

PN-ABL-900

77448



ARTS/FARA

*Office of Analysis, Research and Technical Support
Food, Agriculture and Resource Analysis*

**ECOTOURISM:
A VIABLE ALTERNATIVE FOR SUSTAINABLE
MANAGEMENT OF NATURAL RESOURCES IN AFRICA**

June 1992

INTERNATIONAL RESOURCES GROUP, LTD.

**U.S. Agency for International Development
Bureau for Africa**

**ECOTOURISM:
A VIABLE ALTERNATIVE FOR SUSTAINABLE
MANAGEMENT OF NATURAL RESOURCES IN AFRICA**

Submitted to:

**Agency for International Development
Bureau for Africa
(AFR/ARTS/FARA)
Department of State
Washington, D.C. 20523**

**Contract No:
PDC-5517-00-I-0104-00
Delivery Order No. 2**

Prepared by:

***INTERNATIONAL RESOURCES GROUP
1400 I Street, NW, Suite 700
Washington, D.C. 20005***

June 1992

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
Background	i
Purpose and Audience	ii
Objectives	ii
Methodology	iii
Summary Findings	iii
Summary of Recommendations	vi
1. INTRODUCTION	1
1.1 Background	1
1.2 Ecotourism Definitions	4
2. DESCRIPTION OF THE NATURE TOURISM SECTOR	7
2.1 Overview of Current Literature and Research	7
2.2 Overview of the Tourism Sector	11
2.3 The Market For Nature Tourism	17
2.4 Economic and Political Perspectives of Tourism	18
3. THE TRAVEL AND TOURISM INDUSTRY	22
3.1 Beginning of the Process	22
3.2 Travel Agencies	23
3.3 Tour Operators	24
3.4 Ground Operators	29
3.5 National Tourist Boards and Local Trade Associations	34
3.6 Non-Profits In Travel	34
4. ROLES AND PERSPECTIVES OF NON-INDUSTRY PLAYERS IN ECOTOURISM	36
4.1 Non-Governmental Agencies (NGOs)	36
4.2 U.S. Government Agencies	40
4.3 Multilateral Organizations	44
4.4 Local Communities	45
4.5 Buffer Zone Management	48
4.6 Host Country Governments	50

5.	ECOTOURISM ECONOMICS	60
5.1	Introduction	60
5.2	Approach	61
5.3	Breakdown of the Tourist Dollar	62
5.4	Carrying Capacity	69
5.5	Total Amount Available For Recurrent Cost Funding	70
5.6	Required Investments: Private Sector	72
5.7	Public Sector Investments	77
5.8	Employment Impact: Private and Public Sectors	84
5.9	Analysis and Interpretation of the Results	84
6.	CONCLUSIONS AND RECOMMENDATIONS	87
6.1	Major Conclusions	87
6.2	Recommendations	92

ANNEX 1 Bibliography

ANNEX 2 Organizations Involved in Ecotourism

ANNEX 3 Chief Contacts in Ecotourism

EXECUTIVE SUMMARY

Background

The subject of this report has been approached from a wide variety of views. Everyone seems to be talking about ecotourism.¹ Some people have been eager to exploit the term as a marketing tool, while others define it strictly as travel with a conservation purpose, others see its potential as an economically and socially sound means to conserve biodiversity, and finally, some see it as a vehicle of improvement for people living adjacent to biologically important areas. Planning for ecotourism is complicated by these divergent, and on occasion, competing views. What is clear is that tourism is one of the world's leading industries (US \$2 trillion, Edgell, 1990) and is the world's largest employer. Ecotourism is the fastest growing segment of the industry.

There is not any doubt as to the desirability of developing tourism as a vehicle that can lead to sustainable and equitable economic development, conservation, biodiversity, and social benefits in African countries. Foreign exchange earnings from tourists coming to view wildlife can be major sources of revenue for governments. Park entrance, concession, and other fees can generate much needed cash for managing resources or assisting local communities. For its potential to provide simultaneous economic and environmental benefits, ecotourism enjoys widespread popularity among governments and conservation organizations.

Ecotourism, however, is different from the other forms of tourism in that it is less likely to damage the resource base. Ecological balances are important to ecotourism sites, tend to be easily upset and, therefore, difficult to manage. Concerns about the tourism carrying capacity of the most attractive sites are already well founded in Africa. If irreparable damage is to be avoided, establishment of a balance between ecological, social and economic objectives must be a top priority of all concerned parties. Other ecotourism concerns are: cultural disruption; dependence on fickle international markets; and unrealistic anticipated benefits.

¹Defined by the Ecotourism Society as responsible travel that conserves the natural environment and sustains the well-being of local people.

Moreover, there are problems confronting the development and management of ecotourism. There is a lack of coordination of research and development work within the scientific and conservation NGO communities. Also, lack of coordination exists between the travel industry and governments. Many individuals in the industry contacted during this study also expressed concern about conservation groups' and governments' lack of knowledge concerning the traveling public and the travel industry in general. In short, consumers, tour operators, government agencies, NGOs, and local communities are committed to the same general ends, but it is unclear to most how they can work together.

This report defines key tourism-related terms and describes tourism's major players, with the expectation of providing increased coordination and communication. We have focused on the role of the private, commercial-sector organizations in ecotourism, as they are the least well-known and a crucial segment of ecotourism.

Study Purpose and Audience

The purpose of this study is to illustrate the role ecotourism may play in addressing A.I.D.'s mandate to implement the Development Fund for Africa's (DFA) Strategic Objectives and to enable USAID Missions and host country governments to assess, plan, and initiate policies, strategies, and programs for ecotourism development. The intended audience includes the A.I.D. Africa Bureau environment and natural resources management staff, USAID Missions, PVOs, NGOs, host country governments and other donors.

Objectives

- To describe the history and current status of ecotourism and its role in economic development and natural resource management.
- To provide a professional travel industry expert to relate how the travel industry works and to define the potential for collaboration between the industry, donors, governments, and NGOs.
- To illustrate how nature tourism fits within A.I.D.'s Development Fund for Africa and other A.I.D. strategic plans.
- To provide planning guidance for ecotourism development and management.
- To offer policy and strategic recommendations for A.I.D. programming in ecotourism.

Methodology

The study was based on a review of secondary information sources. An extensive bibliography is listed in Annex 1. Over one hundred people involved in ecotourism were interviewed primarily from the commercial and NGO private sector. Furthermore, a five-week field trip to Namibia, Zimbabwe and Kenya was completed to research on-site local governmental policy, examples of good and bad ecotourism management, and status of the industry, in order to assess the options of USAID and other field officials regarding ecotourism and its alternatives.

Summary Findings

Sub-Saharan Africa has considerable **untapped potential for ecotourism**. The region encompasses a diverse environment from deserts to equatorial rain forests, Mediterranean woodlands to tropical savannahs, and coastal reefs to permanently glaciated mountain tops. Africa has been endowed with large concentrations of wildlife and a composite of vibrant cultures. Following the relative success of a few countries such as Kenya, Zimbabwe and Côte d'Ivoire in generating foreign exchange revenues through tourism, a number of other countries have adopted programs to bring in more visitors. Most notably, Rwanda in the past decade successfully developed a new ecotourism program. After years of neglect under state control, Tanzania's tourist lodges are being privatized and tourism's prospects are improving.

The **literature on ecotourism** is characterized by a cautious but generally favorable bias and a serious deficiency in quantitative evidence and analysis. This, in part, stems from ecotourism's recent entrance into the limelight, but also from the difficulty in distinguishing between ecotourism and other types of tourism. As a result, the presumed benefits from ecotourism are only beginning to be quantified. Even less has been done to study the known and feared negative impacts.

AID's central environmental objective is to promote environmentally and socially sound, long-term economic growth. One way it achieves this goal is by assisting developing countries to conserve and protect the environment and manage their natural resources for sustainable benefits. At the same time, A.I.D. has placed high priority on stimulating private investment, free markets and free enterprise. Many officials within A.I.D. view nature-based tourism as well-suited for simultaneously meeting both objectives. As a result, there has been an increasing level of activity related to ecotourism within the agency.

From the Africa Bureau's point of view, the study team found that ecotourism can **support the strategic objectives of the Bureau's Development Fund for Africa** in terms of both private sector development initiatives and natural resources management. To date, however, no major projects are being funded that focus primarily on travel industry development or Bureau strategy to guide ecotourism activities.

This study examines three major elements of the travel industry: travel agents, tour operators, and ground operators. The most important characteristic of the industry is the large number of relatively small and highly competitive firms. As a result development assistance to the industry should mirror small enterprise development programs. The problems concerning the industry that need resolution are: inappropriate government policies and regulations of tourism, under-capitalization and lack of credit, lack of educational materials, and inadequately trained staff.

Marketing is one of the least understood areas of implementing a successful tour operation, or promoting and developing tourism at a particular destination. The perception of a destination is a significant factor in determining its appeal to the traveller. The demand created by clever marketing should not be underestimated. This is a key area where nature tourism needs support. In the past, the perspective of NGOs, governments and development agencies has been that if a site or attraction is developed for tourism, tourists will simply come. While this may happen, the outcome is probably more coincidental than those in the developmental arena realize.

A strong, independent group of ground operators is a key component for a successful travel industry. Unlike government-owned operations, private ground operators have the entrepreneurial talents to develop and deliver tours that are responsive to tourists' needs. Compared to international tour operators, they can deliver their services at a lower cost. In fact, most overseas tour operators consider private ground operators a prerequisite for developing tours to a destination. As the primary vehicle for delivering tourists to the site, ground operators are also critical to the environmental and social soundness of tourism. However, ground operators are one of the weakest links in the industry and one on which development assistance should focus its attention.

African ground operators' most common problem is under-capitalization. Lack of credit and seasonal fluctuations in revenues also contribute to weaken their financial status. Perhaps the second most pervasive problem among ground operators in Africa is the lack of adequately trained staff, resulting in a poor quality of service. One common complaint of nature tourists is the lack of information about the destination's attractions, and many of the tour guides are merely drivers, able to only provide minimal information.

Over the past decade, NGOs, specifically conservation organizations, have significantly increased their activities in ecotourism. This stems from their traditional concern for wildlife and ecosystem conservation, and the recognition that increases in economic benefit derived from parks and protected areas will improve chances for sustainable resource management. NGOs are involved in all aspects of ecotourism development including technical assistance, policy and planning, community development, information, public awareness and education. NGOs are an important vehicle for channeling donor assistance to ecotourism and should receive expanded support. More attention needs to be given to bring international development PVOs and indigenous NGOs into the picture particularly to assist with local community management.

One NGO, the Ecotourism Society, has recently been formed by leading conservation and travel experts. While the Society is still in its formative phases, it can play a crucial role in the development of ecotourism as a mechanism for coordinating research and disseminating information, and provide a forum for inter-institutional discussion and consensus setting.

Local communities present both problems and opportunities for nature tourism programs. On one hand, the existing problems are: (1) threatened viability of natural resources by local communities, on which tourism depends; (2) resulting negative impacts on social welfare (prostitution, crime, etc.) disrupting local culture; and (3) limited traditional uses of parks and protected area reserves. On the other hand, ecotourism is an opportunity given its potential to: (1) provide impetus for community development and benefits for local people; and (2) support tourism by local people, adding a cultural dimension and diversity to the attraction. It is clear that the relationship local communities have with parks and protected areas and related tourism activities will determine the outcome of a nature tourism project.

There are two important caveats to local participation. First, little concrete evidence exists demonstrating that a grass roots tourism program can help protection efforts. Second, that local participation is easier said than done. It takes time and requires special skills for implementing agencies. These caveats notwithstanding, **local community participation should be given a more important role in planning and implementing nature tourism.** More complete local participation means greater community understanding of and control over the activities. This, in turn, leads to improved sustainability of projects, as reliance on local, as opposed to external, assistance is enhanced.

Successful development and marketing of ecotourism in Africa hinges on a number of appropriate actions by national governments in the areas of policy, planning, industry coordination, resource management, infrastructure development and finance. **Governments could benefit from development assistance in the areas of policy reform, marketing, planning, resource management and infrastructure development.**

In the final analysis, the success of a government's ecotourism plans depends on its ability to effectively balance development in terms of the well-being, needs and interests of the nation, industry and local communities. Only development consistent with ecological, social, and economic sustainability should be allowed. Finally, government must have a keen awareness of what kind of development is appropriate for its social structures, institutions and people and plan accordingly.

Summary of Recommendations

AID:

- **Develop a strategy for supporting ecotourism** as an element of the Plan for Natural Resources Management for Africa. The strategy could rationalize the current A.I.D.-funded ecotourism-related activities underway in Africa and set priorities for future support. This strategy setting should be conducted with the full participation and input of both industry and NGOs.
- **Fund an ecotourism umbrella project** that would initiate and coordinate research, training, policy analysis and local field initiatives.
- **Establish linkages with the travel industry** to learn more about their problems and opportunities, strengths and weaknesses and to determine how to best channel support for the industry. AID could directly fund certain industry activities such as training, development of educational materials and establishment of responsible travel standards through industry trade associations.
- **Fund more research** into priority areas: policy analyses; feasibility studies; studies of carrying capacity and the environmental and social impacts of tourism; exploring innovative approaches to the development of ecotourism; and the involvement of local communities in ecotourism activities. While additional state-of-the-art reviews may be needed, emphasis should be placed on primary investigation and analysis.
- **Provide overall coordination** among the players in ecotourism. If AID can provide these disparate groups with quality leadership, sound research, and an open forum for frank discussion of views, problems and successes, this will provide compelling impetus to various needed African programs.

NGOs:

- **Improve coordination among NGOs and between NGOs and other players**, specifically the travel industry. This coordination could be based on the excellent start made by the Ecotourism Society with focus on coordination of ecotourism plans for specific sites in Africa.

- **Develop priorities and guidelines for research in ecotourism, actively solicit support for research, and provide a vehicle for disseminating the results.** NGOs and academic institutions are well-suited to identify gaps and set research priorities making recommendations to AID and other donors for funding.
- **Educate the public about responsible ecotourism.** Through development of education programs, NGOs should expand their efforts to reach the public about the importance of ecotourism, what responsible travel is, and where to find information.

Travel Industry:

- **Establish standards for responsible travel and recognize operators that practice them.** This should be done in conjunction with NGOs to maintain the credibility of the standards and industry recognition. While not without problems, operators meeting standards could be certified and use this certification in advertising their product. Awards such as ASTA/Smithsonian Magazine's Environmental Award could be used to single out firms providing exceptional service to ecotourism.
- **Create an ecotourism advisory board** which would draw its members from the travel industry, the objective being to foster responsible ecotourism. This board could be given the responsibility for maintaining standards of responsible travel, voluntary codes of ethics, and perhaps annual voluntary contributions to conservation. It could also oversee educational programs for travel and fund raising for projects that are of interest to the travel industry.
- **Develop training programs for ground operators.** International tour operators have a vested interest in properly trained ground operators which allows them to meet the needs of clients. Training needs will vary considerably from place to place but should ensure that ground operators: (1) know and carry out environmentally responsible practices; (2) provide basic ecological information to tourists; (3) are sensitive to the needs and participation of local communities in ecotourism; and (4) understand the requirements of international tour operators.

African Governments:

- **Establish or improve national tourism boards.**

1. INTRODUCTION

1.1 Background

You start your trip on foot exploring the forests of Lake Kivu in Rwanda, home of the largest primate species in the world, the mountain gorilla. The next day you go to Burundi and travel by steamship across Lake Tanganyika to Tanzania through the Mahale and Gombe national parks to study chimpanzees. This is a part of Sobek Expeditions² "Threatened Primates of Africa" program which educates tourists on the importance of protecting endangered species like gorillas and chimpanzees. There are thousands of such trips across the world whose purpose is to witness and enjoy wildlife and nature in relatively remote or fragile areas. In some trips, tourists can take a more active role, e.g., to protest the construction of the largest geothermal energy project in the world, which threatens the Wao Kele O Puna rain forest on the Big Island in Hawaii or to collect garbage along the famous Inca trails of Peru (Kutay, 1989).

This alliance between tourism and conservation has aroused interest among many conservation groups and donor organizations. The idea that culturally and ecologically responsible travel can generate profits and promote conservation and management of natural areas for long-term sustainable economic development was coined as **Ecotourism** by conservationists in the 1970s. The movement is since gaining momentum as safeguarding the environment, as well as becoming an increasingly important political, social, and economic topic. The concept has increased further in stature after the Brundtland Commission report (Leisher and Soltis, 1991) in which sustainable development was defined as meeting present needs without compromising the ability to meet future needs. In this respect, ecotourism may contribute to economic development by:

- improving the quality of life and economic well-being of local people;
- developing the awareness and understanding that tourism can make beneficial contributions to the environment and the economy;
- promoting equity in development;
- providing a unique and outstanding experience for the visitor; and
- maintaining the quality of the environment on which the above depends.

Given that ecotourism is the fastest growing form of tourism in the world (Leisher and Soltis, 1991) it is appropriate for development agencies such as A.I.D. to consider what role

²This trip is described in detail in Adventure Vacations, edited by Richard Bangs, John Muir Publications, Santa Fe, New Mexico, Pg. 61.

they may play in supporting ecotourism. The Food, Agriculture, and Resources Analysis Division of A.I.D.'s Africa Bureau has commissioned International Resources Group (IRG) to explore how A.I.D. might support ecotourism. At the broadest level we concluded that ecotourism can support A.I.D.'s strategic objectives, including continued and expanded funding. Specific recommendations for A.I.D. support of ecotourism are the subject of Chapter 6.

1.1.1 Importance of Tourism in Sub-Saharan Africa

Sub-Saharan Africa encompasses a diverse environment from deserts to equatorial rain forests, Mediterranean woodlands to tropical savannahs. The region has been endowed with large concentrations of wildlife and an amalgamation of vibrant cultures. **It is the combined diversity of geographical features as well as cultural resources that gives the sub-region substantial tourism development opportunities.** Filani (1975) suggested that:

"Among all the continents, Africa is remarkable for the great diversity of its environment. Her beautiful and varied scenery, mountains, lakes, beaches, wildlife and sunshine and numerous other special features provide the continent with a diversified environment unmatched by any other part of the world."

