the Hohoe District, the District owns the land; and therefore, part of the revenue raised at the Sanctuary should be apportioned to the District Assembly so that all parties can be satisfied; other projects are giving payments, therefore Tafi Atome should as well” (per comm.). This issue is one that needs careful attention, as increased influence within the project and the siphoning of funds from the project could detract from its success. This becomes especially true as governmental interest becomes more apparent with increased profitability of the ecotourism in Tafi Atome. Furthermore, as Ostrom discusses, the intervention of the government detracts from the community member’s ability to make and enforce its own rules (1990). Governmental intervention undermines that democratic nature of CBE and the *community*’s participation in their own economic empowerment and in protecting their environment.

2.1.3 Summary of Community-based Ecotourism

The analysis of specific actor-groups at Tafi Atome helps highlight specific points of concern and potential pitfalls of CBE projects. The issues brought up concerning the Village Chief and Paramount Chief address the concern of individuals either exerting previously held power to his/her advantage or changing previous (traditional) power structures to mobilize and

take advantage of CBE projects. The concern here is the act of self-interest; and how self-interest of powerful individuals can detract from project intentions and limit community participation in the decision making process.

Another point addressed is the difficulties of having an entire community participate in the most crucial aspects of community-based projects, and the consequences that can arise when participation is constrained. This problem is seen through the coup incident. CBE is *not* easy. It can be extremely difficult for a community to work together cohesively and cooperatively; especially when money begins to come into play and individuals mobilize in the name of self-interest to take advantage.

Distribution of benefits has also been shown to be a problem. When community members must incur costs to implement an ecotourism project, but do not perceive benefits to counter these costs, problems arise. Also, when the benefits are communal, there is room left for individuals to free-ride and defect from proper participation and gain individually (Gibson 1999). In addition, limited benefits arriving to individuals to make them satisfied (and not defect) can be made even more problematic when governments become involved and desire large proportions of revenue. Overall, the success of CBE depends on the perception of the individual actors as to whether the project is better than any alternatives (e.g. farming, felling trees, etc.) and the actions that the actors take as a result of this perception.

2.2 Nonprofit Organization-based Ecotourism

I argue that some of the pitfalls and concerns addressed in the above example of CBE can be altered and resolved through the use of a nonprofit organization which essentially takes the place of community member authority and controls most aspects of the ecotourism project.

However, in using a nonprofit organization one important advantage of CBE in particular is undermined—this advantage being the empowerment of local peoples in their own economic development and their own protection of natural resources.

It must be noted that the argument made in this paper certainly does not propose that a nonprofit organization be instated in place of community in all situations, but rather provides the potential for nonprofit organizations to succeed under certain *conditions* when a community may not. To provide substance to such a proposition, I provide an example of a particular nonprofit organization that uses the same premise as the CBE example given earlier. This premise is the use of tourism as a means of protecting the environment and providing development at the community-level—the essence of sustainable development. From this point, the actor groups and incentive are analyzed and compared to the CBE outcomes.

The particular nonprofit organization-based example is one in which an organization runs a business in a relatively urban or semi-urban environment and provides the means for receiving revenue from tourism and implementing these funds into local community development projects (such as such as schools, medical facilities, drinking water systems, micro-financing, etc). The crucial point is that not only does the business provide revenue to support local development but they also work to reduce environmental degradation and promote environmental sustainability through the manner in which they operate. The stores operate on two main sources of revenue: water refilling service, which greatly reduces the amount of plastic waste that arrives to rural and urban environments (and something that all tourists need), and a laundry service that uses environmentally-friendly products and processes to prevent contamination of local water supplies. The stores will also provide the means for recycling materials and harmful waste products, and the means for tourists to donate to the community-level instead of spending more

money to be given to the more affluent sectors of society. Overall, the stores will work to reduce the environmental impact of tourism on communities and community surroundings, by providing means for tourists to reduce their consumption of materials, reduce waste products, and spread sustainable and eco-friendly ideas.

