Trial Runs as a Tool for Responsible Ecotourism Development

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ABSTRACT
Ecotourism has by and large fallen short of its economic goals, and sometimes exerts a heavy toll both on natural environments and the indigenous communities that live in them. This is not to say that ecotourism cannot work. For some places it may well be an appropriate solution, but its application may be limited. Unfortunately, responsible ecotourism development is not easily achieved. For any particular destination, it needs to be thoroughly planned beforehand and regulated throughout. Only under such circumstances can outside interests and locals work together to achieve the best possible results. The concept of ecotourism trial runs is proposed as a tool to aid ecotourism development, particularly in new destinations where a variety of parameters need to be tested and monitored. The course of development can then be adjusted when necessary to take into account the interests of all the main players involved.

INTRODUCTION
Ecotourism has often been hailed as the savior of the world’s remaining natural areas (Boo 1990, Jones 1993, Cater and Lowman 1994). The message from the developed world to the developing world is a simple one: save your forests and we will pay to see them. Ideally, this money would be sufficient to offset the financial gains from environmentally destructive and unsustainable activities, such as the clear cutting of forests. The potential for big business is immediately obvious: the industrialized world is rich in expendable cash, and the developing world contains most of the earth’s biodiversity and pristine areas. Not surprisingly, the last decade saw an enormous proliferation of the ecotourism industry on a worldwide basis.

It has been known for some time that ecotourism has both good and bad effects (Boo 1990, Butler 1991). One of the main advantages that ecotourism supposedly bestows on the destination area is the inflow of cash. Yet the picture that emerges is often disheartening: ecotourism has by and large fallen short of its economic goals (Padget and Beckley 1996). Many locals have been promised prosperity in return for giving up their land or handing in their spears. Instead they have found their way of life affected beyond their wildest imagination. They are still as poor, but now find themselves in a changing world where money is the avenue to a better life.

This is not to say that ecotourism cannot work. For some places it may well be an appropriate solution, but its application may be limited. The course that ecotourism development takes in any par-
ticular destination needs to be thoroughly planned beforehand, and regulated throughout. Only under such circumstances can outside interests and locals work together to achieve the best possible results. Unfortunately, responsible ecotourism development is not easily achieved. NGOs involved in integrated conservation and development projects all too often lack vision or are simply too disorganized to rise to this task. Additionally, the funding necessary for project development is often unpredictable or ephemeral, and often is swallowed up in bureaucracies on the way to the target area. Invariably it arrives too late to beat private sector initiatives that are intent on finding the shortest route to their own financial gain.

To facilitate responsible ecotourism development a simple tool is proposed here, namely the concept of trial runs, and its use is illustrated by an example from northeastern Madagascar. Trial runs do not require big funding, if any, to start off. They pay their own way as they develop. They also provide a way in which interested and affected parties are consulted and the interests of communities incorporated into new ecotourism destinations as they develop. Trial runs also make it possible for the impacts of the growing industry to be measured in a step-by-step manner. For example, it can allow for tracking and analysis of the money involved in ecotourism activities. This may point to ways in which the financial gains to local communities can be increased. All the interested and affected parties (I&A’s) can have access to trial run reports. In this way, both the aims of the ecotourism development promoters, and the expectations and aspirations of local communities can be adjusted timeously.

THE CONCEPT OF ECOTOURISM TRIAL RUNS

Trial runs are expeditions to novel or relatively new destinations in which real ecotourists participate. The aim of trial runs is to gather a wide array of information that applies to all aspects of ecotourism development, ranging from assessing the experience of the ecotourist to the impact on local communities. Trial runs help identify problems that can be resolved progressively in subsequent trial runs.

The establishment of new parks and reserves often precedes the development of an ecotourism industry in a region. Trial runs can encourage the starting up of this industry, in which recommendations by word of mouth play a big role. Trial runs can also provide hands-on experience in training guides, local park managers, and a variety of other people involved in a region’s budding ecotourism industry. These people become progressively involved in each subsequent trial in a series of runs. The aim is that they eventually take over and run the industry with minimal involvement from outsiders.
Most importantly, trial runs provide an opportunity for the local inhabitants of a region to learn about the tourism industry, including its financial implications. This puts them in a better position to reap the benefits. Financial statements should be freely available to all interested parties such as developers, local business interests, and community organizations or traditional leadership structures.

