This paper is based on the author’s work with the group Protección del Medio Ambiente en Tarija (PROMETA) in southern Bolivia. The project was designed to address issues involved with developing an ecotourism program in two reserves in the Tarija Department. The author conducted feasibility studies by visiting the reserves, assessing Tarija as a base for tourism, and evaluating the potential of ecotourism as a business in the context of PROMETA goals.

There is the opportunity to develop an ecotourism program at PROMETA. The reserves are interesting and attractive, although they lack spectacular features that would attract a large tourist base. The reserves and the city of Tarija could provide a good ten-day agenda for tourists. The reserves might also be part of a package that includes other ecosystems of Bolivia, such as the Beni, or the Andes.

There are several questions regarding the costs and benefits of ecotourism that need to be carefully answered in order to proceed with a program that meets the objectives of the group. In many ways the questions are more important than the guidelines for implementing a program.

Tourism can have a negative impact on natural areas and rural communities unless the program is very carefully thought out. The author concentrated on the issues and problems associated with ecotourism, and on the business of ecotourism, as well as a “how to” approach to the project.

Some of the key steps taken in analyzing a project are to:

• write a business plan for each ecotourism area, treating the program as a business;

ABSTRACT
Many ecotourism programs are developed to raise money for programs to protect natural areas and to help local indigenous peoples. They are often developed by non-profit groups specializing in environmental advocacy. These groups are often ill-prepared to handle the programs they create. This paper provides case studies analyzing ecotourism development in two reserves. It also discusses the planning process necessary to make an ecotourism program successful for the non-profit group PROMETA (Proteccion del Medio Ambiente Tarija).
carefully weigh the costs and benefits of an ecotourism program in terms of financial goals and environmental and cultural impacts; and

be aware of the potential negative impacts of tourism and implement a thorough plan for monitoring and evaluation.

DESCRIPTION OF PROMETA

PROMETA is a non-profit, non-government organization oriented toward conservation of the environment and rational management of natural resources in southern Bolivia.

The mission of the organization is to contribute to the conservation of the environment to improve the quality of life for the population of Bolivia.

Its institutional objectives are:

- to contribute to the conservation of biological diversity in the ecosystems in the region;
- to promote public participation in environmental management;
- to strengthen the institutional base of PROMETA; and
- to lobby against activities that threaten environmental conservation.

PROMETA has three major areas of concentration: Biological Diversity Conservation; Environmental Education; and Institutional Development Program. It is a young organization in terms of its existence and in terms of its staff. They are an energetic, dedicated group with a foundation of good intentions.

If ecotourism is to be a part of PROMETA’s program, then a staff person who understands the European and North American cultures should be in charge. The Ecotourism program should be a separate division as well, and not be part of the Biodiversity Division. It is a business that must be run like a business, and not managed as an afterthought. Ecotourism can be a viable business for PROMETA on a small scale at first, growing as the demand and the market increase.

The head of the ecotourism division should be trained in business, management, and tourism, and have a general background in natural history, anthropology or a similar social science. Currently the staff at PROMETA is not ready for managing and operating an ecotourism program.
ECOTOURISM IMPACTS AND DEFINITIONS

Ecotourism is often an oxymoron. Tourism and eco-related concerns often have conflicting needs. By promoting tourism and bringing people into an area that is fragile and pristine enough to warrant making it a reserve, the program can, if not carefully planned and managed, undermine the foundation of conservation.

There are obvious economic benefits in nature-based tourism. It is a large segment of the largest industry in the world. In 1989, an estimated $12 billion was spent by U.S. citizens traveling overseas for nature-based travel. According to the World Travel and Tourism Council (WTTC), tourism in 1993 was estimated to generate $3.5 trillion in world output, employing 127 million workers.

Costa Rica generated $336 million in 1991, and Kenya earns more than $500 million per year. According to Latin Finance, tourism represented 5.2 per cent of Bolivia’s GNP. A total of 300,000 tourists visited Bolivia and generated US$135 million in foreign exchange. US$25 million was invested in lodging, with construction of 400 new hotel rooms.

The ramifications of tourism on culture, economy, and the environment are not clear. There are many more examples of failures than successes in the ecotourism business. Most of the problems have been related to insufficient planning and staffing. Often organizations that are not properly staffed to work in the tourism business undertake ecotourism programs and become overwhelmed with the problems that ensue.

Ecotourism is a business that must be planned like any other business, but with a keen eye on the impacts that cannot be measured in financial terms. Briefly, the positive impacts can be thought of as social and economic. Positive social impacts could be:

- visitor awareness of the natural environment, raised consciousness, and involvement in conservation;
- availability of reserves for research and education;
- support for rural communities by incorporating research results in natural resource management;
- protection of resources from encroachment by squatters and destructive industries;
- making conservation better known and popular and paying attention to reserves in decision making.