There are a variety of attractions that make Africa a good ecotourism destination. The most well-known are in Kenya and Tanzania where the Masai Mara and Serengeti conservation areas together provide 1.5 million wildebeest, 250,000 zebra and millions of other game animals. Other countries have less well-known but nonetheless significant ecotourism resources:

- In Rwanda, the world famous Virunga Gorilla Sanctuary contains the Karisoke Research Institute founded by the late American naturalist Diane Fossey.
- In Botswana, the Moremi Wildlife Preserve is home to over 36 varieties of mammals and birds. It is also the home of the Okavango Delta, one of the most biologically diverse regions in the world.
- In Zambia, there are estimated to be 191 wild mammalian species. The South Luangwa Park alone has over 100,000 elephant, 14,000 hippopotamus, 21,000 buffalo, 2,800 rhino and 60,000 crocodile.
- In Zimbabwe, the Hwange National Park has over 1,000 species of animals and 400 bird species. The Kariba Dam, one of the largest man-made lakes in the world, offers opportunities for fishing and cruises. There are also the great Zimbabwe Ruins, the archaeological remains of a once thriving black civilization (Ankomah and Crompton, 1990).

While East Africa provides a wealth of wildlife attractions, West Africa offers a rich cultural and historical landscape. Nigeria is noted for its beautiful wood and bronze carvings, while Ghana boasts numerous colonial castles. Liberia is of interest to black Americans, being

settled by freed slaves in 1822. Finally, the Dogon Plateau in Central Mali is noted for its unique art work and exotic markets. Cultural tourism to such sites is often closely linked to ecotourism.

1.1.2 Development Fund of Africa Strategic Objective 2

In 1987, the Congress established the Development Fund for Africa, which provided A.I.D. with a special mandate, a stable and assured source of funding, flexibility in their spending, and management of Africa's resources benefiting Africans. Within the DFA, two of its strategic objectives are particularly relevant to ecotourism, Strategic Objective 2 and 3.1.

The DFA's Strategic Objective 2 is intended to strengthen competitive markets to provide a healthy environment for private sector-led growth. The underlying rationale is that a country's economic development and how well its population can meet their basic needs is determined by the rate of growth of its productive resources and the efficiency with which those resources are used. Economic growth is best achieved by way of open and competitive markets. Market determined prices accurately signal supply and demand conditions that permit both consumers and producers to better gauge where their interests lie.

The ecotourism sector is a unique blend of private, NGO and governmental interests. Governments largely control natural attractions, such as parks, forests, marine areas, waterfalls and mountain tops. Access to these sites is principally allowed to private, for profit concerns conducting tours at these sites. Conservation NGOs and a few development PVCs have taken an active role in supporting the management of biologically important areas and thus have a de facto role to play in planning ecotourism. Still the economic engine behind ecotourism development is largely in the hands of the commercial sector, which includes tour operators, hoteliers, airlines, travel agents, and others. The economic success of these enterprises, however, is largely dependent on government policy. A tourism destination will not attract tourists if it is not adequately maintained, funded and controlled or if access is not provided to the public sector. Likewise, tourists will not visit the site unless the private sector provides the necessary infrastructure to cater to tourist needs such as lodges, restaurants and other facilities. Both partners, the government and private sector, must uphold their end of the tourism arrangement. Currently, these kinds of partnership arrangements are the exception rather than the rule. The roles of the private sector and of governments and their interaction is discussed in Chapters 3 and 4. Nevertheless, ecotourism development activities that A.I.D. might support will clearly have an important, positive impact on private sector endeavors.

1.1.3 DFA Strategic Objective 3.1

This objective sets an A.I.D. funding priority on activities that improve the management of natural resources -- the long-term physical capital on which a nation builds and grows. In the DFA context, sustainable resource management clearly emphasizes increased economic benefits from resources without harming the environment. Ecotourism, as a non-extractive use of natural resources, can provide direct economic benefits without removing wildlife or vegetation.³ If possible negative impacts are avoided (e.g., habitat is not destroyed through overuse or animal behavior is not upset through proximity), then ecotourism, at least theoretically, is ecologically sustainable. This would be particularly important in meeting key congressional mandates for A.I.D. regarding conservation of elephant, rhino, tropical forests and biodiversity. However, truly sustainable use of resources also must satisfy social and economic requirements.

If ecotourism is to meet this strategic objective then it must be able to compete effectively in terms of the local and national benefits from land use options, while abiding by the same economic rules. For example, a site may be potentially attractive to tourists if left undisturbed, or a lucrative site for logging, but not both. Only an economic or financial analysis of each can sort out which use is economically preferable. An analytical approach to conducting economic analyses of ecotourism is provided in Chapter 5.

Social sustainability of resource management covers a number of areas including the needs of special groups (such as women and the landless), and issues such as resource tenure and local community management of resources. These concerns include institutional policy and management factors. Nature tourism can have negative impacts on social welfare, most often by limiting traditional uses of parks and protected area reserves. Properly conducted, it could have a positive social impact by providing revenues to these local communities. Such social questions are dealt with in Section 4.6.

The issue of ecotourism's utility in meeting DFA Strategic Objective 3.1 can only be tentatively answered. When well designed and implemented, ecotourism is a viable approach to sustainable resource management. However, it is not guaranteed. Only case-by-case analysis of ecotourism will ensure that a particular program or activity can simultaneously meet ecological, economic and social sustainability factors.

1.2 Ecotourism Definitions

Ecotourism has become a development buzzword in the past few years, and it is important that we clearly state our definition. In a June 1991 workshop, the Ecotourism Society offered a consensus definition that ecotourism is "responsible travel that conserves the natural

³ Strictly speaking, wildlife includes both flora and fauna. We have chosen the common usage of wildlife to mean only fauna.

environment and sustains the well-being of local people". This workshop also described ecotourism as:

- purposeful travel to natural areas;
- increased understanding of the culture and natural history of the environment;
- taking care not to alter the environment; and
- producing economic benefits that make the conservation of natural resources beneficial to local people.

Recently, emphasis on ecotourism has aroused the concern of tour operators and travellers for it reflects both regard for the environment and indigenous people. However, ecotourism has been difficult to define as it simultaneously "describes an activity, sets forth a philosophy and espouses a model of development" (Ziffer, 1989). Ecotourism originated as a term that expressed value of low environmental and cultural impact while meeting conservation objectives to one that is broadly related to a natural-history orientation. Still ecotourism is often imbued with values and a set of ethics that may not be found in other segments of the industry.⁴

One early definition stated that ecotourism is:

"Tourism that involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery and its wild plants and animals as well as any existing cultural aspects found in these areas. Ecological tourism implies a scientific, aesthetic or philosophical approach, although the ecological tourist is not required to be a professional scientist, artist or philosopher. The main point is that the person who practices ecotourism has the opportunity of immersing him or herself in nature in a way most people cannot enjoy in their routine, urban existences. This person will eventually acquire a consciousness that will convert him into somebody keenly interested in conservation issues" (Ceballos-Lascurain, 1988).

The above suggests that ecotourism is a comprehensive concept based on a planned approach by a host country or region and is designed to achieve a societal objective like sustainable economic development. In this light, the following was offered to unite all these concepts.

⁴Kurt Kutay, the owner of an adventure travel company that promotes responsible travel, quotes a trip in which a few North American trekkers travelling to the Andes specifically to help clean up the famous Inca Trail to Machu Picchu. Along with the wonders of Machu Picchu, the trekkers collected pounds of garbage near precious Inca ruins left by over 6,000 foreign trekkers each year (Kutay, 1989).

"Ecotourism is a form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. The ecotourist visits relatively undeveloped areas in the spirit of appreciation, participation and sensitivity. The ecotourist practices a non-consumptive use of wildlife and natural resources and contributes to the visited area through labor or financial means aimed at directly benefiting the conservation of the site and the economic well-being of the local residents. The visit should strengthen the ecotourist's appreciation and dedication to conservation issues in general, and to the specific needs of the locale. Ecotourism also implies a managed approach by the host country or region which commits itself to establishing and maintaining the sites with the participation of local residents, marketing them appropriately, enforcing regulations, and using the proceeds of the enterprise to fund the areas's land management as well as community development. (Ziffer, 1989)

The above are not definitions so much as descriptions of planning objectives for ecotourism. Given the breadth of opportunities for nature-based tourism around the world and the interpretations that various societies and cultures will make on the basic theme of enjoying nature, Ziffer and Ceballos-Lascurain definitions are too limiting and too prescriptive.

We have chosen to be inclusive and define ecotourism as travel with a concern for the environment, and with an appreciation of the natural attraction being the prime purpose of the trip. In Section 2, the definitional debate is discussed.⁵

There are a few important distinctions between different forms of ecotourism. Most important among these are:

- natural history travel (bird watching, wildlife viewing, student and teacher training, volunteer programs, photographic expeditions or botanical and other special interest travel related to visiting natural areas);
- adventure travel that requires physical stamina and/or courage (hiking, camping, kayaking, rafting, diving and similar activities done in the natural environment); and
- anthropological travel (visiting and/or living with primitive cultures or assisting at archaeological sites).

⁵For the purposes of this report, we will use the term "nature-tourism" interchangeably with ecotourism. Nature tourism is an appealing term because it can imply travelers who only take a day trip in a natural reserve while on a beach holiday without natural history necessarily being the primary focus of the entire holiday.

2. DESCRIPTION OF THE NATURE TOURISM SECTOR

2.1 Overview of Current Literature and Research

"Ecotourism is Hot!", "Ecotourism: New Hope for Rain Forests?", "Ecotourism: The New Ethic in Adventure Travel" are some of the eye-catching titles seen in popular magazines and newspapers in the last several months. At first glance, it seems as if the new travel buzzword, "Ecotourism", has become a panacea for the conservation of natural resources. At second glance, however, professional and in-depth studies have raised several cautionary flags about the merits of ecotourism in achieving conservation objectives.

Broadly speaking, the literature is divided into three categories: (1) general trends in the ecotourism movement; (2) economic and financial analysis; and (3) examination of ecotourism and its purported conservation requirements.

Popular magazines and newspapers are one key source of the general trends in ecotourism. Kutay (1989, 1990) discusses travellers across the globe joining conservation journeys as a result of increased concern for disappearing cultures and ecosystems. Leisher and Soltis (1991) discuss the "greening of global travel", a combination of the conservation movement and tourism. South Magazine (1989) reports developing countries are climbing aboard the tourist boom and evaluating alternative forms of tourism.

While these articles are useful in arousing the public interest in ecotourism, none deal thoroughly with the advantages and disadvantages of the movement. The most comprehensive study on this subject was done by Boo (1990) who takes a critical look at the potentials and pitfalls of ecotourism. She claims that nature-tourism can help diversify the economy and stimulate local employment but also cautions that a substantial portion of the benefits often accrue to individuals and organizations outside the country. For example, tourism development may require imports of costly items such as oil and consumer goods, investments in infrastructure and repatriation of profits. Thus, large scale international tourism development becomes less beneficial to developing countries than often claimed in the popular literature. Finally, the effect on local employment may be mitigated by the fact that tourism is highly seasonal. In many rural areas, nature tourism often coincides with agricultural harvest times and other economic activities that may cause labor shortages. Boo recommends careful tourism planning, based on carrying capacity requirements, and stringent scientific studies of environmental impacts of tourism. Although nature tourism planning should be designed at the national level, the decision to implement an ecotourism project must be based on site-specific analysis.

Ziffer (1989) addresses some of the same issues as Boo, but emphasizes that with its mix of business orientation and conservation objectives, ecotourism development should solicit input from government representatives, local and international NGOs, tour operators, tourists and

residents. She concludes that there is a strong need for economic analysis for planning of ecotourism projects.

2.1.1 Ecotourism Economics

Both Boo and Ziffer underscore the importance of addressing one of the key ecotourism issues: Is it economically and financially viable? From the economic standpoint, the argument for ecotourism is based on the importance of tourism as a major source of revenue for developing nations, generating as much as \$55 billion in 1988 (South Magazine, 1989). Worldwide, tourism generated over \$200 billion in revenues in the same year, making it one of the largest industries in the world (Edge11, 1990). There is also evidence to suggest that the market for nature tourism is growing, although it is difficult to separate nature tourism figures from other forms of tourism. Ziffer estimates that \$1.7 billion per year is spent on nature travel in developing countries from industrialized countries. In addition, she claims that the number of nature tourists is growing at around 20 percent per year. Lindberg (1991) corroborates this evidence by showing an increase of visitors to Galapagos National Park in Ecuador from 7,500 in 1975 to 32,595 in 1987. Boo's study also found that natural history was an important factor for international visitors to Ecuador, Costa Rica and Belize. In Ecuador, 76 percent of the international visitors reported natural history as a reason for their visit. In Belize, 63 percent toured a protected area during their stay while in Costa Rica, the figure was 50 percent.

To translate the tourist visits into revenues for the site, Lindberg uses a case in Rwanda to illustrate that the generation of tourist revenues annually are about one million dollars in entrance fees, and two to three million in other expenditures. Additional revenues are generated by donations. The Darwin Research Center in the Galapagos National Park raised \$150,000 through a direct mailing appeal to visitors who had signed the guest book at the park (Lindberg, 1991). The Monteverde Cloud Forest Reserve was financed by donations to the Monteverde Conservation League (Boo, 1990). Lindberg claims that visitors who experience natural environments in their travels often become ecotourism converts and provide political and economic support for conservation. Furthermore, tour groups are starting to donate part of their profits for conservation. Victor Emmanuel Nature Tours donated \$5,000 to El Triunfo Cloud Forest Reserve in Mexico from the proceeds of one of its bird watching trips (Kutay, 1989).

Another economic argument in favor of ecotourism is that it conforms to the initiatives protecting biological diversity by making non-consumptive use of resources (Laarman and Durst, 1987). Using Kenya as an example, Western and Henry (1979) maintain that the economic motivation for protecting wildlife is compatible with conservation. Thus, Kenya's recent strong stand on ivory poaching can be traced to its need to maintain tourist revenues (Alderman, 1990). In fact, Sherman and Dixon (1990) have emphasized the need for monetary estimations of conservation benefits (maintenance of biodiversity and ecological processes and watershed protection).

The other usual economic arguments include generation of foreign exchange, creation of employment and stimulation of local economies (Edgell, 1990). Additionally, Alderman claims

that since nature tourism occurs in rural areas, it can lead to localized economic development in these often neglected areas.

The crucial question, however, is not whether tourism generates revenues but what percentage of those revenues stay in the host country. Boo has expressed concern in this regard saying tourism involves substantial "leakages" of income outside the host country. Boo quotes a World Bank study that estimates 55 percent of gross revenues leak back to developed countries.⁶ Laarman and Durst argue that the percentage of income remaining in the host country depends, in part, on consumer choices to use local travel agencies, airlines, and consume local goods and services. Ecotourism is presumed to retain a larger portion of the tourist dollar in the host country than other forms of tourism. In this regard, Kutay says that nature tourism can be expanded without major capital investments, using local construction materials and goods. An example is The Village Hotel in Pohnpei, where most of the huts and infrastructure have been built out of local materials. (Section 5.3.5 will elaborate the process for determining the percentage of the tourist dollar left in the host country).

By and large, the literature attempts to use economic arguments to promote ecotourism. Little analytical rigor in economic and financial analysis has been demonstrated, however, with the exceptions of Sherman and Dixon and Lindberg. Sherman and Dixon have covered the general issues involved in determining monetary values, as well as the role of economic analysis in the establishment and management of protected areas. Lindberg has emphasized the importance of this sort of monetary evaluation, claiming it enables policy makers to choose ecotourism among other development options.

2.1.2 Social Soundness of Ecotourism

While many authors extol the virtues of ecotourism, a number of critics have pointed out its negative impacts. Webley (1991) stresses that in Africa, indigenous people often do not control the tourism infrastructure in their region and local communities often do not experience true economic benefit from the tourism in their homeland. Another often mentioned criticism is the disparity in earnings between employees of the park or reserve and the adjacent population. There is a tendency to create parks in developing countries that become economic enclaves and they lack consideration of the economic needs of the adjacent population. Tourism benefits are generally not shared with adjacent populations (Western and Henry, 1979). Surrounding communities often lose access to resources inside the park and are worse off than before. Webley claims this is a serious problem in Kenya where local communities are obliged to co-exist with wildlife, while receiving little of the benefits generated from wildlife-based tourism. Also, there is the problem of multiple-use lands outside the parks and reserves with which to contend. These lands are vitally needed as migration corridors. The Serengeti

⁶While perhaps undesirable, this percentage still compares favorably with official development assistance which typically retains 20 to 30 percent of gross expenditures in the developed world.

ecosystem, for example, spans across parts of Kenya and Tanzania and extends beyond the park's boundaries to include adjoining communal lands where wildlife co-exists with livestock and other land uses. These lands, however, cannot be subdivided, fenced or used for marginal agriculture if the wildlife option is to remain viable.

The problems can be alleviated only if tourism revenues are equitably shared with local people, including employment and other forms of income generation. Southworth (as quoted by Alderman) gives the example of the Monteverde Cloud Forest Reserve in Costa Rica where a women's cooperative grosses over \$50,000 per year by selling handmade crafts to Monteverde's tourists. McNeely (1988) discusses various other incentives such as cash, food-for-work, providing improved breeds of livestock to rural communities thereby reducing pressure on marginal land best left to wildlife, and land tenure as a method to provide compensation to local communities.

2.1.3 Ecological Impacts

Little has also been done to determine the ecological impacts of ecotourism other than raising the cautionary flag that too many tourists will ultimately destroy the resources on which the industry depends -- "tourism destroying tourism" -- a term coined by OECD in 1980 (as quoted by Boo). Youth (1990) cites the case of the Galapagos Islands where hikers trample vegetation and erode trails. Degroot (as quoted by Alderman) stated the reason for the degradation of the Galapagos park was that the original management plan for the park called for a maximum of 12,000 visitors and when the demand for the park increased, government officials increased the visitors quota to three times the original allotment with no regard for carrying capacity concerns.

2.1.4 Carrying Capacity

Determining and controlling the carrying capacity of an attraction are very important factors in planning ecotourism programs. The long-term sustainability of the resource base hinges on the ability and willingness of the resource owner (i.e., the government) to limit the number of visitor days over a given time period to a level that will accommodate the ecological and cultural integrity of the site. Youth, for example, discusses how local communities around the world are having their traditional ways of life changed if not destroyed by tourism. Western and Henry (1979) cite how cheetah and lion have been reported to decrease hunting activity when surrounded by more than six vehicles. Harrington (as quoted by Alderman) reports of uncontrolled expansion of tourism in the Brazilian Amazon leaving behind a trail of litter and destroying fragile forest habitats and wildlife, in addition to physical degradation of the environment through water and air pollution and trail erosion. Carrying capacity of a particular site is inherently difficult to assess since it cannot be tied only to the rate of use, or visitor days. The risk will always be present that, once having chosen a capacity and operating accordingly, one can damage the resource base before the real carrying capacity is truly known.

On a more positive note, Boo and Sholley⁷ claim that negative ecological impacts can be mitigated if comprehensive scientific studies of the environmental impacts are conducted. Inskip (as quoted by Alderman) contends that there is considerable knowledge and experience available to develop sound environmental tourism planning.