Ecotourists participating in trial runs are made aware beforehand that they will be going into an area, where the degree of uncertainty may be higher than in more developed destinations. They come as willing guinea pigs, within limits, for a chance to be one of the first groups to see a new area and agree in advance to give feedback on a variety of parameters. Similarly local communities can be informed that the trial run is part of an experiment which they can influence through their feedback.

For trial runs to yield the best results, they need to be rooted in a sound philosophical framework. This will give rise to a set of ideals and concrete aims against which the results of individual runs can be measured. In this way it is possible to progressively adjust subsequent runs so they more closely approximate expectations and commonly agreed upon guidelines. Trial runs can be instigated by the planners and developers of national park systems, by independently contracted consultants, or by innovative private investors.

**The Masoala Peninsula, Madagascar**

The Masoala Peninsula is one of the last relatively pristine areas in Madagascar (Figure 1). Located in the remote northeastern part of the country it is roughly pear-shaped and flanked by the Baie d’Antongil on its western side and the Indian Ocean in the East. It contains perhaps the largest remaining tropical rainforest in the country, and has some relatively undamaged stretches of coastline. Once largely protected by its remoteness and rugged terrain, the area has seen sharp increases in migration over the last few decades and is now being deforested at a rate of about 5 per cent per year. Also, the Baie d’Antongil, a breeding area for whales, as well as the reefs and lagoons along the eastern shores, are coming under increasing pressure from local fishers as well as foreign fishing interests. There is little doubt as to the potential of the Baie d’Antongil and the Masoala Peninsula as a major Madagascar ecotourism destination. It is one of a handful of places where pristine tropical rainforest exists adjacent to a coral reef system.

Until recently visits from outsiders have been largely limited to towns on the extremities of the Peninsula, the island of Nosy Mangabe, Cap Est on the northeastern part of the Peninsula, and a hiking trail that runs from Maroantsetra to Antalaha (Figure 1). The
number of visitors to the region has been rising sharply over the last two years. In the last year the area has seen exploratory visits by various outside interests, including ecotourism operators, property developers, and a hotel chain from the Far East.

Last year Madagascar’s largest national park was delimited on the Masoala Peninsula (CARE et al. 1995), as well as three marine reserves with terrestrial components that include stretches of rare littoral and lowland rainforest (Odendaal et al. 1995). These actions will prompt a further proliferation of ecotourism interests. Responsible ecotourism development should be high on the list of priorities of any integrated conservation and development strategy in the region.
ECOTOURISM TRIAL RUNS ON THE MASOALA PENINSULA

Prompted by the rise of uncontrolled ecotourism developments on the Peninsula, a series of trial runs was started by Eco-Africa Environmental Consultants, a company contracted to delimit the Masoala Peninsula’s marine reserves. Local organizations and communities are being gradually involved through a series of trial runs so they will be able to take over the operation within five years. Only when local inhabitants have a firm stake in the region’s budding ecotourism industry will they support the existence of the national park and the marine reserves. The latter not only protect marine biodiversity but also are important breeding grounds for fish and other marine organisms harvested by local fishers.

Three ecotourism trial runs have been conducted thus far. The first trial run, consisting of five ecotourists, was held in November 1993. Two of the participants returned to the Masoala Peninsula for the second trial run. Eighteen ecotourists participated in the second trial run which was an advancement over the first one because only local people were contracted to provide services such as preparing meals and moving luggage. Local people were also contracted to lead ecotourists through the forests at various locations and up the Ampanavoa river in dugout canoes. The third trial run consisted of eight participants. Again, progress was made: members of the newly formed Guide Association in Maroantsetra were involved, and local staff took over a large share of the logistics on the Peninsula itself.