2.2.1 Actors and Incentives

As discussed under CBE projects, the success of a nonprofit organization-based project is similarly determined mainly by the actions of the actors that influence the project. In this section, the individual actor groups within the project discussed above are analyzed, with special attention paid to the actor group's relationship to the project and to other actors, as well as the incentive structure that each actor group has to participate in project rules. As opposed to the Tafi Atome example, the nonprofit-based example has not been carried out and therefore there is not data to back the argument. Propositions are made from presumptions with regards to how a nonprofit organization would carry out such a project. In the case of this example, which I will refer to as the sustainability shop example, the individual actor groups are as follows: the nonprofit organization itself (or those that control the nonprofit organization), the beneficiaries of revenue (non-worker), local workers of the nonprofit organization, and the government.

2.2.1.1 *Nonprofit Organization Actor Group*

This group is obviously the group with most authority and decision-making power with regards to the sustainability shops example. This group, made up of the heads of the organization, control almost all aspects of the project, including where and how a shop will be run, who will work for the shops, and where and how revenue will be dispersed. Participation

among other actor groups is limited as the organization actor group holds most power and control. This actor group is the owner and authority behind the project.

With that, it is also presumed that this group makes decisions for the *interest* of the organization and its goals, and not for the interest of the individuals who operate the organization. This is a crucial assumption and is where incentive strategies come into play. If the organization actors are to act for the best interest of the goals of the organization, then the incentive to participate is that of seeing the goals of the organization carried out and produced. The incentive to carry out this type of nonprofit organization is basically that of altruism. The heads of the organization must be willing to support such a project on a desire to help—to support economic empowerment of underprivileged peoples and to protect the environment. The organization must run on the same altruistic characteristic of an organization that gives aid to areas that need support without economic returns. I do not believe the goals of such an organization could be carried out if the heads acted upon self-interest and self-benefit. This is an important detail to keep in mind. The heads of the organizations must be organized in a committee that assures that all businesses carried out are aligned with the goals of the organizations—that of the people and the environment—and *not* any ulterior motives of the individuals that govern that organization. This point can serve as a potential major setback of the NPE idea, as the success relies on the attitude of the head committee which must be committed to supporting others and not themselves.

The nonprofit organization actor group takes the place of two of the three actor groups found in the CBE example—the chiefs and the residents. Local chiefs and residents do not have power to make decisions; however, depending on the conditions laid out by the heads of the organization, participation is possible but most likely limited. The benefit here is the prevention of potentially poor, dangerous, or misguided decisions made by residents and those in power.

Whereas decisions within a community may be guided by individuals whose drive is self-interest, the organization makes decisions based on the interests of environmental protection and community development. In other words, the organization's power cuts the motive of powerful actors taking control of funds when they desire. Personal incentive to take power is replaced by the organization's incentive to distribute wealth. This point arrives at the first condition that I believe a nonprofit organization may be necessary in order to assure that the outcome of environmental protection and community development is assured: *when traditional leaders are likely to take advantage of benefits, funds, and power derived from a CBE project.*

The nonprofit organization acts to resolve the pitfalls found in community cohesion. As seen in the Tafi Atome coup, community cohesion, or the ability of a community to act together in a cohesive manner, can be undermined with the influx of new institutions and new money into the community. Rifts between community members and/or community clans can appear or widen with the implementation of an ecotourism project in a community and may come as a great deterrence to the goals of the project. This point addresses the second condition that may favor nonprofit organization-based project implementation: *when a community is likely to divide among its community members with the implementation of a CBE project (i.e. lack of community cohesion or history of not working together well).* This issue is discussed by Gibson et al. (2000) who state that a community's history of organizing together is an important attribute for the success of community-based natural resource management. A sense of cohesion among individuals and the actor-group in which they fall is important for success. Divisions among groups within a community can lead to the breakdown of a project. Lack of community cohesion may more likely be found in urban or semi-urban environments, as the example project suggests, where community cohesion is likely weak. Under such a condition, a NPE project

would be better suited to achieve the goals of environmental protection and economic development.

2.2.1.2 *Beneficiary Actor Group*

The beneficiary actor group includes all those that receive benefit from the revenue generated from the nonprofit organization. This group includes those that receive funding for community development projects (schools, health clinics, etc), micro-financing support, or any other form of development at the local-level. These benefits may be in the form of both direct (monetary) and indirect (infrastructural) benefits.