In summary, the existing literature confirms that ecotourism is a growing phenomenon that has potential for sustainable economic development. Further, it asserts that ecotourism is economically viable, but largely without having carried out any detailed economic or financial analysis. As a tool of conservation, the results of ecotourism have been mixed. A body of the literature cautions against the negative impacts of ecotourism both from a cultural and environmental point of view, but concludes that rigorous scientific assessments should go into any planning of ecotourism.

2.2 Overview of the Tourism Sector

2.2.1 Worldwide Overview of Tourism

- **Historical development:** Tourism as a leisure activity increased dramatically in the 1960s. Fuelled by jumbo jets, charter tours and the increasing affluence of the middle class in Western industrial nations, tourism became a booming industry. Throughout the 1960s and early 1970s tourism growth continued at a steady pace. For the remainder of the 1970s, the industry's growth continued despite a stagnant period during the early 1980s (See Table 2.1).

In terms of the regional breakdown of tourism, although data prior to 1975 is difficult to find, it is interesting to observe that in 1980, Europe occupied the center stage of international tourism receipts. According to the World Tourism Organization (WTO), Europe accounted for 60 percent of international tourism receipts, while the Americas received around 25 percent. Remaining tourism receipts went to the Middle East (three percent), Africa (three percent), East Asia/Pacific (seven percent) and South Asia (two percent). This pattern altered significantly for some countries by 1990, the most noticeable of which were East Asia/Pacific which increased to 16 percent, the Americas which increased to 29 percent and Europe, whose share decreased to 51 percent. Unfortunately, the Middle East and Africa,

⁷Based on conversation with Craig Sholley, formerly a senior associate at the African Wildlife Foundation (AWF) who was involved in the Mountain Gorilla Project in Rwanda.

**TABLE 2.1
FOREIGN VISITOR ARRIVALS AND TRAVEL RECEIPTS
1960-2000**

Year	World International Tourism Arrivals (millions)	World International Tourism Receipts (\$ billions)*
1960	69	6.9
1965	113	11.6
1970	160	17.9
1971	172	20.9
1972	182	24.6
1973	191	31.1
1974	197	33.8
1975	214	40.7
1976	221	44.4
1977	239	55.6
1978	257	68.8
1979	274	83.3
1980	285	102.4
1981	289	104.3
1982	287	98.6
1983	284	98.5
1984	312	109.6
1985	326	114.8
1986	334	138.5
1987	360	169.4
1988	391	193.4
1989	400	208.7
1990	412	225.0
1995	472 (P)	263.2**
2000	532 (P)	304.3**

Source: World Tourism Organization and U.S. Department of Commerce (United States) Travel and Tourism Administration and Bureau of Economic Analysis 1990

* Excludes intentional passenger fare payments

**Expressed in 1990 (constant) dollars

(P) Projected

both of which already had a low share of tourism receipts, had their shares decline to two percent each (see Figure 2.1 for regional breakdown).

- **Current trends in global tourism:** Tourism is an important source of income for most of the world. In 1989, tourism receipts amounted to nearly \$2.5 trillion. This figure is projected to increase to \$3.1 trillion by 1992 (Figure 2.2). In addition, the industry employed approximately 110 million people worldwide in 1989, a figure which is expected to grow to 130 million workers or one out of every 14 workers worldwide (Figure 2.3). It is important to note that growth of employment in the tourist industry surpassed that of world employment, growing at 5.1 percent in the period of 1987-1989 while the latter only grew at 4.1 percent.

Finally, tourism can contribute heavily to a country's foreign exchange earnings. In some Caribbean nations (The Bahamas, The Dominican Republic and Jamaica), for example, tourism accounts for almost 70 percent of foreign exchange earnings (Edgell). In Mexico, it is consistently the second or third largest share of foreign exchange receipts. In Spain and Italy, tourism is one of the most important components of the economy and in the United States, it was the number one export surpassing agricultural exports in 1988.

- **Africa's place in the tourism market:** Africa, for its size, has the smallest share of the tourism market. Moreover, it has not shared in the recent growth of tourism in the developing world which has resulted in a decline in its market share. The reasons for this are varied and numerous: poor and expensive travel connections, substandard facilities, relatively few destinations, fear of disease, insecurity, etc.

2.2.2 The Issues

The above statistics indicate that worldwide tourism is likely to grow. What the numbers do not reveal are the multitude of issues facing the industry. Several of these were addressed during the George Washington University First International Assembly of Tourism Policy Experts in November 1990 (George Washington University, 1991). The panel of experts agreed that the following issues would dominate the tourism industry:

- **Physical environment:** The condition of the physical environment has become the number one issue of the decade. Tourism is more sensitive and dependent upon the quality of the environment for its long-term success than many other sectors. This recognition calls for well-planned development of tourism strategy, encompassing its economic, social, cultural and environmental significance.

FIGURE 2.1
INTERNATIONAL TOURISM RECEIPTS
REGIONAL BREAKDOWN

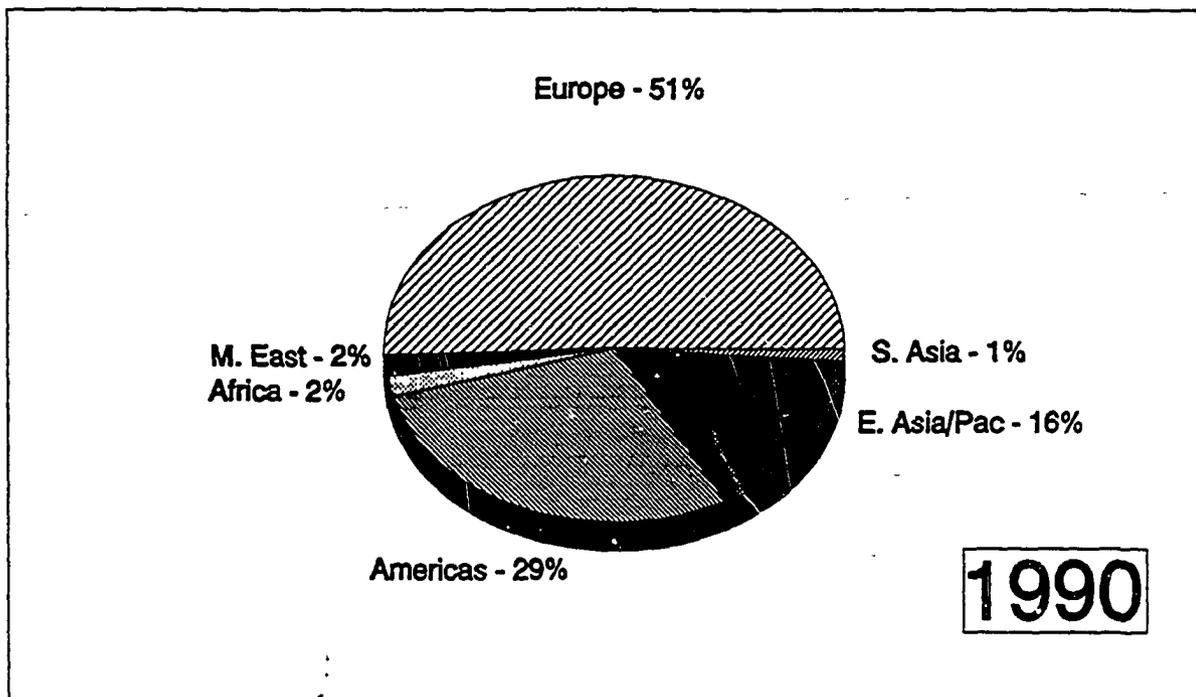
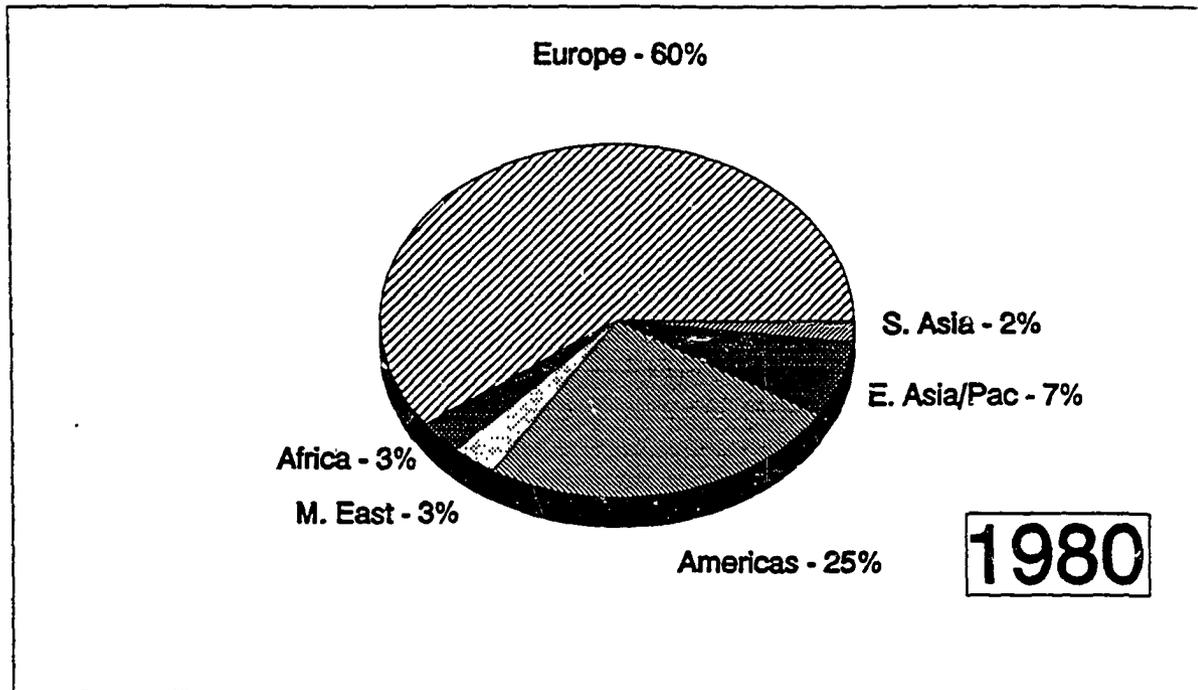
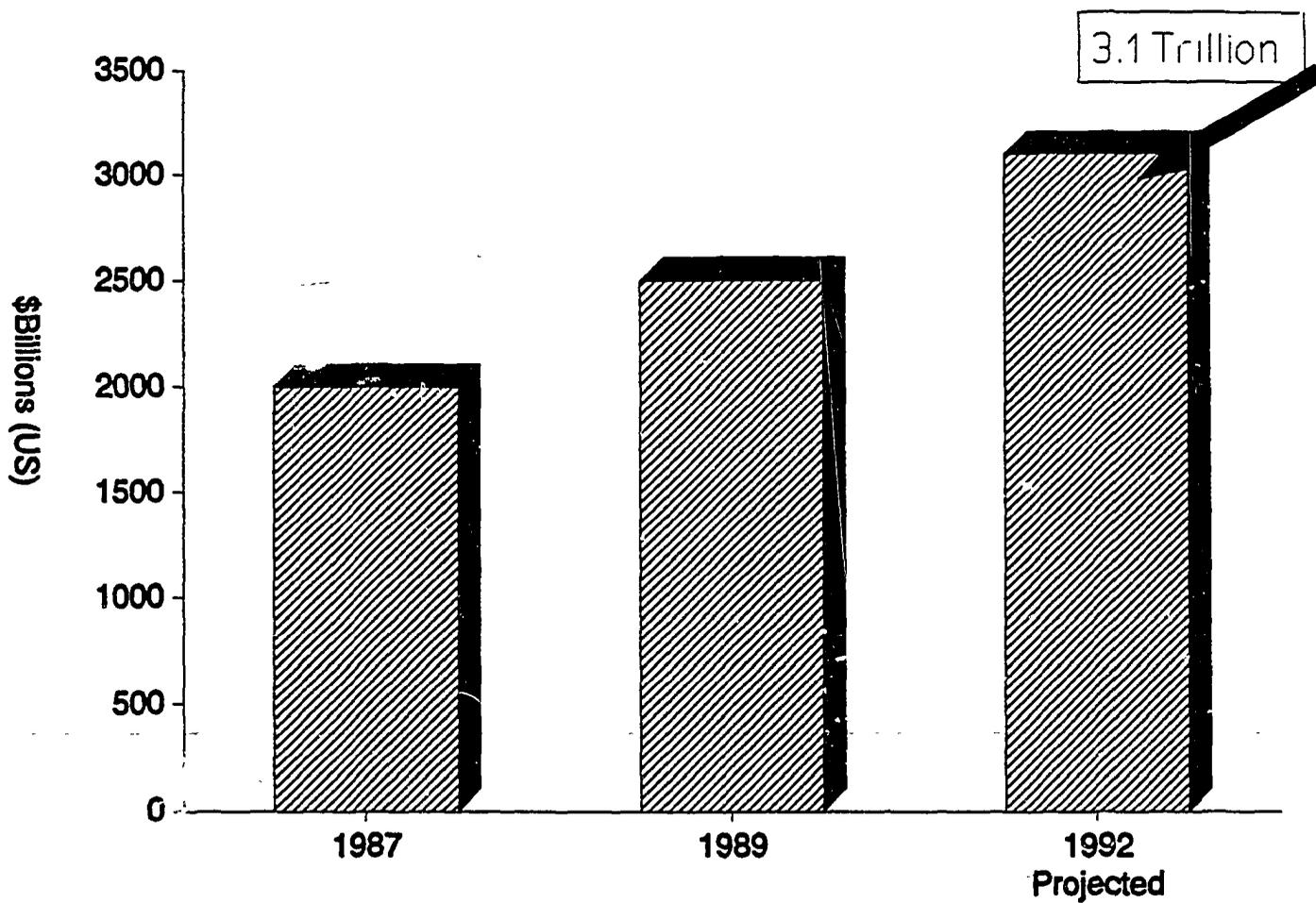
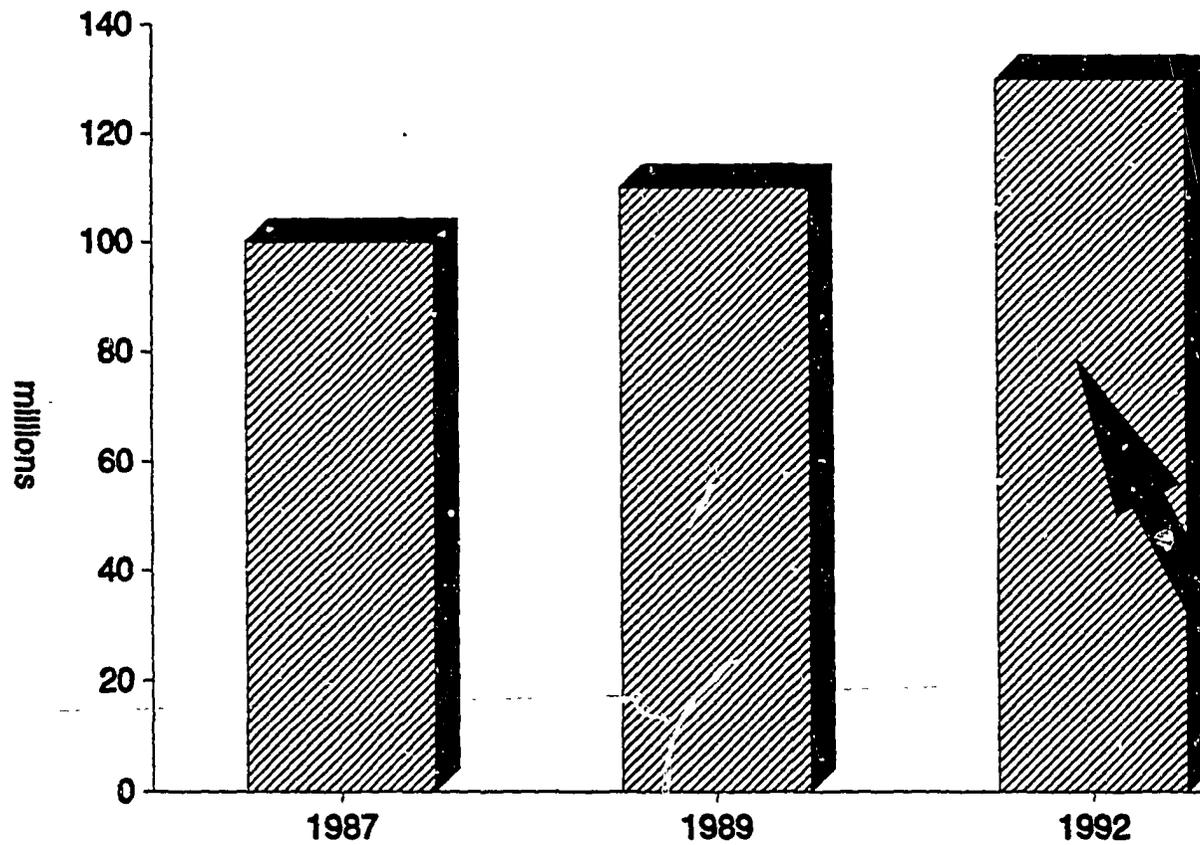


FIGURE 2.2
WORLD TRAVEL & TOURISM PER US \$BILLION



Source: World Travel and Tourism Council

**FIGURE 2.3
WORLD TRAVEL & TOURISM EMPLOYMENT**



**130 Million workers
1 of every 14 workers
worldwide**

Source: World Travel and Tourism Council

- **Finite carrying capacity:** There are finite limitations to tourism development, in terms of both physical and social carrying capacity. Related to the previous issue is the broader recognition that tourism can potentially bring about a whole range of undesirable impacts in economic and cultural arenas as well as the environment. These impacts include increased crime, corruption of local culture and people as well as the encouragement of prostitution. These issues have led policy makers to take into account the social and cultural facets of tourism development.
- **Local participation:** There must be active participation of the local community in setting the tourism agenda. In the past, concern related to tourism development has focused on tourist needs. While this is still a concern, there is a strong and growing recognition that a greater balance is needed when weighing the desires of visitors against the well-being of their hosts. There is a growing concern that tourism must benefit the local community and there must be broad based participation in tourism development at the community level.
- **Aging of populace:** Recognition of demographic shifts which will influence the level and nature of tourism. The fact that people in the industrialized world live longer, have more leisure time and the means to travel, should be reflected in planning and decision making with respect to the design, development, delivery and utilization of tourism facilities and services.
- **Increased privatization:** The 1990s have witnessed an increased emphasis on privatization, fewer subsidies and reduced levels of regulation and government control. Tourism projects must be able to demonstrate economic viability without the benefits of subsidies or tax breaks, etc., yet be able to demonstrate environmental responsibility. Only those regions that can offer a tourism experience which is attractive in the market place will be viable in the foreseeable future.