KNOWLEDGE AND INSIGHTS GAINED FROM TRIAL RUNS

A vast range and amount of knowledge and insights were gained from the three trial runs:

(1) Debriefings with the ecotourists provided information regarding:

- the desirability of specific camping and snorkeling sites, hiking trials, and visiting specific landmarks such as islands and cultural sites;
- the relative enjoyment of specific activities such as going upriver in dugouts, hiking in the forest, visiting mangrove stands, going on night walks, as well as fishing or hiking with locals;
- particular cultural highlights as well as potential points of friction or misunderstanding, and the degree of discomfort that may result from certain situations such as traveling in local vessels on the open sea or staying over in villages;
the desirability of spending time on the Masoala peninsula relative to other destinations in the country (on all three trial runs tourist were also taken to other regions).

(2) Specific information was collected on the distances of certain routes and the time required to travel along them, as well as the feasibility of specific sites for camping logistics, and the carrying capacity of specific villages;

(3) Key local people who can play important roles in ecotourism development were identified;

(4) Specific information was collected on money spent by ecotourists on residuals such as crafts;

(5) Information was collected on the feelings of local inhabitants about the presence and actions of ecotourists, with a focus on community members such as shop owners and teachers, and through traditional social structures such as the fokontany. A data bank on the region is being regularly expanded, and gaps in knowledge will be filled during subsequent trial runs. Some of this information has been included in a strategic plan for the region.

FINANCIAL CONSIDERATIONS

How and where ecotourism money is spent is of vital importance in assessing the industry’s influence on a region. Frequently the financial gain of locals from ecotourism is outweighed by environmental degradation resulting from ecotourism activities and ensuing negative influences. Often less than 1 per cent of money made from ecotourism remains in the area; the price paid in environmental degradation and erosion of local culture can be incalculable. Unfortunately this trend may be the norm rather than the exception.

Continual financial analyses made from one trial run to the next may allow for adjustments to be made with regard to where money expenditure should be focused in subsequent trial runs. For this purpose it may be useful to divide ecotourism money into four rough categories based on geographical regions:

(1) money that never reaches the host country;
(2) money spent in the host country but away from the destination;
(3) money spent in the broader region that hosts the target area;
(4) money spent inside the target area itself.

It is of paramount importance to design and direct development to increase the amount of money in the last category. On the
Masoala Peninsula, forest and reef destruction occur largely at the hands of local people who need food and space to grow rice and graze their cattle. Only by benefitting from ecotourism will the park make sense to them. The larger the fraction of ecotourism money that stays behind in the target area, the easier it will be to justify the existence of the park to those people who are denied access to previously open resources. The final aim is to empower local communities by thoroughly involving them in the running of ecotourism operations as well as endorsing their capacity as owners of the industry.

Trial runs provide a useful opportunity to study precisely how money arising from ecotourism activities is spent. The first trial run was atypical in that the boat, a major expense, was provided by CARE INTERNATIONAL, an NGO active in the area. Yet 7 per cent of total expenditure occurred in the host region and target area. During the second trial run the total expenditure in the host region and target locality together came to 10.2 per cent. In the third trial run 16.1 per cent of revenue was spent in the target area; a significant increase over the second trial run. However, the two trial runs are not directly comparable because the second circumvented the entire Peninsula, an idea that has now been discarded for trips under two weeks in length.

A finer analysis of these figures provides the insight necessary for steering the expenditure of future trial runs toward the target area itself. As an example, the financial details from the third trial run (Table 1) show the types of expenditures in the four areas of expenditure. Not much can be done at the moment to decrease the expenditure outside Madagascar. Those expenditures that occur inside Madagascar but away from the host region and target locality can, however, be adjusted.
Table 1: Actual and projected financial statements for the third and fourth trial runs on the Masoala Peninsula (all values converted to South African rands; one rand is roughly 29 cents US).