Positive economic impacts could be:

- funds for environmental groups to run their programs, jobs and development projects for rural people who live in and around reserves;

There is no right or wrong definition of ecotourism but there is merit in creating a definition that will, in essence, become a direction statement for a tourism program.
reserves as an attraction in the national tourism base, thereby supporting airlines, ground transportation, hotels, food industries, and things like handicraft markets.

More and more people are participating in some form of nature-based tourism. This is a function of easier access via cheap and frequent air travel and also a function of popularity. There is a definite trend toward participating in something that is environmentally oriented. This trend can be related to the boom in outdoor recreation and fitness activities. People want to escape the urban and suburban environment and experience something more natural. It can also be related to the emergence into a new lifestyle. People in most “developed” countries are seeking an adventure, or an extraordinary experience in their vacation.

Unfortunately, the infrastructure necessary to accommodate the growing number of people who want to go somewhere natural is rapidly pushing back the limits of what is natural. Some people truly want to get away, but most people want some level of comfort. The situation represents a thought-provoking concept. Everyone wants to go where no one else is.

There are no clearly defined levels of nature-based tourism, and many travel groups are promoting ecotourism trips that have no real significant social or economic benefits for the natural area or the people who live near them. Their staff is not trained in natural history or in managing impact on the environment; they are simply using the natural area as a tourist attraction. The industry is growing faster than careful planning and management in natural areas can keep up with.

The questions arise: to promote ecotours or not in the case of areas that are truly in need of protection; to ecotour or not to ecotour.

There is no right or wrong definition of ecotourism, but there is merit in creating a definition that will, in essence, become a direction statement for a tourism program. In the case of PROMETA, ecotourism managers question what type of ecotourism achieves the goals they have for their reserves. Where are they going with the program? In an effort to focus the program, it is advisable to write a clear strategy for the ecotourism program including: mission, goals, strategies to achieve goals, and methods for evaluating progress.

**TYPES OF ECOTOURISTS AND WHAT THEY WANT**

For the purposes of this paper, a breakdown of types of tourist is included. There are many other descriptions and names for the various types of tourists. But for the case studies being used for this paper, the following will serve during program planning discussions.
TRUE ECOTOURISTS

The true ecotourist may be described as a person who travels with an interpretive group that is led by an environmental advocacy or educational institution. They are willing to study information presented to them and they are genuinely interested in nature and culture. Most groups are willing to endure some hardship in accommodations as long as basic needs are met and there is not much danger.

The true ecotourist is well-educated and probably has an affiliation with environmental groups through membership or volunteer activities. They require guidance, but are fairly aware of how to conduct themselves in nature.

ENVIRONMENTALLY AWARE TOURISTS

There is a growing segment of tourists who are aware of nature and who are capable of venturing into a remote area and not creating a large impact. They may need some assistance and education, but they generally have an awareness of the natural world and how to interact in it. This type of tourist is generally active and well-educated. They may prefer to go alone rather than participate in a group.

NATURE TOURISTS

There are millions of tourists who want to be near nature and spend some time in a natural environment, but who want a fairly high degree of “creature comforts.” They may or may not have some nature-oriented hobby such as bird watching, fishing, or hiking. They want to be able to drive through nature, stay in a comfortable, safe, clean place with good food, hot showers, and few mosquitoes. They want a room with a view. They appreciate nature, but they would prefer not to get too dirty, hot, or wet.

ADVENTURE TOURISTS

Travelers or back packers and activity-oriented tourists constitute another type of tourist. They want an experience. Although the travelers generally have a limited budget, they are aware of nature and have a fairly educated perspective. They usually are not actively interested in educational trips. They spend a surprising amount of time in towns and cities with other travelers. They are generally less than thirty years old.

The activity-oriented tourists want to go rafting, bungee jumping, or ski, sail, scuba dive, or DO something else. Although they enjoy being out of doors, their participation in nature trips and things like bird watching or botany is limited.
RESEARCHERS AND STUDENTS

Researchers and students who come to the centers to conduct research and to participate in on-going projects are a good constant source of tourist-type people for the reserves. They have minimum impact, are attentive to the needs and goals of the organization, and don’t expect too much in the way of accommodations. They generally have a grant for research and can afford to pay a fair price for accommodations and equipment.

ECOTOURISM PLUSES

By promoting reserves and bringing people into them, their value is demonstrated. People who visit the reserves will promote their existence if they have a good time.

Visitors will learn something about the natural history of the area and the people of the area. They will learn something about the culture of the people who live in and around the reserves, which may change their perspective of how they live.