2.3 The Market For Nature Tourism

There is no simple and practical way to segment the market into neatly defined terms, largely because tourists do not travel according to theoretical categories. Thus, determining the market for ecotourism is a complicated task as there are no published statistics on market size. However, some preliminary estimates found in recent literature give an indication of the size of the market.

- Ziffer estimates that nature-based tourism dollars to developing countries from visitors of industrialized nations amount to approximately \$2 billion using 1989 figures.
- Ingram and Durst indicate the number of nature tourists is growing by approximately 20 percent per year.

- Tour operators report that 4 to 6 million Americans travel overseas for nature-related travel each year. Buzzworm, an environmental journal, estimated in 1989 that more than 3 million people would pay several thousand dollars apiece to risk getting wet, hungry, lost or sick in search of exotic nature and culture adventure.
- A recent Lou Harris poll reports that 40 percent of American travelers are interested in "life enhancing" travel versus 20 percent interested in "seeking the sun".
- Approximately 30 million people in the U.S. either belong to environmental organizations or have demonstrated an active interest in environmental protection.⁸

2.4 Economic and Political Perspectives of Tourism

2.4.1 Economic Perspectives

Tourism is said to fulfill important national, regional, and local objectives -- generation of foreign exchange revenues, greater employment and economic growth.

- **Foreign Exchange:** In Kenya, Rwanda, and Tunisia tourism is the largest foreign exchange earner. In many other sub-Saharan countries it is in the top five. These figures interest those who would use tourism to ease their foreign exchange crunch. But overall foreign exchange earnings can be a misleading indicator of the value of tourism. There are several other important considerations of foreign exchange that planners should consider before investing in tourism: the percentage of the tourist's total outlay that is spent in-country; the ratio of foreign exchange costs to support the industry vs. the revenues generated; and the stability of the revenue flow.

Estimates of net to gross foreign earnings range from 10 percent in one study in Mauritius, 40 to 50 percent in Tanzania, to 60 to 70 percent for Kenya and Tunisia (Edgell, 1990). Extracting a higher percentage from tourists can be difficult especially in the case of packaged tours where most expenses are paid in advance and out-of pocket expenses are limited.

Any tourism development program will have both foreign exchange outflows and inflows which must be identified and accounted for. The ratio (foreign exchange retained in-country vs. foreign exchange costs to support the tourism industry) is a continuing concern. Major outflows of foreign exchange include payments for imported items, management fees, expatriate salaries, capital goods not financed from the outside, loan redemption as well as interest and dividends and the import content of local purchases. The foreign exchange inflows include taxes collected on imported and local purchases,

⁸The last three points were taken from the notes in the George Washington University Ecotourism Management Conference Manual, June 18-22, 1991.

in-country transport, local wages and salaries, domestic content of local purchases, and a share of operating surpluses. The inflows must more than offset the outflows for ecotourism (at some point in time) to be economically viable to the nation as a whole. The net inflows of foreign exchange are potentially manageable through strategies that include securing a higher percentage of the tourist dollar, by increasing user fees, or by increasing occupancy rates particularly during off season.

- **Employment:** Increased tourism will probably generate both direct employment (hotel staff, tour guides, maintenance people, drivers, etc.), and indirect employment (handicrafts, etc.). In East and North Africa, it is estimated that two to three indirect jobs per bed is a reasonable estimate (Edgell, 1990).
- **National income:** Tourism is said to be an important generator of national income to the extent that tourism dollars stay in the host country. In its broadest sense, tourism encompasses all expenditures for goods and services by travellers. It includes purchase of travellers checks, transportation, lodging, attractions, meals, beverages, entertainment, souvenirs, clothing, car rentals, travel agencies, sightseeing tour services, and personal grooming services. In effect, the range of international travel and tourism products and byproducts covers the output of many industry segments as tourist activities create industries such as insurance, banking, credit cards, auto clubs, park fees, taxi services, cameras and film, reservation systems, and telephones.
- **Economic Development:** Tourism plays an important role in the economic and technological development of nations. It stimulates the development of basic infrastructure such as airports, harbors, roads, sewers, and electric power. It contributes to the growth of domestic industries which support the tourism industry like transportation, agriculture, food-processing, commercial fishing, lumbering, and construction. It attracts foreign investment, especially hotels, and facilitates the transfer of technology and technical know-how. Technology transfer has been particularly evident in the hotel industry as developing countries have acquired computer-based reservation systems and contracted with North American and Western European hotel corporations for management and manpower development services.

The following table demonstrates world-wide tourism-related employment and travel.

TABLE 2.2
TOURISM-RELATED EMPLOYMENT AND TRAVEL

Employment in Transport and Tourism by Region in 1987 (millions of jobs)	
West Europe	17.6
E. Europe and USSR	15.9
North America	9.6
Latin America and Caribbean	12.9
Africa	3.8
Middle East	2.3
Australia, New Zealand & Japan	4.6
Rest of Asia	34.5
Where They Go: Personal and Business Travel and Tourist Spending Worldwide (1987 total: U.S. \$ 1,916 bn)	
West Europe	32.6%
E. Europe & USSR	15.7%
North America	21.6%
Latin America and Caribbean	3.9%
Australia & Japan	14.3%
Rest of Asia	8.2%
Middle East	2.4%
Africa	1.3%

Source: South Magazine, August 1989

2.4.2 Political Perspectives

The fact that tourism is widely viewed as a learning experience presents the host government with a unique opportunity to influence visitors from abroad. Many nations use this to fulfill important political objectives through tourism. For example, tourism is often used to showcase the accomplishments of the government and to increase understanding abroad of the government's policies. Combined with the economic imperatives of retaining tourism levels, these factors can influence governmental policy standards to reflect the internationally acceptable norms of behavior. While it is probably far-fetched to suggest that tourism can create democratic pluralism and reduce repression, tourism is unlikely to detract from these goals and may in fact support efforts to obtain them.

There is also a negative aspect of the political dimension of tourism to consider, i.e. the detrimental effects of political and social instability on tourism. For example, one lesson of the Gulf War was the fickleness of the tourism industry. In East Africa, tourism dropped dramatically in the months leading up to and following the war. In addition, terrorism, riots, disease, and natural disasters are internationally newsworthy calamities that can cause serious and rapid drops in visitor entries. Of course, the vagaries of world markets are common to most

export commodities, but tourism is especially sensitive and rapid change is frequent as it is critically dependent on positive public opinion. Negative public relations can be very hard to overcome. There are many sub-Saharan countries that are politically unstable, where civil strife simmers and occasionally boils over, and the kind of law and order demanded by tourists is lacking. For instance, internationally, Uganda still suffers from the reputation of barbarism inflicted on its own people earned during the Amin regime, and the civil war in Rwanda in 1990 effectively stopped for a time the highly lucrative tourism business associated with the mountain gorillas.

The major repercussion of political upheaval on tourism development is fairly obvious - the private sector will not be interested in funding tourism developments, and tourists will not travel to the country. Only countries with a reputation of being politically calm, devoid of ethnic strife, and are rich in potential nature tourism attractions will attract the attention of private sector tourism developers.

3. THE TRAVEL AND TOURISM INDUSTRY

Introduction

Tourism is a complex and highly competitive industry. Tour operators compete by differentiating their products as well as their prices, looking for unique marketing niches or presenting other special products or services. Nature tourism is, of course, subjected to the same kinds of competitive pressures. Once an attractive nature tourist destination has been identified, developed and marketed, anybody can sell tours to that destination. Managers of tourist destinations generally wish to maximize revenues by increasing the number of visitors. Nature tourism, however, is different from other forms of tourism where mass visitation is less likely to damage the resource base. Ecological balances are important to nature tourism sites, tend to be more easily upset and, therefore, more difficult to manage.

The integrity -- ecological and cultural -- of the nature tourist sites must be preserved if the attraction is to remain sustainable. This means that the number of visitor days may have to be limited, or controlled by the resource owner, i.e., the host country government in most cases. In turn, this also means that the kind of competition prevalent in traditional forms of tourism may take a somewhat different form. The notion of tour operator responsibility emerges as a major issue. How are tour operators regulated and how can they be encouraged to demonstrate responsibility toward the resources that economically sustain them? One may even ask who should be allowed to offer nature tourism?

The travel industry is much more complex than it may initially appear. For this reason, the purpose of this section is to identify the major players in the industry and broadly describe their constraints and opportunities, with particular reference to their adaptations to the restrictions and responsibilities of nature-based tourism. The section provides brief discussions of travel agencies, out-bound and in-bound tour operators, and the roles each play in the tourism industry.

3.1 Beginning of the Process

Pleasure travellers' motivations range from adventure, hedonistic pleasure, education, personal or professional growth, and exploration. Some business travellers will add some personal travel at the end of their business trips. There are hunters, photographers, scientists, and all sorts of groups that will travel with their own personal agendas. It is these aspects of "pleasure travel" with which this section is concerned.

Depending on the purpose of their program, individuals will choose a destination based on information obtained from television, newspaper travel sections, magazines, cinema, books, or educational programs. Often word-of-mouth information plays the most crucial role. The travel programs of professional associations often influence an individual's travel choices.

Destination decisions are not usually based on little hard data or analysis, but rather on the collective perceptions (of the destination or activity they are seeking) received through word-of-mouth, the media or other individual contacts. Rare are the truly discerning travellers who thoroughly analyze the destination they are interested in and its alternatives.

Once the tourist has established an interest in one of the sources mentioned above, they will often purchase specific guidebooks, magazines or general books related to the destination of interest. Ultimately, they make a decision to travel and select a travel agent (more rarely a tour operator) with whom to do business. The process of destination selection is complex, individualized and not fully understood. More information is provided below in our discussion of marketing (section 3.3.2).

3.2 Travel Agencies

The travel agency is one of the first stops for most travellers planning an international trip. Travel agencies have changed and evolved throughout the years. Today, they could be primarily categorized as corporate and leisure agencies. This study focuses on leisure travel agencies which are relevant to this study.

Most travel agencies sell airline tickets and products packaged by tour operators that are featured in brochures and distributed through the national network of travel agencies. Many leisure agencies are small, family-run businesses, some of which have evolved and become larger, more professional over the last 10 to 15 years. Exotic international travel may be handled by a smaller group of specialists, or knowledgeable agents, who steer clients to various tour operators whose products the travel agencies "represent."

Several factors determine which tour companies will be "sold" or recommended by the travel agent. They include prior business dealings with the operator, the operator's apparent financial integrity, the marketing strategy or commission structure of the tour operator, as well as the airline used or recommended by the agency. The personal experience of the agent or agency owner may also be a factor.

With few exceptions, agencies can earn between 10 to 15 percent on most transactions. The industry average is lower. Business handled by most agencies is comprised of small travel packages such as domestic air tickets, Caribbean package vacations, Las Vegas, Hawaii, not the "big ticket" items. African tour group destinations are considered "big ticket" travel packages.

It is worth noting that tour operators' markup is between 15 and 35 percent on their packages, and the average percentage is high. This markup has tempted some travel agencies to bypass the international tour operators.

3.2.1 Travel Agency Accreditation

Travel agencies must be licensed or accredited by the Airline Reporting Corporation (ARC) and/or by International Airlines Travel Agent Network (IATAN). It is through these institutions that airlines formally allow travel agencies to write tickets on their ticket stock. This is the only regulatory body for travel agencies. Regulation is achieved via initial accreditation and continuous reporting on a weekly and yearly basis. Weekly reports must be filed detailing all financial transactions. Yearly changes in ownership, employees, financial standings, etc. must also be reported to ARC and IATAN; ownership is strictly regulated.

3.2.2 Professional Associations and Training

Two of the major professional organizations in the travel industry are the American Society of Travel Agents (ASTA) and the United States Tour Operators Association (USTOA). ASTA is largely a political arm of the travel agency community protecting travel agent rights vis-à-vis airlines, cruise lines, tour operators and the U.S. Government. Virtually anyone in the travel industry can become a member. ASTA, in conjunction with the Smithsonian Magazine, has recently launched an annual "Environmental Award" given to outstanding nations or individuals for their work in responsible tourism. Rwanda was among the first recipients for its development of the Mountain Gorilla sanctuary. ASTA/Smithsonian are also considering a certification program for responsible travel firms.

Other travel industry associations include ARTA (the Association of Retail Travel Agents), PATA (Pacific Asia Travel Association), APTA (The Association for the Promotion of Tourism to Africa), MAST (Midwest Agents Selling Travel), and ICTA (Institute of Certified Travel Agents). ICTA provides a two to three year training program to certify travel agents with a CTC (certified travel counsellor) degree. This is the only advanced training program available for travel agents where trainees emerge knowledgeable about the travel industry and are generally excellent travel agents. However, only a small percentage of travel agents become CTCs.

An important issue among the tour operators interviewed, is the lack of industry training. There are several travel training schools in the United States. One of the most famous is the Echols International Travel Training School in Chicago and San Francisco. They offer a 300-hour, hands-on training program with professional instructors from throughout the travel industry. But these programs are scarcely able to meet the demand for qualified travel professionals.

3.3 Tour Operators

Tour operators are largely responsible for the mechanics of tour planning and tour operations. Tour operators determine the itinerary for the proposed tours. They contract with airlines, hotels, motorcoach or transportation companies, and in-bound tour operators who make arrangements for services such as guides, escorts, local city tours, wildlife experts, etc. The

tour is then packaged and sold to the general public, usually through intermediaries such as travel agents or special interest organizations (like a non-profit in travel). Some operators market directly through magazine and newspaper ads, direct mail, or special mailing lists to which tour operators may have access.

3.3.1 The Competitive Nature of Tour Operators

An important characteristic of the travel industry is the competitive nature of tour operators. They tend to use travel agencies as their major marketing outlet and compete for agency attention by way of high commissions, incentive programs, high profile advertising, newsworthy articles in trade publications, contests, free or reduced rate "fam trips" (familiarization trips), or other industry perks such as Abercrombie and Kent's annual sales dinner.

Some operators may bypass the travel agency community altogether by advertising in specialty magazines. This eliminates the need for paying commission thereby increasing the tour operator profitability. Some tour operators are remarkably effective in attracting clients this way. Another effective approach of some tour operators is to focus exclusively on special interest group markets, i.e., alumni associations, museums or zoological societies. This has the dual advantage of offering the added marketing appeal of peer groups while traveling and bypassing travel agencies.

Also, because of the competitive nature of the industry, small factors can make a difference in securing a sale. Promotional brochures with big glossy pictures can make a statement, capture a mood of a country, and ultimately be a major determinant in a traveler's mind as to which company may ultimately be used.

Given their stiff competition, tour operators generally do not donate money for conservation purposes. They argue that if tour operators were expected to donate money they would have to charge higher prices and fewer tourists will sign up. Furthermore, a tour operator should not dictate where or for what purpose the tourist should be donating money, and that operator overhead charges are high enough. A few operators have recently begun to make some progress in contributing to conservation activities.

One of the areas where collaboration is warranted is in the development and application of specific standards for conducting tours to ecologically and culturally fragile nature sites. ASTA's committee for the environment has become active in this domain. Their June 1991 meeting featured several prominent tour operators who discussed travel policy in the Antarctic, a list of ten "commandments" for the traveler and ways to distribute these guidelines, how airlines and hoteliers can become more active in sharing their knowledge and experience for construction of ecologically sensitive buildings, recycling, etc. In addition, three other major conferences during the past year have focused on ecotourism in the travel industry.

3.3.2 Marketing and Public Relations in the Travel Industry

Marketing is one of the least understood, yet most important, areas to master in building a successful tour operation or promoting or developing tourism at a particular destination. In order to fully understand how marketing works, it is necessary to examine both the travel industry tour operators and the individual traveler (see section 3.1) By understanding how the traveler makes decisions, we can see how tour operators can try to market their products to a targeted audience. Similarly, a country or tourism development board can use some of the same techniques to effectively market their products.

The perception of a destination is one of the most important factors in determining its appeal to the traveler. It should not be underestimated how much demand is created by clever marketing. A destination can literally be created in the traveler's mind, and a good nature tourism developmental program can both follow the public's apparent interests while at the same time working to create those interests. A good publicity campaign is essential for launching new destination tours.

This is a key area where nature tourism needs support. In the past, the perspective of NGOs, governmental agencies, and development agencies has been that if a site or attraction is developed for tourism, tourists will simply come. While this may happen, the outcome is probably more coincidental than those in the developmental arena realize. Marketing and public relations is often overlooked in their planning. Developing the attraction or the "supply side" of ecotourism, while ignoring or failing to create demand, will never work in travel.

It is those avenues of communication discussed above (television, newspaper travel sections, magazines, cinema, books, or educational programs) that marketers must focus on initially to directly convey the message about their destinations to the potential travellers. Use of these media is actually an established specialty in the public relations field, complete with experts who focus on the travel industry and travel marketing. There are several firms that specialize in these activities. The budgets required do not have to be large. Access to media is not limited to paid advertising; alternatively, newsworthy stories can be placed with wire services or in trade and consumer travel publications. Magazines, newspapers, guidebooks and press trips are three inexpensive and under-utilized ways that the tourism industry, development officials and park professionals can gain publicity in international markets. Free advertising can be obtained by informing specialty travel publications and major newspapers, at home and abroad, about park development and the activities available to visitors. Public relations should be made available as part of any developmental projects involving ecotourism.

A typical example of how one might market a destination would be to use public relations to sell or market that destination. The first step might be to hire a public relations firm that specializes in travel. There are several who comprise this particular niche.

Typically an arrangement would be made to include a monthly retainer (usually between \$1,000 to \$6,000/month) to handle marketing over a given period (usually year to year). For

this, the public relations firm will perform one of a number of functions, including establishment of company identity, creating a niche, designing a brochure, creating marketing schemes such as contests, advertisements, and a program of publicity that will help establish the destination or products the tour operator, tourist board or airline are trying to sell.

Classic Tours International in Chicago developed a clever approach of creating newsworthy events which were featured in press releases. This plan included honeymoon safaris, golf safaris, scuba diving safaris, and other such programs. There were reductions for grandparents' day (when they accompanied grandchildren on safari), family safaris, "limited edition" departures led by noted experts in given fields, and all sorts of other programs. These stories were picked up and published nationally, bookings followed. However, the promotion goal was not so much the numbers of travellers generated for specific programs as it was to obtain publicity and credibility for the company or destination.

There are two markets for tourism-related press releases, the consumer press and the travel industry trade press. There are perhaps 250 magazines and newspapers that are the best targets for these kinds of consumer stories. Editors are constantly being asked to place stories or articles written on various products or destinations in their travel sections, travel magazines or feature pages. It is the successful solicitation of those writers and editors that is the art of a good public relations firm.