The level of participation of this group in the sustainability shops project is limited if not completely absent, while the incentive to support the project is strong. The recipients of benefits may have a level of say as to where such benefits are to be implemented, but the final decision is up to the heads of the organization. The recipients act to *receive* much needed support, but do not play an active role in making decision on how the project is to be run. Regardless of the lack of participation, the actor group will have incentive to support the project if they are receiving benefits of any kind. Because the particular project idea does not call for the necessity of locals to change their habits (but rather provides this option to the locals), the cost of “participation” is low, while the benefits are potentially high. The problem that may arise however is with those that do not receive any benefit from the project, but are forced to pay minor costs. This group is likely to be small.

This is a where an important distinction must be drawn between the two examples that this paper compares. Whereas the CBE example calls on the community to change their lifestyles by creating rules that prevent residents from acting in particular ways (e.g. no forest

use), the NPE example calls on the residents to do little. This is an important note; for when the residents must change their lifestyles in major ways in order for the project to succeed the nonprofit organization example may not be possible. This is because the residents would have little incentive to change their lifestyles when benefits are given communally rather than individually.

Overall, the beneficiary actor group is likely to support the nonprofit organization's means of using tourism for sustainable development. The fact that the organization serves in place of community authority helps to solve some of the problems associated with community residents not participating as a result of lack of incentive. Although this problem is merely seen on the surface at Tafi Atome and was not a problem of particular strength, lack of participation from community members through lack of incentive is a problem in community-based conservation project (Gibson 1999). The nonprofit organization does not rely on incentive of the locals, but rather the tourists who the projects attempts to target in changing the tourists' actions to become more environmentally-friendly. This point comes to strengthen another condition that supports the use of a nonprofit organization: *When community members have incentive not to participate in a project due to high costs incurred and will therefore defect from the project.* Local residents must incur little or no costs with the use of the sustainability shops project and therefore do not have reason to not support the project when provided some level of benefits. Community-based projects, as Gibson purports, must insure that the benefits provided to the local residents must outweigh the costs of participating. In addition, if costs are incurred, the benefits should be individual rather than communal to prevent free riding (Gibson 1999). Within the sustainability shops project free riding is only a limited problem, as the project, again does not require local residents to make large adjustments in their lifestyles.

2.2.1.3 Local Workers Actor Group

This group includes the employees of the nonprofit organization. The heads of the organization limit the participation of this group; however there is still a substantial amount of responsibility and involvement that the group must provide. These responsibilities include the actions carried by employees of most small-scale businesses, including money handling, customer service, accounting, etc. The incentive to participate is a normal wage. A problem that must be considered however is the misuse of funds by this actor group. In a relatively poor or underdeveloped area, such as the areas in which the shops are likely to be implemented, there may be strong incentive to take advantage of the project. This mainly would come in the form of stealing money from the business. This problem serves as a potentially strong pitfall to this particular type of ecotourism project. Conditions must be such that this type of defection from the project is kept to a minimum.

2.2.1.4 Government Actor Group

Just as in the community-based conservation, government has the potential to be a substantial player in the happenings of the nonprofit organization-based project. The government can either come as an opponent if it desires to prevent profits from reaching the community-level or as a proponent if it decides to give support to the project. The choice is up to the regional and national governments that decide such actions. The project will better succeed however with either limited government interference or strong government support in attaining the goals of the nonprofit organization-based project.

2.2.2 Conclusions from Nonprofit Organization-based Ecotourism

From the above analysis of NPE as well as the analysis of the CBE project found at Tafi Atome, the following table can be constructed. Table 4 gives a summary of the actor groups as well as the incentives of each actor group to participate and not participate in the specific ecotourism strategy at hand. In addition, Table 4 provides potential setbacks that the actor groups can provide the community-based project and the incentives that each actor group in the nonprofit organization-based project would replace in the community-based project if the nonprofit organization strategy were adopted.