By charging money to go into the reserve, funds will be made available for PROMETA to manage their programs in the reserves. Some jobs will be created for the locals. Value added jobs including airlines, hotels, restaurants, and merchants along the route to the reserves will be created.

ECOTOURISM MINUSES

The presence of visitors will disrupt the local culture. Not only will the presence of strangers be disruptive, but the material possessions and appearance of the strangers will create a consumer mentality, especially in the younger people. In order to accommodate visitors, buildings need to be built. Inherently, construction is damaging to the natural environment, although some lessons can be learned from the local inhabitants on how to work with the natural materials and to adapt them to the climatic features of the area. Sewage, garbage, noise, lights, and vehicles to transport visitors all detract from the natural setting.

Visitors will disturb wildlife and traditional lifestyles and will create an impact on the environment. An ecotourism program diverts the research, education, protection and management efforts of PROMETA. It is a full-time job to manage a tourism business. Whether it is subcontracted out or run from within, a tremendous amount of planning and monitoring needs to be done in order to carefully implement a new tourism program. Accounting and personnel management and training need to be incorporated into a position within the organization.
GUIDELINES

As the program develops, a workshop on guidelines and evaluation techniques is proposed. For the purpose of this document, the following basic thoughts are presented to help PROMETA approach the ecotourism concept:

1. Maintain a careful vigilance on the mission and goals of the programs.
2. Make sure the program can support PROMETA’s overall agenda and not just run the ecotourism program for its own sake.
3. Buy locally, but be sure that the products are not having negative impacts. Examples: firewood, lumber, and beef may be contributing to deforestation. Continue to discourage intensive agriculture techniques to feed tourists. Chicken has less of an impact than beef.
4. Be careful that contact between locals and tourists is not having a negative impact on the lifestyle of locals. Orient the program so that visitors improve their awareness of their own society through interaction with locals. Encourage simpler, less consuming lifestyles, family, and community values of locals.
5. Support ecological and social science research that circulate back to the local communities.
6. Facilities and actions of the organization need to be exemplary. Buildings need to fit the site and show methods of sustainable energy use. Staff need to be advocates of the organization’s goals. Buildings should be cost effective and it should be possible to duplicate them.
7. Include things like trail repair and reforestation in activities. Help to repair damage to the environment.

A BUSINESS PLAN

For the purposes of structuring the ecotourism program, the following components of a typical business plan outline will help to structure the business:

1. Institutional strength and personnel: Describe the institution and qualifications of the people who will be working on the ecotourism staff.
2. Financial background of the institution: Provide three years of financial history on the organization.
3. Goals of the ecotourism program: List specific milestones and a time frame for the program including income and distribution of funds over five years. What is the action plan?
4. Strategic plan: List methods to achieve goals.
5. Financial projections: Provide a spreadsheet with monthly expenditures and income for the first year, quarterly for the second year and annually for the years 3-5. Provide an extremely detailed list of all costs, broken into line item categories.
6. Market: Carefully describe the clients that are to be part of the ecotourism program, including what they want out of the program.
7. Marketing strategy: Describe all methods of marketing and why they are to be used.
8. Market niche: Describe the industry trends and competition. Describe the unique qualities of the organization and the natural and cultural features of the area that will make the ecotourism program competitive.

LAND TENURE AND ENVIRONMENTAL CONDITIONS
The environmental conditions at the site are a key element in planning a research center and lodge facility. The following issues raise questions that need to be addressed prior to deciding on the exact location:

LAND TENURE
Who owns the land or will question the land use for the center? Does it interfere with anyone’s grazing patterns, etc.? Is the community fully behind the location of the center, or do some people have questions that need to be addressed? What do the locals say about building at the site?

TOPOGRAPHY
Does the site offer protection from the wind and afford strategic orientation to the sun for solar energy. Is the site protected from run-off in cases of flooding?

PREVAILING WINDS AND FRONTAL SYSTEMS
The site should be planned for protection against prevailing winds and storms;

SOILS
Soil percolation and issues relating to water and sanitation in relation to water ways and fresh water sources are important;

NATURAL FEATURES
What natural features of the site will be incorporated into the construction? Rocks, adobe bricks, sand for cement? Are these resources near by? Will their use disturb the site?
WATER
Is water available for the maximum use of the site? Can it be contaminated? Is it saline?