Similarly, the travel industry has perhaps a dozen trade publications that print news on the various tour operators they feel are commendable. Familiarization trips are also offered, contests, new commission structures, are developed, all of which can focus attention on a destination, a product or a tour company.

These are some of the ways tour operators, tourist boards, airlines, and the like can create demand. Too often, development workers, economists and government officials neglect this aspect of development when considering ecotourism policies and programs. The sound ecotourism program should always include some provision for marketing.

3.3.3 Tour Operator Associations

Because there is no accrediting body or licensing procedure for tour operators, virtually anyone can enter the industry for a relatively small initial investment. It is obviously a system fraught with peril as major tour operators, even those with financial backing, often go out of business. On the other hand, it is an attractive business to the entrepreneur. It is fairly easy to get started with little or no capital. Many tour operators are small, privately held corporations with no regulatory body, and abuses frequently take place.

United States Tour Operators Association (USTOA) is a relatively new organization of 41 tour operators designed to protect the traveling public from unsound tour operators and promote the interests of better established tour operators. USTOA provides a financial guarantee for member tour operators' clients by requiring their members to post a \$250,000 indemnity

bond as a prerequisite for joining the organization. USTOA then uses this money to provide a \$5 million consumer protection plan. The membership is also restricted to operators who have demonstrated a long-term commitment to the industry. The membership requirements of USTOA provide its members with comparative advantage in marketing, while offering some excellent financial guarantees for travel agencies and travellers who elect to use member tour operators. However, there is currently no avenue for a tour operator who wishes to distinguish him or herself by promoting responsible ecotourism to receive special "green" certification or recognition. This could be a useful adjunct to the USTOA program.

3.3.4 Non-Profit Arms of Tour Operators

Some of the more responsible tour operators have set up non-profit arms to support resource conservation and management. Abercrombie and Kent, a luxury safari and tour operator, founded a non-profit organization, the Friends of Conservation (FOC), its mission to preserve endangered habitat and wildlife. FOC allocates more than 80 percent of its contributions directly to education and field projects directly or indirectly related to ecotourism. In Kenya, for example, the FOC Conservation Education Lectures and Slide Presentations are directed toward local people, visiting tourists, and tour drivers, and illustrate the value of conserving natural resources.

Journeys, another adventure travel company, sells itself under the banner of responsible travel. Through its non-profit, arm Earth Preservation Fund, travellers can assist and encourage better conservation and environmental practices in local communities around the world. Currently, Journeys' travellers have been working in Nepal where they have assisted schools and monasteries in conservation programs, supported trail sanitation projects and initiated community-based forestry. In Ladakh, India, they have supported several monastery restoration and solar heating projects as well as contributing annually to the programs of the Ladakh Ecological Department Group. Finally, in Africa, they contribute to the efforts of the East African Wildlife Society and Wildlife Clubs of Kenya.

These non-profits are similar to non-governmental organizations (see Section 4.1), given their grassroots orientation. They also play a crucial role in contributing financially to specific sites used by tour operators. This contribution is an important source of revenue, meeting the recurrent costs of maintaining specific tourist sites. Currently, its use is highly localized, but it does have significant growth potential.

3.4 Ground Operators

At most destinations, tour operators subcontract with networks of ground operators or "inbound operators" who meet and greet the travellers, provide transport from airports to hotels (transfers) and around the country, arrange local visits, book hotels, hire and train drivers and guides, pay park entrance fees, and generally handle on-site operations.

A strong, independent group of ground operators is a key ingredient of an economically-successful tourism industry. Without effective local ground operators the tourist visits would be very limited and/or expensive. Unlike government-owned operations, private ground operators have the entrepreneurial talents to develop and deliver tours that are responsive to tourists' needs. Compared to international tour operators, they can deliver their services at a much lower cost. In fact, most overseas tour operators consider private ground operators a prerequisite for operating tours at any given destination.

A well-developed tourism industry will have many different components, including a variety of touring options ranging from budget to up-market deluxe travel and including group motorcoach tours, minibus tours, landrover tours, or private air or "wing" safaris. The services and infrastructure provided by ground operators should be matched to the opportunities and unique attractions that a country may offer. These may include white water rafting, mountaineering, camel safaris, walking or horseback safaris.

The ground operator options currently offered are limited in much of sub-Saharan Africa. While Kenya has a complete range of ground operators, there are fewer alternatives in Namibia, Zambia or Zimbabwe. In Botswana, a lack of ground operators has led private camps and lodges (or groups of them) to act as their own inbound operators. In Tanzania, there is a good variety of independent operators who often market programs in conjunction with Kenyan ground operators.

3.4.1 Problems and Constraints Facing Ground Operators

The most common problem experienced by African ground operators is under-capitalization. Lack of credit and seasonal fluctuations in revenues also weaken their financial status. If the local travel industry and tourism markets are insecure, then investment in tourism training and infrastructure will be constrained. This in turn erodes confidence of investors and tourists creating a vicious cycle leading to market failure. Such is the case in Uganda where the fledgling ground operators run a very under-capitalized and amateurish operation compared to their neighbors (and competitors) in Kenya. The regrowth of Uganda tourism industry, which once rivaled Kenya's, has been very slow and mainly fueled by development professionals.

Another problem among African ground operators is inadequately trained staff, which results in poor quality of service. Most tourists traveling to exotic locations are willing to make allowances for lower standards of service, but a minimum comfort level is necessary to satisfy tourists in Africa. The quality of service is derived in part from infrastructure but is even more

a function of staff training. Improvements in service resulting from better trained staff will increase an operator's competitiveness and, to an extent, allow them to charge higher prices. As the industry continues to evolve, those overseas tour operators using well-trained and well-equipped local ground operators will have a comparative advantage in providing an international standard of travel by using lower-cost local firms. More of the tourist dollar will remain in-country and more local employment will be generated by using local ground operators.

A common complaint of nature tourists is the lack of information describing an area's attractions. Most tourists are anxious to learn more about local wildlife and their ecosystems, yet many tour guides are merely drivers able to provide only minimal information. There are exceptions of course. Kenya has some skilled safari guides with exceptional interpretive abilities. But even the world famous mountain gorilla tours in Rwanda are conducted with very little interpretation about the highly specialized gorilla habitat, collateral species or intricacies of gorilla behavior. While language is one problem, lack of training in ecology is the primary failing.

Interviews with local ground operators elicited the following recommendations to relieve their constraints:

Under-capitalization

- Provide credit assistance, tax incentives, or other forms of support for ground operators;
- Develop national promotion campaigns to bring in tourists during off-season; and
- Establish industry standards for ground operators and company certification programs to even the competitive field and provide incentive for increased investment that has a higher likelihood of obtaining a fair return.

Training

- Develop guide training and certification programs;
- Recruit guides that have formal education in wildlife biology; and
- Prepare tourist guidebooks, pamphlets, or manuals specific to a given site or region

3.4.2 Ground Operators, Competition and Environmental Management

Ground operators are also critical to the environmental success of ecotourism. In terms of impact, they range from those causing heavy environmental damage and harassing animals, to those with strict rules for drivers. As an example, in South Africa, drivers typically stay on the roads as opposed to Kenya where numerous vehicle tracks criss-cross some parks. In their desire to maximize client satisfaction and hence, profits, ground operators will often conduct a tour to provide maximum enjoyment for the passengers regardless of the environmental impact. For example, some drivers will not hesitate to chase a cheetah, possibly disrupting a "kill", simply to thrill passengers. The goal is to temper short-term, profit-motivated behavior with environmentally-responsible action.

Some ground operators are leading the way. For example, Jonathan Scott, a noted wildlife photographer based at Kitchwa Tembo (Abercrombie and Kent's deluxe camp adjacent the Masai Mara), personally trains the drivers based there to minimize negative impact on the animals and vegetation. However, as price is a major factor in winning business, the extra cost of properly training drivers, importing fuel instead of gathering firewood from adjacent land, or appropriately disposing of trash can cost an operator business. Because of their often weak financial positions and stiff competition, ground operators are very cost-conscious.

Of course, overseas tour operators are in a similar competitive environment, and they may find that the additional cost of using a more environmentally conscious tour operator, not to mention one that spends some of its proceeds to help manage its resource, may make the operator too expensive and they will switch to the lower cost operator.

This is also why the important step of educating the traveler in environmental and cultural "dos and don'ts" is often left out of the tour package. In the most ideal of circumstances, all operators would cover the traveler's information needs, including environmental concerns, detailed cultural insights, travel tips and the like. Such educational materials contribute much to the trip, but developing the materials and training the guides is costly. Currently, only the best and well-financed companies can afford to pay attention to this kind of detail.

Ground operators are largely responsible for the quality of the tourist's travel experience. The client's level of comfort, visual experience, learning and, ultimately, satisfaction will depend as much on their interaction with the ground operator's staff as on the inherent quality of the attraction. As a result, ground operators who invest in trained staff and practice environmentally sound tourism may find themselves at a competitive advantage. But these practices can not be expected to spread of their own accord because as one operator put it, "If I can afford to properly train drivers, I'll be able to market this to conservation-minded clients. Why should I share this advantage with other operators?"

Ground operators will only begin to treat the environment and local people with due respect when they realize it is in their best interest. This will require leadership from local government. Tour operators often complain that the government is not geared up to protect a

given ecosystem and since others currently abuse it, why should they try to do differently? Like anybody else, ground operators follow the path of least resistance. If tough standards were established and enforced, tourism would function very differently than it does today. At the same time, it is necessary to convince the traveling public, their travel agents and tour operators to support those ground operators that are environmentally sensitive even if it costs a few dollars more.

Using Market Forces to Foster Environmentally Sound Ground Operations In Namibia

In Namibia, Skeleton Coast Safaris, headed by Louw Schuermann, has an exclusive concession to operate in Skeleton Coast National Park. The Ministry of Parks and Wildlife decided that the best way for it to balance revenues and environmental protection was to competitively let a single concession to the highest bidder that could also demonstrate a high degree of environmental sensitivity. By limiting access to a single operator, they could closely control his activities.

Skeleton Coast Safaris is an excellent example of how a ground operator can support environmentally sound ecotourism. There are no permanent camps in the Park, and all tracks through the desert are carefully thought out before being created. Drivers are careful to only drive on tracks that are already made in the desert as a jeep's tracks can last for fifty to one hundred years on the desert floor.

In addition, their operation is striving for social soundness. Their tour includes a side trip to Damaraland where, under the guidance of Garth Owen-Smith and Maggie Jacobson, Skeleton Coast pays a per head amount to the local Himba tribe. Maggie has worked with the Himba people to re-establish traditional crafts. The Himba are now making baskets and other handicrafts to sell to the tourists. Thus tourism has a relatively low environmental impact while local people benefit.

It is clear, then, that fostering responsible behavior among ground operators requires a combined effort from the local government, the traveling public and the operators themselves. How to obtain the desired behavior of a diverse group of ground operators will require a variety of actions, likely to include the following:

Government

- Set clear rules regarding their actions and penalties for their violation. This must be accompanied by a just enforcement system, including catching and punishing violators, by far the more difficult task;
- Coordinate planning and action with a broader range of participants that provide for local peoples' benefit as well as wildlife and ecological conservation, and allow for a more comprehensive and dynamic tourism development program; and
- Create a far-sighted development plan that includes long-term plans for development and preservation of a sustainable and renewable resource base.

Operators (and Government)

- Train ground operators and their employees in proper behavior, knowledge of the rules (and penalties), and an understanding of why they were enacted and what the long-term effects would be in ignoring them; and
- Establish local ground operator associations or boards, that accredit operators and induce responsible behavior at the company level.

Tourists

- Educate tourists on benefits of using qualified ground operators who provide community benefits, have a high degree of integrity, and foster the protection and preservation of the local environment.

In addition to the above, innovative uses of markets and pricing mechanisms can help foster environmentally sound nature tourism. There is ample evidence in other sectors and even a few cases in ecotourism of how markets can shape environmentally-sound behavior (see box below).

Local Community Benefits from Ground Operators

In Kenya, Reggie Destro Safaris is typical of several small, private tour operators. They use concession areas just outside the Masai Mara Reserve on Masai communal lands. They negotiate a fee with the Masai for the use of the campsites and reserve them accordingly. (There is some resentment on Destro's part because although they compensate the Masai directly and receive protection and support from the Masai, a daily game park entrance fee must still be paid even when the Reserve is not visited on a given day.)

Destro finds this approach so satisfactory that recently, when they took over a camel trekking concession out of Lewa Downs in the north of Kenya, they built in a strong local component to their program. There they employ almost exclusively local Masai to handle the camels and work in the camps. In addition, Destro pays the Masai a per-head fee for the use of their land for the campsites. This has proven to be a real boost to the local economy.

Social soundness can also be a goal of a responsible ground operator. Too often in the past, local people have been treated as another species of wildlife to be viewed by curious tourists, or just ignored. As with environmental sensitivity, social sensitivity has begun to take hold among a few innovative ground operators. This type of program should be encouraged whenever nature tourists come in contact with local people.

3.5 National Tourist Boards and Local Trade Associations

Many African governments have national tourist boards that promote tourism in their countries through external marketing and public relations. In some countries, they also have responsibility for establishing standards for ground operators. Tourist boards are not noted for their concern for environmental impact of tourism. Rarely do their marketing plans consider the impact large numbers of tourists may have on the tourist attractions they are marketing. Their mandate is simply to attract tourists and, for the most part, the more arrivals the better. Clearly their marketing efforts are not well coordinated with planning and resource management ministries of governments.

The private sector counterpart to tourist boards, local trade associations, have been formed in several sub-Saharan countries. Ideally, trade associations should be setting industry standards, monitoring and negotiating for high standards, and recognizing good conduct. Local trade associations are the logical representative of ground operators in government dealings, international development agencies, overseas tour operators and NGOs. In fact, it is more often the case that they perform sporadically in just a few of these functions. For example, the Kenya Association of Tour Operators (KATO) is the ground operators' trade association. However, as in many countries, membership is not obligatory and any company can operate tours with few restrictions or requirements. KATO is by definition most concerned with its own interests, mainly short-term profits and volume business. The dialogue between Kenya Wildlife Services (KWS) and KATO is limited by mutual mistrust. Certainly KATO is not thinking 20 years beyond their present tourism development programs.

3.6 Non-Profits In Travel

Many non-profit institutions, such as the Smithsonian, offer travel programs to their members in collaboration with international or inbound tour operators. For the operators, this niche of the travel industry can be lucrative largely because the association with reputable institutions brings credibility and prestige. Alumni associations, zoological societies, museums, and special interest groups often have large memberships that are essentially a captive audience to the tour operators' marketing campaigns. Targeting this audience is relatively easy as there is a readily established common bond among members. For this reason, tour operators vigorously compete for membership groups business. This has resulted in larger institutions creating their own "revenue generating" tour operations.

Because these organizations often influence public policy and rely on charitable contributions, they are usually quite environmentally sensitive and maintain rigorous standards of international travel. Tour operators who win these accounts tend to be those who have consistently demonstrated environmental sensitivity over time.

This brief summary of the involvement of non-profit organizations in ecotourism highlights two important functions: a) they act as educators to the general public regarding environmental issues, and b) they serve a valuable function in "grass-roots" conservation projects. Nearly all the non-profit, conservation-oriented organizations mentioned above emphasize education as a part of their trips. Education, which creates public awareness of conservation issues, is one of the most important facets of ecotourism development. In addition, tourism often brings in substantial revenues which can support the institution as well as underwrite and support projects in the field.

The Smithsonian Institution

The Smithsonian Institution, a non-profit institution, runs about 350 study tours each year emphasizing programs in natural history, art and cultural issues. One of its more popular programs is a tour to Zimbabwe and Botswana. The Zimbabwe trip involves a visit to the spectacular reserves of Hwange National Park and Mana Pools which extend over approximately 1,600 square miles, one of the most beautiful and dramatically located wildlife sanctuaries in Africa. In Botswana, the visit includes the unique Okavango River and Delta. In Kenya, the Smithsonian trip offers an opportunity to experience Kenya's cultural and natural heritage and a visit to its Samburu and Masai Mara game parks.

The goal of Smithsonian tours is to present educational study tours that mirror the interests and concerns of the Institute. These study tours are designed for members who share these interests and are eager to broaden their intellectual horizons and expand their involvement with the Smithsonian.

4. ROLES AND PERSPECTIVES OF NON-INDUSTRY PLAYERS IN ECOTOURISM

Who are the other major players in nature tourism, what roles do they play, and most importantly, how do they interact with each other? This section briefly discusses the roles and perspectives of institutions such as NGOs, host country governments, donors, indigenous villages and the private sector in the formulation, implementation and monitoring of nature tourism activities. Examples are given of the major, non-industry players. This is not meant to imply that they are the only types of groups interested in ecotourism, nor that this is an exhaustive list. They are, we trust, a reasonably representative sample.

4.1 Non-Governmental Agencies (NGOs)

Over the past decade, NGOs or Private Voluntary Organizations (PVOs), especially conservation organizations, have significantly increased their activities in the field of nature tourism. This stems from their traditional concern for wildlife and ecosystem conservation, and is a recognition that increases in economic benefit derived from parks and protected areas will improve chances for sustainable management of these resources. NGOs supporting ecotourism activities include (but are not limited to) U.S.-based organizations like the World Wildlife Fund (WWF), Conservation International (CI), Wildlife Conservation International, The Nature Conservancy (TNC) and Africa Wildlife Foundation (AWF). While WWF, WCI and CI have a global focus, TNC works almost exclusively in Latin America and AWF, as its name suggests, works in Africa. The Geneva-based International Union for the Conservation of Nature and Natural Resources (IUCN) is a coalition of most major conservation organizations and governments from around the world. They help to coordinate, and occasionally compete with their member organizations' activities.

NGOs are involved in many activities that are either directly or indirectly relevant to ecotourism. The following illustrate the types of activities: technical assistance, policy and planning, community development, information, public awareness and education. Examples are:

- **Policy and Planning:** WWF has prepared a two-volume book on the potential of ecotourism in Latin America. To date, it is the most comprehensive book that deals with the potential and drawbacks of ecotourism. In Tanzania, in conjunction with the WWF, AWF is providing technical assistance at senior levels in the Ministry of Lands, Natural Resources and Tourism to upgrade the Division's capability. IUCN has for a number of years provided high level expertise to African governments in parks and protected area management. Their publication, Parks and Protected Areas in Africa, is the bible for wildlife and park planners.
- **Public Awareness:** Recently CI launched the **Rain Forest Imperative** campaign, a 10-year strategy to conserve the world's most endangered rain forests. The campaign focuses on 15 rain forests, three major tropical wilderness areas, and two critical areas

of temperate rain forest. The Rain Forest Imperative has become the cornerstone for CI's programs and public awareness activities.