Table 4 Actor groups, actor incentives, and the setbacks/replacements in community-based and nonprofit organization-based ecotourism projects

Actor Group	Incentive to Participate	Setbacks/Replacements
	Incentive to Not Participate	
CBE*		Potential Setbacks caused by Actor Groups
Chiefs	Direct revenue & prestige	Authority can undermine participation of community residents; Acts of self-interest undermine funds meant for community
	Little or none; extra responsibilities	
Residents	Limited direct benefits; mostly communal	Residents not participating because of self-interest; Free-riding with communal benefits
	Desire to use forest for products and farming	
Government	Desire for revenue	Excessive intervention can undermine participation of community and reduce revenue meant for development
	Little or none; some responsibilities	
Nonprofit Org-based Ecotourism		Actor Groups and Incentives in CBE Replaced
Nonprofit Organization	Interest of local-level development and environmental protection	Replaces acts of self-interest and takes all decision-making authority
	Great responsibilities	
Beneficiaries	Infrastructural developments	Replaces residents who receive benefits from the project; however, little of no participation
	Little of none	
Organization Workers	Direct monetary benefits	Replaces community participants; however still possibility of defection
	Responsibilities	
Government	Desire for revenue	No replacement (i.e. still same potential for setbacks)
	Little or none; some responsibilities	

* Specifically at Tafi Atome Village, Ghana

3.0 Conclusions

The analysis describes specific institutional challenges against the success of using CBE as a means of achieving environmental protection and the economic development of underdeveloped areas. As the analysis concerns the specific actor groups which each have the power to both negatively and positively affect the success of such projects, there are several points that must be reiterated in regards to how these actor groups can invoke setbacks to CBE projects. And, as said previously, although I feel the information provided is worthwhile and telling, because data was taken from only one example of CBE projects, it cannot serve as a generalization of all such projects.

An important action to realize is that of self-interest. Individuals will act in a manner such that the benefits of participating are greater than the costs of participating (Gibson 2000). Holding this to be true, individuals may also act in such a manner that maximizes the benefits gained, regardless of certain negative effects that may be imposed on other individuals or the project as a whole. This was seen in the actions of the Paramount Chief who lead the takeover of the ecotourism project at Tafi Atome. Although costs were quite low for the Paramount Chief, self-interest and the desire to maximize gains guided his actions to take funds from the project. In other cases, residents of communities will not act of such desires, and will merely require that the benefits exceed the costs. I believe this is true for most residents of Tafi Atome, who desired at least some benefit from the project to keep from defecting (which came mostly in the form of farm expansion). Self-interest can also come into play with regards to participation. As CBE projects operate on the basis of participation from all community members, the analysis has shown that participation can be weakened by the actions of certain actor groups who decide to take decision-making power into their own hands. Another important setback discussed is that

of communal benefits to the residents of the CBE projects. By giving communal benefits, residents may free-ride and defect from project participation while still receiving benefits. This can arise as a large problem, especially when costs of participating in the project become greater.

The setbacks and challenges to community-based conservation projects given in this paper and generalized above must be realized in order to implement successful CBE projects. The actions of all actor-groups in the name of self-interest must be analyzed *prior* to implementation in order to realize which institutions, rules, and regulations must be established in order to have a greater likelihood of achieving the goals of CBE. In order to contribute to this “pre-analysis” of community-based projects, I provide specific conditions of a community that may weaken the potential for success, and which may point to the use of a nonprofit organization that may replace the community actors. These conditions are shown in Table 4 and will hopefully guide future analysis of CBE projects and the potentials they have for success.

Table 5 Conditions of a community and residents that indicate that a nonprofit organization may succeed in place of a community in running an ecotourism project

(1) Community members have incentive not to participate in a project due to high costs incurred and will therefore defect from the project (adapted from Gibson 1999)
(2) Community is likely to divide among its community members with the implementation of a CBE project
(3) Traditional leaders are likely to take advantage of benefits, funds, and power derived from a CBE project.

I feel that what is important is that the projects that are implemented work for the betterment of the environment and the communities that the projects are hoping to support. CBE projects are difficult. I can attest from my work at Tafi Atome that the inner-workings of such a project are intricate and complex, with members of community having different desires and different actions stemming from those desires. Careful consideration of all actors and their

incentives must be realized in an attempt to solve any problems that may occur in the process of achieving the goals of environmental protection and economic development. I proposed an alternative strategy of CBE, that being nonprofit organization-based ecotourism, in order to stress that in some cases alternative options must be adopted to achieve specific goals. These alternatives can come into play particularly when CBE is likely to fail. As stressed, one condition in which this may be true is in urban or semi-urban environments, where community cohesion is likely weak and incentives of self-interest are likely strong. Other illustrations of communities in which CBE are likely to fail exist. It is crucial to attempt to identify these communities and the institutions which exist there so that costs can be minimized and that the goals of sustainable development are actualized.

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