IMPACT ON WILDLIFE
The center may impact the wildlife it is dedicated to protecting. After observing the flamencos in Sama, it is apparent that they are very weary of humans. The center should be located far enough away from the lake that it will not impact birds;

SITE DISTURBANCE
Because the center will be built near the lake, it is important not to disturb the vegetation at the site. Unless absolutely necessary no roads should be cut to the site and vegetation should be disturbed only where actual construction is taking place;

PROXIMITY
The proximity of the site to local communities is an issue that requires attention. The benefits of the center to the villages need to be clearly discussed with the communities. In many ways, there are advantages to locating the center away from the communities, so that:

• There is no competition for favors from the center. None of the communities should be receiving more benefits from the center than another
• The cultural habits of the local communities are not disturbed. Visitors, researchers, and tourists will have contact with the locals, but it is preferable to remain separate and let them carry on their life styles. The facility should be far enough away from the villages that children are not encouraged to spend a lot of time there.
• Emergency radio use and demonstration projects are services which may be provided by the center.
• Transport on a regular basis in PROMETA vehicles should be carefully considered

DESIGN AND CONSTRUCTION
Design and construction of the tourist center has important functional and aesthetic aspects, especially in regard to the impact the center will have on the local population. Balance between the project and the locals is necessary, if the project is to achieve its social goals. Design and construction need to take cost, environmental conditions, and materials into account. The center has to “fit in.”
If visitors are going to be a major part of the program, then they must be catered to at the onset of the design. Having just outlined ways the center must fit in, it is also imperative that the center accommodate people who are used to and demand a level of comfort much higher than the local population. For tourists, the accommodations are a major part of the experience. The center needs to be innovative and unique and still reflect the local vernacular style and fit with the landscape.

The center should be low in stature so as not to “stick out” in the landscape. The concept of an observation tower does not fit in with this philosophy. An observation room that can accommodate spotting scopes and an open roof that can be used during clement weather for small astronomical telescopes seems ideal. Continuing on the theme of observation, the preferred approach is to have a series of observation stations or blinds, where people are concealed, but they are generally closer to the wildlife than a lodge would ever be.

The ecotourism lodging should be located as a “satellite” to the center. The accommodations should be comfortable, with good beds and heating or cooling. A common room for eating and relaxing is recommended. By having the lodging separate, the staff can carry on their work and their lives without the feeling that they are always entertaining.

When feasible, opportunities to install solar and wind energy systems should be analyzed. Passive solar heat, solar water heat, photovoltaic battery charging, and a small wind mill for pumping water are recommended to the extent that these technologies are available at a reasonable cost. The benefits of these types of systems in reducing the impact of the center are obvious.

In particular, any opportunity to avoid running a generator will help maintain the serenity of the area. As sound travels over water much further than over land, the impact of a generator on wildlife in the reserve can be an important consideration.

Photovoltaics are quite efficient in charging a bank of batteries that can be used for radios and lights. Invertors are now more efficient in converting DC power to AC. The primary consideration is the cost of the batteries. Natural gas lamps can be used as a back-up for the lights.

If a well is to be drilled for fresh water supply, then some type of pumping system must be installed to raise the water into a tank. As the center will not be occupied all the time, it is possible to have a small snap pump run by batteries to slowly fill the tank. If there are many people using water at the center, this option may not be feasible. A small, simple wind mill can have a fairly low impact on the site.
PROGRAMS AND ACTIVITIES

Generally ecotourists want an activity-oriented vacation. They want to learn something about the natural history and culture of the area they are visiting. They want to exercise and see new exotic things. In the absence of dramatic natural features or wildlife, hiking, boating, and bicycling in remote terrain can be appealing.

A set of participatory research projects can be attractive. The researchers would pay rent to participate in on-going programs by organizations such as the School for Field Studies and Earth Watch. Participants in such programs pay a lot and generally do not expect a major, natural attraction like most ecotourists. They also expect a research environment and therefore do not expect sophisticated food and lodgings.

Ecotourism can be an excellent tool for education and for generating income. An organization interested in developing an ecotourism program will require personnel who know business and the ecotourism field. The staff and local people in and around the natural areas will need training in ecotourism, basic accounting, and business methods. Often language training is necessary. The person in charge of the ecotourism program needs to understand the culture of the visitors and the local culture in the areas that are being visited, and should be multilingual.

Because ecotourists like to be active, organizations managing natural areas might consider banding together to provide accommodations of uniform standards and an itinerary where visitors can move between the areas. Coastal and inland forest combinations are particularly popular.

Any ecotourism program needs to be carefully and properly planned and managed. The program needs a clear business plan and financial evaluation in order to proceed. Hotel and restaurant businesses are complex. When placed in remote areas without access to equipment, supplies, communication, or health-care facilities, the businesses become even more difficult. In remote locations, often under the assault of harsh weather, insects, and unusual surroundings, the guests become very demanding of basic creature comforts.

Any organization involved in the ecotourism business must be willing to dedicate resources, time, and effort in the tourism business, which may not be directly related to the work they have done in the past.
REFERENCES


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