- **Community Development:** Through CI's Plant Conservation Program and through activities with indigenous groups in its country programs, CI seeks to document native knowledge of forest plants and support native people's participation in developing conservation strategies that also defend cultural integrity. CI's activities have emphasized better livelihoods and more economic autonomy, and steps toward greater political influence and self-determination.
- **Scientific Tourism:** Yearly TNC sponsors 25 to 30 natural history expeditions designed for the natural history and conservation enthusiast. Each trip is escorted by a Conservancy representative and guided by an experienced in-country naturalist. This obviously furthers the desire of TNC members to support its program, partially through the revenues earned from their participation. Opportunities are also available to meet conservation partners in-country to learn firsthand about the protection work TNC is supporting.
- **Training and Education:** AWF helped found the College of African Wildlife Management in Tanzania and has been the only consistent donor to the College and students. AWF also helped found the very successful Wildlife Clubs in Kenya--a model for instilling conservation values in young people, that has spread to other countries like Tanzania and Uganda. AWF also sponsored training of selected students in U.S. universities. Several of these graduates have held posts as heads of national parks in their countries, positions made possible only by the education they received.
- **Community-based Conservation:** AWF's program for "*Protected Areas: Neighbors as Partners*," focuses on including local communities in the conservation effort. This involves consultation and dialogue with community and village leaders during the process of project implementation. WWF and CARE have jointly supported a protected area/buffer zone management program in southern Uganda that marries the development of management activities inside park boundaries with on-farm soil conservation and agroforestry.
- **Endangered Species Protection:** A hallmark of single species protection has been AWF's lead Mountain Gorilla Project (MGP) Consortium in Rwanda and the elephant ivory ban under CITES. A key outcome from the MGP was the development and implementation of a coherent tourist plan that eliminated abuse of primates while at the same time made their survival essential to the economic well-being of the Government of Rwanda. Tourism has (until the recent civil war) now become the number one source of foreign exchange in Rwanda as a direct result of the Mountain Gorilla Project. Through its highly reputable Elephant and Ivory Information Service, AWF provided critical support to the effort to bring about a temporary ban on the international trade in ivory. This ban has been hailed as a major step in slowing the decline of the African elephant.

- **Information and Public Awareness:** AWF has had a long tradition of informing and educating school children and adults of the need to conserve wildlife. With CARE, they helped launch the enormously successful Pied Crow environmental education comic book that has become a model for similar efforts in Africa and Asia. This reading manual will help adults in Kenya develop basic skills and teach them about the environmental challenges Kenya faces now and in the future. AWF has also published a series of park guides which have made tourist visits more informed and safer as well as stimulate increased foreign exchange earnings that are earmarked for conservation efforts in the park.

4.1.1 The Ecotourism Society

The Ecotourism Society is a non-profit organization dedicated to conserving environment and sustaining the well-being of local people through responsible travel. In addition to representatives from key NGOs, the Society is composed of individuals from non-profits, academic institutions and private sector tour companies. The purposes of the Society are to:

- **Be a clearinghouse of information.** Plans include an interactive database with information on professionals, projects, institutions and published research. The aim eventually will be an international effort with chapters participating in the gathering and updating of the data on a globally-compatible data base system;
- **Act as a forum.** The Society acts as a forum for professionals working to ensure ecotourism is a conservation tool. In this regard, the Society recently assisted in staging an ecotourism workshop on June 18-22, 1991 at the George Washington University. The workshop, which included professionals from the government, private sector, non-profits, and NGOs provided for exchange of current information and ideas on ecotourism; and
- **Create media outreach.** The Society plans to create education, training, and outreach materials for consumers, professionals, government policy makers, and the media.

While the Society is still in its formative phases, it can play a crucial role in the development of ecotourism in that it is currently the only institution focusing exclusively on ecotourism. It can also serve as an arena representing the multifaceted institutions and interests that are an integral aspect of ecotourism.

4.1.2 Conservation and Education Travel Organizations

Ecotourism has increasingly attracted involvement by non-profit organizations. Interviews with representatives of these institutions revealed that they perform two important functions: educating the public on issues regarding environmental issues, and serving as a "grass-roots" conservation organization. The major non-profit institutions interested in and involved with ecotourism include museums, zoological societies, alumni associations, and various other special interest groups, such as the Smithsonian, Earthwatch, the Foundation for Field Research, the Sierra Club, and the Experiment in International Living.

Nearly all the organizations mentioned emphasize education as an integral part of their tours. Education, which creates public awareness of conservation issues, is one of the most important facets of ecotourism development. In addition, tourism often brings in substantial revenues which can support the institution as well as underwrite and support projects in the field.

4.1.2.1 Earthwatch

Earthwatch, founded in 1971 to preserve fragile lands, monitor change and conserve endangered species, conducts scientific expeditions that draw about 3,500 participants a year. In 1991 alone, Earthwatch offered 120 projects in the United States, Central America and Europe. Its projects include tracking timber wolves in the Northern Hemisphere to counting the humpback whale population off the coast of Mozambique.

4.1.2.2 The Foundation for Field Research

The Foundation for Field Research works as a matching service between scientific researchers and volunteer assistants in projects in oceanography, archaeology, botany, and biology. Programs include specific projects like protecting leatherback turtles in Mexico. The foundation currently offers 38 programs including trips to Mexico, Grenada, Wales, Mali, Liberia, Micronesia and British Colombia.

4.1.2.3 The Sierra Club

The Sierra Club offers active vacations with hiking, biking, cross country skiing and river rafting. Leaders are usually from scientific backgrounds and the purpose of the trips is often educational as well as adventurous. Sierra Club members are often looking for ways to instigate environmental reform. Currently in Rajasthan, India, the Club is protesting the development of the Sardar Sarvodar Dam Project which is expected to cause deforestation and wildlife depletion in the surrounding states.

4.1.2.4 Experiment in International Living (EIL)

EIL promotes its study abroad program under the banner of educational tourism. Typically, these study abroad programs range from six to sixteen weeks. During that time, students travel to a destination overseas where they take classes, often study the language and travel around a given country or region. EIL typically sends nearly 1,000 U.S. students abroad each year on academic programs.

The EIL program can play an important role in ecotourism by:

- Educating students on socially responsible travel to better understand indigenous culture and natural history;
- Incorporating ecotourism education as a part of the study abroad curriculum. EIL launched a new study abroad program called *Tanzania-Wildlife Ecology and Conservation*. The program combines wildlife studies at the Mweka College of African Wildlife Management and the Serengeti Wildlife Research Centre with visits to villages on the outskirts of the protected areas and participation in community development projects;
- Creating study abroad programs that contribute to the well-being of local people through economic opportunities.

4.2 U.S. Government Agencies

Tourism has long been of interest to U.S. government agencies interested in trade development. More recently, AID has renewed its interest in ecotourism for its environmental benefits, having lost interest in tourism in the 1970s because of the high capital requirements of tourism infrastructure and lack of direct benefit to the poor and local communities.

To develop this section, IRG interviewed representatives from the Agency for International Development, the Forest Service, the National Oceanic and Atmospheric Agency (NOAA) as well as the Overseas Private Investment Corporation (OPIC) to outline their respective program for ecotourism development.

4.2.1 AID's Role in Nature Based Tourism

AID's central environmental objective is to promote environmentally sound, long-term economic growth. One of the ways it does this is by assisting developing countries to conserve and protect the environment and manage their exploited resources for sustainable yields. At the same time, A.I.D. has placed high priority on stimulating private investment, free markets and free enterprise. Many officials within A.I.D. view nature-based tourism as well suited for simultaneously meeting both objectives. As a result there has been an increasing level of activity related to ecotourism in the agency. To date, however, there are no major projects being funded

that focus primarily on tourism industry development. Most of the activities are peripheral, e.g., studies such as the present report, development of tourism plans for specific sites (without much consideration about how the visitors will get there or what they will do when they leave), or protection and management of natural attractions with little interaction with the tourists or tourism industry. Many of these activities are implemented by Private Voluntary Organizations and only partially funded by A.I.D.

The following is a summary of A.I.D.'s activities in nature-based tourism. Due to constraints imposed by time and location, this study focused on Bureau activities, as a thorough review was not possible for all Mission level activities.

4.2.2 Bureau of Research and Development

Through its Forestry Private Enterprise Initiative, the Bureau of Research and Development has funded several concept papers that study nature travel in developing countries. The most general among these is Laarman and Durst's (1987) introductory look at nature tourism as a conservation tool, an economic enterprise, and as a promoter of socio-economic development. Using four tropical countries as examples, the Philippines, Thailand, Ecuador, and Costa Rica, the authors conclude that nature tourism is a worthwhile objective for natural resources management.

While the above study is broad and "supply-oriented", Ingram and Durst (1987) put forth the argument that in order to successfully implement nature based tourism, planners have to analyze "demand" by consumers and tour operators. This study describes nature-oriented activities promoted by U.S.-based tour operators and profiles the nature oriented tour operators and their clientele in relation to the constraints and growth potential of this market segment.

Applying the concept of nature tourism to specific countries, Laarman and Wilson (1987) have looked at the possibility of expanding nature tourism to the Ecuadorian mainland away from the Galapagos Islands. The study describes the current structure of nature-based tourism, assesses the constraints presently limiting this kind of enterprise, and recommends strategies for its growth and development in the future. It concludes that the future of ecotourism on the Ecuadorian mainland will be feasible only with considerable advances in wildlands protection and management, infrastructure development, and marketing.

Finally, Larmaan and Perdue (1987) scrutinize an alternate form of tourism in Costa Rica, namely scientific tourism. Their study examines the impact of expenditures in support of tropical science in small economies, specifically looking at spending attributable to the Organization for Tropical Studies (OTS). It was found that scientific tourism amounted to 2 to 3 percent of Costa Rica's national tourism receipts.

4.2.3 Latin America and Caribbean Bureau

The Latin America and Caribbean (LAC) Bureau has been actively involved in nature tourism. The Bureau's most notable contribution to ecotourism is a comprehensive study on ecotourism (Boo, 1990). Prepared by staff at the World Wildlife Fund with the help of several tourism consultants, this study was undertaken by a grant from the LAC Bureau. It documents the status and impacts of nature tourism in five representative countries in the Latin American region, evaluates economic and environmental impacts in two protected areas in each of the five countries, and highlights the crucial issues in the development of ecotourism. The study concludes by recommending tourism oriented measures to improve protected area planning and management.

Several field activities have been initiated in the region with ecotourism aspects. These include, among others, the Central American regional natural resources management project, RENARM, the natural forest protection and management project in Ecuador, SUBIR, and a new natural resources initiative in Nicaragua. All of these projects are involved in protecting and managing national parks.

4.2.4 Asia Bureau

The Asia Bureau has conducted both general and country-specific nature tourism studies. In addition, a few Missions are currently implementing nature tourism projects as a larger component of natural resource management programs.

Laarman and Durst (1991) have recently prepared a paper that reviews the general concepts of nature-based tourism, the role of key players in the field and a review of lessons learned in nature tourism throughout the Asia-Pacific region's developing countries. Specifically, the Bureau has also been working on developing nature-based tourism strategies for individual Asian countries like Thailand, Indonesia, Sri Lanka, Nepal, and the Philippines.

Finally, within the countries themselves, Missions have been actively involved in incorporating nature-based tourism in other NRM programs. In Thailand, the MANRES project is funding park related activities that may have spinoffs into tourism. In both the Philippines and Indonesia, the Natural Resource Management Projects (NRMPs) are expecting tourism to play a part in their programs. Finally, in the South Pacific, the new initiative Profitable Environmental Protection Project will include ecotourism as one of its many components.

4.2.5 Africa Bureau

The present report is the second major study funded by the Bureau to explore the potential of nature tourism in Africa. The first examined the potential for low impact tourism as a strategy for sustaining natural and cultural resources in sub-Saharan Africa (Lillywhite, 1990). Low-impact tourism (LIT) is a "supply side" approach to tourism, i.e., it examines tourism development from the perspective of local communities ability to absorb and manage

small operations as opposed to the number of potential visitors a site may have. As such, LIT offers the advantage of immediate local benefits. However, the capacity of local African communities to manage LIT concessions is as yet untested. This may be resolved, however, as implementation of the LIT model has been proposed in Botswana and Madagascar.

Several other studies explore the contribution tourism can make to the local economy. Borge, Nelson, Leitch and Leistriz (1990) estimate the direct impact of tourism in Northern Botswana on the private and public sectors of the economy. Specific topics addressed include income and expenditures for the three sectors of the industry: tourists, safari companies and retail businesses associated with tourism. In addition, general perceptions and suggestions are made to improve the industry of each group. The hallmark of this study is that it highlights the breakdown of the tourist dollar to the local economy.

The above studies focus on the broad issue of the nature-based tourism potential in Africa. The Bureau has also investigated the potential of developing tourism in specific countries. DeGeorges (1990) describes a tourism feasibility study conducted in the Northern Rwenzori Mountains in Uganda and recently investigated the possibility of sport hunting in the northwestern Karamoja region of Uganda. A multi-year, non-project assistance initiative has been launched by USAID/Kampala to fund assistance to the Ministry of Tourism and Wildlife and its dependency Uganda National Parks. When operational, this will be the first major effort directly supporting ecotourism development in A.I.D.

4.2.6 National Oceanographic and Atmospheric Agency

The National Oceanographic and Atmospheric Agency (NOAA), a government agency within the Department of Commerce (DOC), has primary federal responsibility for conducting research and developing and disseminating information on the oceans and atmosphere. In addition, NOAA has environmental responsibilities for the ocean and coastal environment including marine species and protected areas. Various offices within NOAA have contributed to ecotourism. Some examples include:

- Information and data management: the NOAA Weather Station provides continuous broadcast of the latest weather information. For long-term purposes the NWS databases on global and national scale climate information contribute to assessments of how climatic trends influence tourism markets;
- Public awareness: the National Marine Fisheries Services (NMFS) has federal responsibility for ocean and coastal marine and estuarine and living marine resources. Whale watching tours, for example, benefit from NMSF information on protected species. The office also provides technical assistance and consultation on saltwater sport fishing based tourism development; and

- **Technical assistance:** the National Ocean Service International Affairs Office provides assistance in multilateral and bilateral exchanges of technical information, technologies and training related to environmentally sensitive tourism development.

4.2.7 Overseas Private Investment Corporation

The Overseas Private Investment Corporation (OPIC) is mandated to encourage private investment in developing countries through political risk insurance, loan guarantees, loan participation, and equity financing. Recently OPIC has begun funding projects related to ecotourism and it has the potential to become a major source of financing for the ecotourism industry through its new "Environmental Investment Fund". This fund finances carefully selected projects demonstrating the financial viability of investment in environmentally-beneficial endeavors. The fund has an explicit mandate: to fund ecotourism projects, such as guest lodges near natural attractions, designed and managed to actively protect the area's ecological value. The fund managers anticipate investing in services, such as tour companies, whose business will enhance international interest in visiting and protecting sites of ecological interest.

Recently, OPIC awarded its first "Ecotourism Award" to a couple working in a lodge in Micronesia. The award recognizes private sector investments in the developing world that demonstrate significant environmental benefits.

4.3 Multilateral Organizations

Like A.I.D., multilateral organizations such as the World Bank, the International Finance Corporation (IFC), and others are beginning activities in support of ecotourism for similar reasons, i.e. the potential value of ecotourism in supporting sustainable economic development.

The World Bank created a tourism department in 1969 that lasted for 10 years, lending about \$450 million directly to 24 tourism projects in 18 countries throughout the developing world (South Magazine, 1989). The department was discontinued partly because of competition for funds from other departments and partly because of the bad publicity associated with funding capital intensive projects, such as large hotels, which clashed with the Bank's evolving rural poor mandate.

Currently, the Bank has no structured policy for tourism development. The Bank has, however, created a Global Environmental Facility (GEF) which may have an indirect impact on ecotourism. The GEF is a pilot program under which grants or concessional loans will be provided to developing countries for global environment protection programs. Four program areas have been identified under the GEF: protection of the ozone layer, limiting emissions of greenhouse gases, protection of biodiversity and protection of international waters. The mandate to protect biological diversity is probably most closely related to ecotourism. For example, in Uganda, the GEF has committed \$4 million to the conservation of the Bwindi Forest Gorilla Reserve, one of the most biologically diverse tropical forests in East Africa.

The GEF tends to fund site management and conservation activities and is less interested in the debt or equity funding and private sector institution building that the tourism industry requires. The World Bank's sister organization, the International Finance Corporation (IFC), is better suited for this role. The IFC is a triple A-rated institution which lends at London Interbank Rate (LIBOR), plus 2 percent. Most of its loans have 10 to 15 year paybacks on \$5 million projects. IFC finances up to 25 percent of project costs taking both debt and equity positions. In the past, private sector investments in environmental projects have been limited to the urban and industrial sector. Recently, however, the IFC has been investing in "green" projects including ecotourism.

4.4 Local Communities

Local communities are at once a problem and an opportunity for nature tourism programs. On one hand, they threaten the viability of the natural resources on which tourism is based. Another problem, the potential of nature tourism to create negative social impacts (prostitution, crime, etc.), occurs when limits on traditional park uses and protected area reserves are enforced. On the other hand, ecotourism is an opportunity, given its potential to provide impetus for community development and benefits for local people, who in turn support tourism by adding a cultural dimension and diversity to the attraction. It is clear that the relationship of local communities with parks and protected areas and their related tourism activities will determine the outcome of any nature tourism enterprise.

The reasons for these problems are easily understood, although less easily treated. Natural attractions are often surrounded by the poor rural families who actively extract, or would like to extract, benefits from the protected area through farming, timbering or wildlife utilization. Such land uses are often not compatible with the objectives of protected area management, including tourism. As a result, protected area managers enact land use restrictions that disproportionately affect neighboring communities and people.

..... Covering at least some of the opportunity costs that local communities thereby suffer is the economic rationale for including them in the benefits of tourism. Tourism can generate spin-off revenue and employment opportunities for local people through restaurants, hotels, transportation companies and local arts and handicrafts. Revenue can also result from increased cultural manifestations including folk dances, basket-weaving, sculpture and other handicraft items.

Social issues such as equitable access to resources and democratization are also important reasons for local participation in nature tourism planning. Communities that are not included in the planning for, or benefits of, tourism have repeatedly derailed protection efforts. Management of local communities' interaction with parks and protected areas through disincentives and enforcement alone is rarely effective and often more costly than management by local participation.