<table>
<thead>
<tr>
<th></th>
<th>Trial run 3</th>
<th>%</th>
<th>Trial run 4</th>
<th>%</th>
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<tr>
<td><strong>Income:</strong></td>
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<td>Ecotourists</td>
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<td>98</td>
<td>38,533</td>
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<td>Loss by Eco-Africa</td>
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<td><strong>Expenditure:</strong></td>
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<td></td>
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<tr>
<td>In South Africa</td>
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<td>6,213</td>
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<td>In Host Country</td>
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<tr>
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<td>In Target Locality</td>
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<td>3</td>
<td>6,179</td>
<td>16</td>
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<td><strong>Expenses in Host Country:</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(1) Air Madagascar:</td>
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<td>13,062</td>
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<tr>
<td>(2) Hotels &amp; Side Trips:</td>
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<td>9,322</td>
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<td>(3) Parks Board (ANGAP):</td>
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<td>328</td>
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<td>(4) Hotels, meals:</td>
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<td>(6) Transport:</td>
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<td>(8) Miscellaneous:</td>
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<td><strong>Expenses in Target Locality:</strong></td>
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<td>(9) Supplies:</td>
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<td>(17) School:</td>
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<tr>
<td>(18) Locality Development:</td>
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**Expenses in Host Region:** 2,100*

* By prior arrangement produce can be obtained from local farmers, hence the shift from (5) to (9); the transport boat can be provided by the community living in the Cap Masoala marine reserve.

** These increases can be covered by decreasing out of the region expenses (2), that will now be invested inside the target locality.
Feedback from trial run ecotourists showed that they would like to spend a longer period on the Masoala Peninsula rather than take side trips elsewhere in the country. Also, ecotourists indicated that they are prepared to stay at a considerably less expensive hotel than the luxury Gregoire while in the capital, which frees up money for other expenses. In the fourth trial run this money (Table 1, No. (2)) can now be directed to the host region and target area.

Similarly, money can be diverted from the host region to the target locality, based on knowledge gained from the first three trial runs. With prior notification, supplies can be obtained on the Peninsula itself in the form of fresh produce grown on land or harvested from the sea and kept in holding pens in the lagoons. Fuel has to be brought in from Maroansetra. Several available boats located in the target area itself have been identified and tested to transport such imported goods. More money can be spent on local guides without detracting from the newly formed Guide Association in Maroansetra. During the third trial run, an investment was made into providing guide instruction handbooks.

Most importantly, even if the price of the tour stays the same, there will be money left over to develop other resources (Table 1, no. 18). Any such development will be done in conjunction with traditional conventions and structures such as the fokonolona and fokontany, as was done with the installation of a school in Ambodiletra (Cap Masoala marine reserve) during Trial Run 3.

Therefore a projected 25 per cent will be spent in the target area during the fourth trial run, if the tour price remains the same. In reality the tour price will rise by 18 per cent to R 6,500 (or about $1756 from Johannesburg, or about $3256 from JFK). This profit will be re-invested in the target locality in the form of infrastructure. Because of this development, the real expenditure in the host region and target area will rise to 39 per cent; however, 14 per cent of this expenditure will be locked up in limited-access infrastructure.

FURTHER CONSIDERATIONS

Apart from the step-by-step approach that is both participatory and adjustable, trial runs have many other advantages. Ecotourists that participate in trial runs tend to “catch the spirit” of the development initiative and the conservation ideas behind it. Many of those who participated in the trial runs on the Masoala Peninsula are eager to return and have volunteered their help for the project, both in their own countries or on subsequent trial runs. Consequently a Friends of Masoala organization has formed. In the future this organization will be an important development tool, acting as a lobby group working for the continued health of the Masoala Peninsula environs and the well-being of the people living there.
REFERENCES


FRANCOIS ODENDAAL
Francois Odendaal is an ecologist who formulates integrated conservation and development strategies for remote regions. He has published on topics ranging from structural morphology to the exploitation of marine resources. Through his company Eco-Africa Environmental Consultants, he has consulted widely for industry and government on the siting of national parks, industrial developments, and alternative developments in regions where primary non-renewable resources are failing. His current projects also include documentary film making, teaching, establishing policy for the development of parks, investigating socio-economic limitations that influence the management of marine resources, and the restoration of areas that have been depleted of primary resources for ecotourism operations. His professional background is in population and behavioral ecology and conservation biology, and he has a keen interest in safeguarding the integrity of traditional cultures. He works at both the local and governmental levels to safely develop areas for ecotourism, within both social and ecological thresholds.

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