With that said, there are two important caveats to local participation. First, there is little concrete evidence that a grass roots tourism program can help protection efforts. It may be that the proper studies have not been conducted. Pedersen (1990) suggests that the complexities of dealing with tour operators, requirements for educated service providers, and the needs for business management skills are difficult to find and/or create among local communities. While the theory of local community management of ecotourism resources is orderly, with some substantive evidence, little field work has been completed demonstrating investment in locally-based tourism is more advantageous than investment in stronger enforcement or unrelated employment generation. The hypothesis that community management of ecotourism is a suitable alternative to government management is based on experience with more traditional forms of community development that do not interact with international markets. The second hypothesis has not been proven.

The second caveat is that local participation is easier said than done. Involvement of local people necessarily involves more time spent in developing and managing consensual processes. This involvement may tax the skills of local resource managers who rarely have been trained in the communication skills needed to work with local people.

These caveats notwithstanding, local community participation should be given an important position in planning and implementing nature tourism. Local participation, or community management, is typically separated into components of planning, decision making during implementation, and sharing of benefits. More complete local participation should mean greater community understanding of, and control over the activities. This in turn should lead to improved sustainability of project interventions as reliance on local as opposed to external assistance is enhanced. One goal of ecotourism development should be the involvement of local communities both as decision makers and beneficiaries.

Local Management of Ecotourism Resources in Uganda

Along the western border of Uganda lie the Rwenzori mountains, the tallest range in Africa. Also known as the "Mountains of the Moon" this range has for centuries been the home of the fiercely independent Bukonjo tribe. The tallest peaks of the range have also, since their discovery by the famous explorer Stanley, been the destination of adventuresome western travellers seeking the unique vegetation and perennial glacier on the equator. Some 500 visitors per year now take the seven-day circuit trek to the high peaks. The Bukonjos have for decades been serving as porters and guides for these tourists. Only recently, however, did they organize themselves into the Rwenzori Mountaineering Services (RMS) to better capture revenues and control the visits being made.

RMS is a membership NGO, officially recognized by the Government of Uganda, whose purpose is to guide tourists over the rigorous trail and, with the proceeds from entrance fees, fund local community development. Membership in RMS is only open to other Bukonjo's for a nominal one time fee which makes them eligible to be called to work as a porter or, once they have gained enough experience, as a guide. They are well compensated, considering local labor rates, although the cost of the trek to the tourists (approximately \$150 for seven days) is still very modest. RMS has, for a number of years, received a local currency grant from USAID/Kampala which has enabled them to construct an office, and several trail huts, as well as a bridge and wooden walkways over some bogs. Funds received from tourists besides paying for the twenty-odd member permanent workforce have been used to build additions to a local school and construction of a clinic.

The Mountains of the Moon have recently changed status from a Forest Reserve to a National Park. The Bukonjos and RMS on the surface respect this authority but are reported to, at best, tolerate state ownership claims only because the Forest Department in fact did very little active management of the area. With the change of authority to Uganda National Parks and a recent grant from A.I.D. to World Wildlife Fund/U.S. to support UNP's management planning in the Rwenzoris, the future role of RMS is unclear. This perception is heightened by the fact that expatriate park management advisors were openly scornful of the Bukonjo's efforts (accusation of overcharging, lacking of government control, inappropriate construction) and the WWF/U.S. proposal scarcely mentioned RMS. Ugandan government officials are more accommodating and appear to recognize the merits (without diminution of their own authority) of the Bukonjo's claim on their traditional homelands. Although the future of RMS, the National Park and their interaction remain uncertain, a likely compromise will be worked out through extensive discourse, the hallmark of Ugandan politics these days.

In Zimbabwe, the Campfire program has demonstrated the feasibility of local management safari hunting. There communal lands have a great deal of wildlife, and hunting wildlife is a popular source of revenue. It is legal and well accepted. The Masoka district petitioned the government and won custodianship of wildlife on its communal lands. Then, with the help of a local NGO, the Zimbabwe Trust, it established a community-owned safari hunting operation. In 1989, this program generated \$126,000 of which, after costs, \$32,400 went to the district to be distributed as immediate cash for households, building a health clinic, and for indemnification against crop losses caused by wildlife.

In the Beitbridge project in Zimbabwe, when a license to kill an elephant was sold to one hunter, the proceeds were brought to the village in a wheelbarrow to be divided into stacks by the village elders for hospitals, schools, individual households, etc. In this novel approach, local

communities perceive a clear message on wildlife conservation. Beyond placing resource management control in the hands of local people, two factors have made this program a success: transparency and immediacy of benefits. Moreover, as other communities learn about this success, they will petition their Members of Parliament for "proper authority".

The approach to local community benefits handed out by government is fraught with difficulties. Anecdotal evidence of Kenya's difficulties in this regard illustrate how complex it can be. Outside Amboseli National Park, promises have been consistently broken with the Masai. In retaliation for cattle losses suffered by lion and the National Parks' failure to adequately compensate the Masai's losses, a carcass was poisoned by Masai and five lion killed. Based partly on past experience with broken promises, local communities resisted strongly when Kenya Wildlife Service tried to take control of Masai Mara National Reserve. They reportedly retaliated by killing one of the few remaining rhino in the reserve, a mother with young, and left behind the rhino horn as a statement. Again, this is anecdotal, but the bullet used was apparently one used only by park rangers.⁹

On a more modest scale, guiding and portering activities have been proven to be feasible for community management. An example of a truly indigenous community management of an ecotourism resource has been operating for several years in Uganda (see page 47).

4.5 Buffer Zone Management

Early efforts of protected area managers to deal with neighboring communities focused on enforcement of land use restrictions. This continues to be a major activity for resource managers, but a parallel effort to involve local people with protected area management planning and implementation has recently been initiated by several conservation NGOs and donors. Many of these activities take the form of so-called buffer zones around parks and protected areas.¹⁰ Buffer zones are increasingly being incorporated in the planning of protected areas and have received considerable support from NGOs.

The interaction of local people with parks and protected areas has been a major concern for years. Pressures from neighboring people can have very deleterious effect on the

⁹Based on interviews with Kenyan Park officials during IRG field trip by Michael Fox in July/August, 1991.

¹⁰Buffer zones are areas immediately adjacent to a protected area that have limitations and controls on use that are intermediate to those of the protected area and the open use areas beyond the buffer. The term was developed under the UNESCO Man and the Biosphere Program and was originally intended to be much more restrictive in uses allowed (e.g., no permanent habitation in the buffer zone) than in practice has proven feasible. Some people use this difference in the original theory and actual practice to say that buffer zones have failed. Better said that the concept of a buffer zone has evolved.

sustainability of a protected area. A good example exists in Kenya, where their savannah national parks and reserves depend on the rangeland just outside the parks for seasonal grazing. In Amboseli National Park, the neighboring Masai are receiving for the first time title to land. The Masai, unaccustomed to land ownership but not to cash, sell the land for its windfall profits. Land-hungry farmers buy the Masai lands, fence it, and try to grow crops on the agriculturally marginal range lands. As 80 percent of the wildlife in Kenya spends at least some of its life outside the national parks and reserves, wildlife without access to these ranges have a very difficult time.

Another example of potential buffer zone problems relates to the use of fuelwood outside the Masai Mara Reserve in Kenya. Since Kenya Wildlife Service (KWS) banned fuelwood collection inside the park that many of the tourist camps and lodges used for cooking fuelwood, collection has shifted to the reserve's buffer zone. Fuelwood collection is still adversely affecting wildlife habitat, as well as reducing local people's access to fuelwood. Actions are needed to reduce fuelwood consumption and/or increase its production. An innovative buffer zone strategy could turn the current situation around by assisting local communities to establish sustainable managed fuelwood concessions and energy efficient cookstove manufacture.

Buffer zone programs have been explored in Africa for at least twenty years. In Rwanda, for example, the Nyungwe forest buffer zone was established in 1969. No doubt similar activities, perhaps under a different name, were practiced by resource managers during the colonial period. Recently, activities in buffer zones have enjoyed popularity among internationally funded projects. The general goal of these projects is to provide sustainable benefits to local communities while reducing negative impacts on the park or protected area. Most projects support activities outside of the park boundaries and a few allow very controlled use inside the park.

The Development through Conservation project implemented by CARE in southwestern Uganda is a fairly typical highland forest buffer zone project. It has established a small farm extension system around two national parks (Bwindi and Mgahinga) where Uganda's mountain gorillas are found. Extension modules have been developed in agroforestry, soil conservation, sustainable agriculture and conservation education. The project works closely with the Impenetrable Forest Conservation Project funded by WWF/International to protect the forests from poachers and illegal pit sawyers and conduct scientific research on the forest ecosystem. CARE has helped the in-forest activities by providing a full-time researcher/inventory specialist to draw up a management plan for the forest. The intent is that sustainable extraction of medicinal plants, vines and other minor forest products may be possible if properly managed.

4.6 Host Country Governments

Successful development and marketing of ecotourism in Africa hinges on a number of appropriate actions by national governments in policy, resource management and finance. Following the relative success of a few countries such as Kenya, Zimbabwe, and the Côte d'Ivoire in generating foreign exchange revenues through tourism, a number of other countries have adopted programs to bring in more visitors. Most notably, Rwanda in the past decade successfully developed a new ecotourism program. After years of neglect under state control, Tanzania's tourist lodges are being privatized and tourism's decline there has turned around.

In the final analysis, the success of a government's ecotourism plans depends on its ability to effectively balance its development in terms of national, industrial and local needs, interests, and well-being. Also, it must only allow development consistent with ecological, social and economic sustainability. Finally a government must have a keen awareness of what kind of development is appropriate for its social structures, institutions and communities and plan accordingly.

The role of national governments in supporting ecotourism is multi-faceted and quite complex, varying considerably between countries. To simplify this discussion we have chosen to limit our analysis to four major areas of government intervention: policy, resource management, tourism promotion and infrastructure development.

4.6.1 Ecotourism Policy Considerations

A number of important government policy areas affect the success of ecotourism. Many of these are similar in their impact on the economy at large (e.g., monetary policy). Others are fairly specific to tourism (e.g., immigration policy and procedures). The following analysis discusses a few of the most important policy considerations.

4.6.1.1 Monetary Policies

As discussed in the following sections, tourism's foreign exchange earnings offer one of the greatest potential benefits to developing country governments. However, monetary policy that overvalues local currency can constrain tourism development by increasing cost to foreigners. A classic case of this has only recently been alleviated in Uganda where the official rate was three times the cost of local currency as the "free" market rate. Visitors were required to exchange the equivalent of US\$30 per day they spent in the country. As a result, a thriving currency black market sprang up and the government lost control of an unknown, but quite significant portion of the foreign exchange brought into the country. Visitors were required to pay at least a portion of their expenses in overvalued schillings.

Given the stiff international tourism competition, a country whose currency is overvalued and artificially forces high prices places the local tourism industry, particularly hotels, at a competitive disadvantage to alternative destinations. This is particularly true throughout West Africa. Planners need to consider carefully the value of local currency in relation to competing destinations before initiating a tourism program.

Another serious problem for the tourism industry is access to hard currency. Where government policy limits hard currency sales to tour operators, they will have difficulty creating or maintaining key elements of the tourism infrastructure (vehicles, hotel furnishings, some types of food and drink). In addition, overseas firms that wish to operate in the country need to have a reasonable assurance that they will be able to repatriate their profits.

Access to credit is a recurrent problem for local tour operators and other elements of the local tourism industry. Government policies can influence credit availability in a number of ways, e.g., by holding down official loan interest rates. While a thorough discussion of this is outside of the scope of this report, suffice it to say that tourism planners should ascertain if sufficient capital is available for the expected private sector investment before launching an ecotourism campaign.

4.6.1.2 Institutional and Fee Earmarking Policies

Park management in Africa, like much of the rest of the world, has most often been the province of a line ministry. Some countries, however, established parastatal agencies to manage parks and certain protected areas. The rationale is that parastatals are more like private sector agencies and therefore are more responsive to market forces. As parks are revenue sources and intimately involved with the private sector, they are likely to be better managed by parastatals. While this logic is attractive, the experience of parastatal management is mixed, and not conclusively recommended as an approach to park management.

Government policy regarding the use of visitor fees is another area that deserves close scrutiny. There is a body of opinion that governments should allow park agencies to use park entrance fees to offset tourist and wildlife management costs. A number of park agencies have been empowered for that purpose, often by creating them as parastatals. They can then adjust park entrance fees and total revenues to offset costs of infrastructure maintenance, conservation, local peoples' benefits and similar costs. An alternate logic that applies, in the case of line agencies, is that revenues from an agency charging fees related to tourism ought to be treated like most other revenue-generating government agencies (water companies, forest services, customs, tax collectors etc.) which routinely deposit their revenues in the central treasury and the political process determines the appropriate allocation.

Parastatal Park Management in Kenya and Uganda

Parastatal management of parks is exemplified by the recently created Kenya Wildlife Service (KWS). While it is too early to fully evaluate the success of KWS, one early problem appears to be the lack of coordination between KWS and the tourism industry. While KWS does exert control over some aspects of tourism within the boundaries of the protected areas they manage, they have very little planning or no coordination role for tourists before they arrive at the park entrance. They need to integrate all parties in Kenya's tourism industry into a cohesive plan.

A more established parastatal is the Uganda National Parks (UNP) agency. UNP was originally established in the 1960s with management responsibility for four national parks. A fifth was added in the early 1980s and recently three more sites were gazetted as national parks. In the past thirty years, tourism to Uganda, which was mostly to national parks, fell from its equal footing with Kenya to nearly zero during the 1970s. In the past decade, tourism has begun a slow ascent, with most of the growth in the past five years. Clearly UNP was not to blame for the drop in tourism. The parastatal which is mandated to generate income, is potentially in greater jeopardy than a line agency when the bottom drops out of the market. UNP has not turned a profit in twenty years and relies on the treasury for its meager annual budget. As a parastatal, it is not well placed to fight for a fair share of the budget and continues to be woefully underfunded. This results in park management difficulties such as late payrolls, UNP's few vehicles are in bad repair, and, while management planning has recently begun, it remains to be seen if UNP can seriously begin to implement the plans. The lesson is that a line ministry may be preferable (in terms of effective management of a resource) to a parastatal that is a money loser.

Regardless of the disposition of proceeds, entrance fees charged by most parks in developing countries are far too low, even though the money is needed to maintain the parks and protected areas. Thus tourists receive surplus value for their expenditures over and beyond the prices paid. This benefits ground operators and tourists but penalizes local people who otherwise might receive a share of the surplus proceeds, and threatens the long-term sustainability of the resource.

A Disconnection Between Tourist Revenue and Park Management in Namibia

During fiscal year 1990, the government of Namibia received some 17 million rand (\$6.2 million) from tourism concessions and entrance fees. These proceeds went directly to the central treasury. At the same time, the budget for the Ministry of Wildlife Conservation and Tourism was R27 million (\$9.8 million) over the same time period. Park entrance fees are low (a few dollars a day) and set without regard to costs related to maintaining and improving park infrastructure or tourism facilities. As the Ministry's budget is independent of the revenues it generates, it has little incentive to raise entrance fees.

The policy of arbitrarily setting low fees not only causes the Ministry's program as a whole to operate at a deficit of 10 million Rand, it places the Namibia Park system in jeopardy. The park's budget is subject to changes in government priorities, austerity programs, crises in other sectors, especially public security, and more insidiously, inflation rates that increase faster than budget allotments. This can undermine the Ministry's ability to properly manage the park system. Specifically, the Ministry operates its own lodge system from the annual budget. Problems can occur if more tourists arrive than are expected, and no additional budget is available to meet the increased demand for food and services.

Several alternatives used elsewhere might serve Namibia. Privatizing the lodges or operating them under a concession, could allow flexibility to meet fluctuating demand while reducing the government's budget. Allowing the Ministry to set and collect park entrance fees and concessions based on a market price would cover the current deficit and allow for proper management. An important point is that arbitrary fee setting has historically resulted in low rent on the parks and protected area resources undermining their value to the country as a whole and threatening their effective management.

4.6.1.3 Immigration Policy

Ease of passing through immigration on entry and exit are also important to a country's reputation for hospitality and to operators' willingness to guide groups in country. Tourists' first and last impressions of a country are formed by its immigration procedures. A country's reputation as a tourist destination is disproportionately influenced by immigration. Rude and rough treatment of visitors, shakedowns for small bribes, numerous repetitive checkpoints, and long lines can be discouraging to the less experienced traveler. Speedy and courteous formalities, clearly sign-posted requirements, and minimal number of checkpoints are low-cost strategies to improving the quality of the visit and attractiveness of the destination.

Delays of a week or more in obtaining a visa are common occurrences in some African countries, even those trying to promote tourism. This stems from poor policy coordination between immigration and tourism agencies. At the very least, those nations that process the bulk of Africa-bound tourists should have easily obtainable visas. If visa requirements cannot be waived then a facility for purchasing a visa at the airport should be established.

4.6.1.4 Enforcement

To maintain the integrity of the attraction, proper law enforcement must be in place to regulate and control tourism development, operations, poaching, compliance with regulations and

other concerns. Adequate order must be available to protect tourists. Maintaining a stable marketplace for both travel products and for consumer goods related to travellers' needs is necessary. Control of tourism products such as handicrafts and locally produced artifacts is needed to protect tourists from being cheated and ensure that goods (national cultural treasures and endangered species) are not being illegally exported.

Most park and area protection programs have narrowly focused on equipping and training rangers and guards. Wildlife agencies also leave aside the larger issues pertaining to safeguarding resources outside of the park or the security of the tourist. While resource managers have much of the responsibility for enforcement they must have cooperation of numerous government agencies. For example, customs inspectors must be able to spot illegal exports of endangered species, and tourism boards and training agencies should train ground operators in secure and appropriate operations. Local police and magistrates must cooperate with resource managers who arrest poachers. Understandably, the development of a comprehensive enforcement system is often avoided by donors wishing to steer clear of the potential for negative publicity, but without reasonable security and enforcement in place the tourism industry will suffer. Tourism planners should be assured that adequate security and enforcement will be in place.

4.6.2 Resource Management

There is clear evidence that African governments such as those of Botswana and Kenya that allow market forces to shape the tourism industry fare better than those that attempt central control of the industry. Economic freedom is essential for private sector initiatives and the kind of dynamic market place on which the tourism industry thrives. This freedom does not imply that tour operators should function without controls on their use of the resource. Many nature tourism attractions are quite fragile resources with relatively open access and lack a well-established management regime. This states a case for an authority to control the tourism resource and whose concern is the welfare of that resource. This authority is typically a government agency. As discussed earlier, there are a few but growing number of alternative examples to management of nature tourism attractions.

4.6.2.1 Carrying Capacity Considerations

Resource managers are charged with maintaining the ecological integrity of an area while ensuring that it produces a desired set of goods and services for both national and local benefit. They develop and oversee the implementation of plans that determine resource use. They allocate spaces to different uses, direct the construction and maintenance of infrastructure, enforce park/reserve regulations and oversee the actions of a variety of concessionaires and permit users. As a rule in Africa this all must be done on a short budget with inadequate training, equipment, vehicles or pay. Inevitably the question arises, "will the management effort and the resulting resource uses (primarily tourism in this case) be sustainable over time?" This issue is closely linked with carrying capacity of a natural site or ecosystem.

Carrying capacity is a term used by ecologists and resource managers to describe the number of healthy animals a piece of land could support without unacceptably degrading the ecosystem¹¹. Lately, usage has expanded this concept to include the number of tourists that can visit a particular site without a decline in either the ecosystem or the quality of the visit. As discussed elsewhere in this paper, ecological impacts of excessive tourist visits are quite severe in many African sites. The permissible visitation rate, particularly at fragile sites such as deserts, wetlands or alpine areas, is one of the hot topics of debate among the players in nature tourism. Although in agreement that sites should be sustainably managed, ecologists and many resource managers are often more conservative in their estimates of tourist carrying capacity than are tour operators or government tourism planners. The problem stems from an incomplete knowledge of how visitors impact ecosystems and an inability to predict what site-quality trends will be under a given level of visits. Given this uncertainty, the conservation-minded tend to underestimate the carrying capacity while tourism interests generally push for more visitors.

One of the primary financial concerns of ecotourism operators is that a site should maximize profits. Conservation interests usually respect the need to make a profit, but point to the long-term sustainability of profit generation as the true route to profit maximization. However, this begs the question: Can the site be profitable now? Because of the exigencies of cash flow, most entrepreneurs, unlike governments, donors and economists, must see a return on investment in the short run or they will fold or not invest in the first place. Without key investors, the site will lose its revenue generating ability, often its primary defense against proponents of alternative uses.

The need to establish profitability early on, at least for commercial interest, argues that a business analysis must parallel the analysis of ecological carrying capacity to determine a profitable visitor rate. This analysis should consider the several options with different primary variables: the demand for tourism to the site, the price people will pay to visit, and the cost of the establishing and running the facilities. These factors are best determined from experience at other similar and, preferably, nearby sites by experts in business planning of tourism ventures. Governments can support the preparation of these feasibility studies.

4.6.2.2 Multiple-Use Management: By Whom and for Whom

Historically, nature tourism resource management has been the province of government-employed resource specialists focusing on their sciences--usually wildlife or range management

¹¹Unacceptable degradation of an ecosystem means different things to different people. The strictest definition would be that no change occurred in the system, an impossible goal if people are going to be allowed in. Some resource managers, e.g., foresters and range managers, have considered only the primary products (trees or grass), other elements were of lesser concern. A reasonable approach is somewhere in between. The most important point for planners and managers to agree on is the limit of acceptable change in the ecosystem.

and forestry--with little regard for the needs of the tourism industry or local communities. In the past decade, many resources managers, led by conservation NGOs, have recognized that to succeed, modern park and protected area planning must coordinate with public and private agencies as well as local community needs and plans. Coordination complicates the resource manager's job. In the U.S., considerable literature is being produced, college programs are being redirected, and resource management agency staffs are being overhauled to accommodate the demands of multiple use management of wildland resources. In Africa, there has been little training and research produced to help the African manager cope with multiple-use problems. Unless training and funding constraints are overcome, the weaknesses of African resource management will remain.

A reasonable expectation is that in the near- and medium-term, these constraints will not be resolved in resource management. This argues for a more radical approach to resource management. Efforts at strengthening Africa's resource management have been directed to adoption of western management practices. Alternate approaches to management suggest that there are other potential managers of nature tourism sites who might be able to resolve difficulties confronted by the government managers. These sources of management include local communities, private enterprise, and NGOs. The exact nature and terms of their involvement must be site-specific, but the guiding principle should be that the original owner of the land (often the government but occasionally local communities or private citizens) maintains ultimate management control while much of the day-to-day management responsibilities are vested in other parties.¹²

Certainly there is no theoretical reason why private interests could not develop certain sites under a management contract similar to the arrangements with many large hotel chains. For example, like many major hotels in Africa, the Sheraton Kampala is owned by the government. In return for a management fee and a share of the profits, the Sheraton Corporation equips, staffs, and runs the hotel.

¹²Law enforcement would be one management responsibility that probably should remain with government.

Profit and Protection: The Mountain Gorilla Project

The Mountain Gorillas are found in the Virunga Mountains of Rwanda and Zaire, and in southwest Uganda. In the 1970s Dian Fossey, the noted naturalist, founded the Karisoke Research Center to study the gorillas. Her work brought to world attention the plight of these endangered mammals. In 1979, a group of international NGOs led by the African Wildlife Foundation, the World Wildlife Fund, and the Flora and Fauna Preservation Society formed a consortium to design a plan to save the gorilla by, among other things, managing the Virunga Mountains as an ecotourism resource.

Working in close conjunction with national and local governments as well as local NGOs, the group launched the Mountain Gorilla Project (MGP). They developed a four-step strategy to save the park: development of an overall management plan for the entire park (Parc des Volcans); adoption of anti-poaching laws; conservation education programs to train and educate local people; and development of a tourism program.

The MGP program succeeded beyond most expectations. It reversed the decline in the gorilla population, generated enough revenue to make tourism the country's third largest foreign exchange earner, and succeeded in changing local people's minds about the value of the park (RRAM 1987). Again, the benefit of the program to the nation and local people was the key factor in this success.

Interestingly the entrance fee is probably the highest in Africa--\$170 for a one-hour visit with the gorillas. Even so, because the experience is unique and the supply is very limited (six people per group and only a few groups per day) the gorilla viewing is booked months in advance. This is one indication that park entrance fees may be underpriced at many sites.

To demonstrate the point about the tension between conservation interests and revenue interests in setting carrying capacity limits, in 1989 when the government of Rwanda raised the number of tourists per group from six to eight without consulting with the MGPs sponsors, many of the expatriate staff on the project went on strike until the government reversed its decision.

There are precedents for private management of public resources. NGOs have for a long time assisted governments in park management and in some cases had de facto management control. Relationships between private tour operators and governments have not developed as many shared management models as NGOs, but there is enough experience with concessions inside parks and private management of ecotourism attractions on private lands to be a base for an innovative management strategy using commercial interests.

Resource management, using local communities, is likely to be a difficult venture. Despite numerous pronouncements, local community participation in resource management decision-making and local community control of nature tourism resources has not proceeded very far. But the potential benefits (equitable distribution of tourism spending, and local acceptance of park use limitations) under local resource management are so significant that an effort should be made to find opportunities to experiment with this approach.

4.6.2.3 Integrated Resource Management Planning

An appropriate role for government is the coordination of the activities of different players in the tourism industry. Issues such as limits on the number of visitors and activities in buffer zones are often taken unilaterally without due regard for impact on other agencies and institutions. In taking Kenya for example, the Kenya Association of Tour Operators (KATO) represents only their narrow interests, while the Kenya Wildlife Service represents the interests of the wildlife. No organization represents local peoples very effectively, and certainly no effective long-range planning is taking place. Integrated planning and implementation of park management and tourism initiatives that includes all these players and has benefits accruing to each will attract the support of all the various interests necessary for a broad enough mandate and constituency to carry forward on otherwise difficult issues with the agreement (or at least consent) of all.

4.6.3 Tourism Promotion and Marketing

Governments are well advised to support international market development. Indeed, marketing and consultations with private sector tour operators are two of the key ingredients to a successful ecotourism program and are consistently left out of ecotourism planning.

The ministry or other agencies charged with tourism planning must be committed to meeting the demands of an increasingly sophisticated marketplace. Serious planning must go into designing and developing long range strategies and developmental programs. It often takes 18 to 24 months to begin developing a given market that will result in overseas tour operators including a specific destination in their itinerary. Too often this commitment is lacking. Ministry of Tourism appointments are often political and notoriously inefficient.

The Kenya Tourist Board is a classic case, in that they have put little serious effort into reaching foreign markets, and with the lifting of sanctions in South Africa and the recent improvements in Tanzania's park system and infrastructure, Kenya faces real competition in the coming years. Too often tourism boards promote local tour operators and local interests, which ignore the potential for greater gross revenues that might be achieved by reaching international operators.

4.6.4 Tourism Infrastructure Development

One of the major roles for government is establishing and maintaining the infrastructure needed to safely and efficiently handle tourism. The primary responsibilities are for airports, roads and bridges. A problem area is that all too often governments also feel compelled to provide for lodging and occasionally restaurants. With the possible exception of facilities within parks, which still should be operated under concession, most government-owned and operated facilities are money losers, providing second rate service, and should be avoided.

Plans for tourism development need to take into account how the tourists will travel to the site as well as where they will stay and eat. A range of price options is needed. Many African countries are opting for the high-end of the tourism market expecting fewer, better paying customers to ease carrying capacity concerns while maintaining cash flow. Tourists from Japan figure heavily in their plans. This may, in fact, work out but it is just as likely that several problems will arise. First, high-end tourists are quite demanding and their standards are met in only a few places. Newer ecotourism sites will need to have superior quality to capture a share of the market. Second, there is a need for greater high-end initial capital outlays for excellent food, well-trained staff and views of spectacular sites. Rarely do these come together in Africa. Perhaps a better strategy would be to focus on the larger group of mid-level travellers or try to offer a range of price options.

There are a number of ways in which governments can control the type and nature of its tourism infrastructure development: through its permitting process, by providing incentives to a particular kind of development, or by pitching its plans consciously toward a certain type of development. Inevitably planners must ensure that infrastructure needed to support a desired level and type of tourism will be in place before tourists start arriving.

5. ECOTOURISM ECONOMICS

5.1 Introduction

The literature on nature tourism is not extensive. It is a relatively new area in need of considerable research. Several publications on the subject regard nature tourism almost as a panacea for the conservation of natural resources. Others are more skeptical by pointing out some of the pitfalls -- the danger of mass tourism leading to the eventual degradation of the tourist attraction. None treat the subject matter with much economic rigor with the possible exceptions of Lindberg (1991) and Sherman and Dixon (1990). The key economic question for purposes of this study, however, has not been answered in the literature: whether tourism can support the broader goal of sustainable development, or the idea that "wildlife pays, so wildlife stays." In view of A.I.D.'s DFA mandate to spend approximately \$80 million per year on natural resources activities in Africa, A.I.D. decision makers need guidance in how to allocate these funds among competing activities.

This chapter addresses the feasibility of investments in nature based tourism from the perspectives of both the private and public sectors. What are the probable investment magnitudes and, most importantly, the probable benefit magnitudes? The literature has not addressed the "bankability" of investments in nature-based tourism in sufficient detail. This chapter describes a process planners can use to analyze tourism investments that is compatible with the analysis of other investment options. In short, the feasibility of investing in nature-based tourism should be directly comparable to the feasibility of commercial exploitation of the same proposed site, or any other investment option competing for scarce funding.

There are three major limitations to the analytical process discussed in this chapter:

- **Marketing:** in Africa today there are many potential areas where nature tourism can flourish, provided that appropriate investments are made in infrastructure, site improvements and long-term maintenance of the attraction. Such new tourism attractions, however, must compete with the old and established ones. Kenya, for example, has a long history of successfully catering to tourists making it the number one foreign exchange earning sector in the country. Innovative marketing of tourist attractions in other countries is of key importance to the financial and economic success of potential attractions. **This chapter does not address the marketing question.** The analysis must be firmly rooted in assumptions on how many visitors the park will be able to support (carrying capacity) and what the probable occupancy rate will be. The analyst will use the information provided by the marketing experts.
- **Distribution of benefits:** the emphasis is placed on identifying the overall "pool" of financial benefits from tourism. This is a process of breaking down the tourist dollar and progressively isolating the amounts leaking outside (international airfares, etc.), the

amounts staying in-country, and most importantly, the amounts spent on the site being analyzed. How this overall "pool" of benefits is distributed is not addressed in detail. A major portion of the money generated from tourism on the site being analyzed will be used to fund the recurrent costs of maintaining the tourist attraction itself (public sector), and maintaining hotels, paying staff, etc. (private sector). Once these costs are covered, any remaining excess in the public sector "account" could be used to relieve encroachment pressures from local people living adjacent to or inside the park. To ensure the financial success of the investment, it is essential that the local people receive a substantial share of the benefits generated.

- **Quantifiable information:** the missing ingredient in the literature on nature tourism is a focus on the "bottom line" -- does tourism pay? Sherman and Dixon (1990) address this question largely from the perspective of the many benefits of preserving an area that are not counted in the analyses "spreadsheet" such as watershed protection, flood control, biodiversity benefits, etc. This chapter does not address the non-quantifiable aspects of nature based tourism analytically. The process described emphasizes the bankability aspect of nature-based tourism using quantifiable information only. A project that is financially feasible based on the (quantifiable) cost and benefit assumptions employed may not need any further boosting of its attractiveness with elaborate analyses of the non-quantifiable benefits (and costs). We strongly emphasize, however, that any such non-quantifiable impacts should be identified and discussed qualitatively.

5.2 Approach

The approach taken is intended to be field oriented and pragmatic. What must an analyst for A.I.D. know in order to judge the feasibility of investing in the development of a tourist attraction as opposed to other development alternatives?

- First, the analyst must understand how tourist dollars are spent -- how much stays in the country and at the tourist sites (the tourism benefits), and how much leaks outside. This information allows determination of how much money will be made available for recurrent cost funding.
- Second, the analyst must understand the importance of carrying capacity. This is a "fluid" concept that varies with different perspectives. There may be an economic carrying capacity whereby the tourist attraction is exploited to its fullest -- perhaps mass tourism -- with the long term result that the ecological integrity of the attraction is compromised. The ecological carrying capacity may be less economically attractive in the short run as the number of tourists is limited.
- Third, the analyst must determine the direct public and private investments required in the development of the tourist attractions (capital costs). They may include investments in infrastructure (buildings, vehicles, fences, etc.), technical assistance, training, etc.

Which investments should be made by the private sector (tour companies, airlines, hotel chains, etc.) and which should be made by the public sector (donors, host countries).

- Fourth, the analyst must estimate the costs of maintaining the ecological integrity of the tourist attraction including operation and maintenance of the park and its infrastructure (recurrent costs), and investments required outside the park in rural development activities to decrease encroachment. Also included here is a discussion of the indirect costs associated with preserving an area, such as the cost of compensating farmers for crops destroyed by wildlife.
- Fifth, the analyst must confine the analysis and interpretation of the results on a site-by-site basis. While tourists may visit several sites in the same country, the challenge is to determine the portion of tourism benefits and costs applicable to the site being analyzed.

The following discussion is based on several tables (5.1 - 5.5) that progressively isolate the portion of the tourist dollar applicable to the site being analyzed -- money available to fund the operation and maintenance of the tourist attraction and to fund rural development activities outside the park to reduce encroachment pressures. **The numbers appearing in the tables are all hypothetical, used only to illustrate the analytical process.** Prospective nature tourism analysts, however, will have a complete list of variables as they appear in the tables on which quantitative information will have to be collected through questionnaires, interviews with tourists and tour operators, etc. associated with existing tourist attractions similar to the one proposed for development. Tables 5.6 - 5.13 deal with the private and public sector investments required to develop the site being analyzed. Table 5.14 addresses the employment impact of the proposed activities. Table 5.15 illustrates the process of carrying out sensitivity analyses of key variables.

5.3 Breakdown of the Tourist Dollar

The breakdown of the tourist dollar is essential in order to determine how much is spent in the host country and, more importantly, at the tourist sites. The total magnitude of these expenditures comprises the upper limit of the pool of money available for recurrent cost funding needed to ensure the sustainable integrity of the tourist attraction. In a broad sense, tourist money that remains in the country and at the site(s) are the direct economic benefits of tourism.

There are two major kinds of expenditures considered here:

- What tourists pay the tour companies for the entire tour package, and
- money spent by tourists while in country, not included in the tour package, for handicrafts, food and drink, and donations, etc.

In the majority of cases, tourists from the US, Europe, Japan, and other industrialized countries sign up for tours marketed by international tour operators. They pay a lump sum for a tour package which buys transportation, hotels, meals, entrance fees, airport taxes, tour guides, and many other services. Business people who are already in country may spend extra time as tourists signing up with local tour operators or travel on their own to the sites where they spend money on handicrafts, entrance fees, and donations.

Following are brief discussions on the breakdown of the tourist expenditures by different categories -- en route to, in-country, on site, and departure from the country. The purpose here is to identify the key expenditure categories and to isolate the percentage spent in-country, and most importantly, on the site being analyzed. Table 5.1 provides a summary of the assumptions. The numbers are hypothetical serving only to illustrate the breakdown of the tourist dollar. Actual figures can only be made available through interviews with international or local tour operators.

5.3.1 Total Cost of the Tour Package

Each tourist pays a (hypothetical) lump sum of \$4,850 during the high season (defined as April 16 - October 14 in Table 5.1). The base price is usually subject to a specified number of tourists signing up -- a minimum of 15 in this example. If fewer people sign up, some tour operators may charge more per tourist to cover costs as indicated by the surcharge of \$350. Since the group size in this example is 16 the surcharge is not applied.

The \$4,850 total price buys a 16-day tour package for an average price of \$303 per day per tourist. Of this amount, by far the most costly item is the international airfares comprising nearly 33 percent of the total cost in this hypothetical example. The tour guide accompanying the group will receive nearly five percent of the total cost. His or her share will fluctuate with the number of tourists. The international tour operator overhead (23 percent) also accounts for a substantial portion of the total cost.

In the example, net revenues for the tour company is $\$77,600 - \$74,179 = \$3,421$ per group (\$214 per tourist), or a rate of return (profit) of 4.6 percent. Following are detailed discussions of each component in the table.

5.3.2 En Route To and From Host Country

Few tours travel directly from the U.S. or Europe to and from the site. Distances are long and there will be stops along the way. For a group originating in the US, for example, there may be a one-day stopover in Paris or London complete with lodging, meals, and a sightseeing bus before continuing on towards the destination. Table 5.1 provides information on how much of the total tour cost is spent en route to and from the host country including lodging, meals, sightseeing excursions and transfers to the airport.

5.3.3 Arrival In and Departure From Host Country

In the majority of cases, international tour operators work with local or in-bound operators subject to negotiated subcontracts. Tourists pay the lump sum to the international operator who, in turn, reimburses the inbound operator for in-country costs plus overhead. In the example, the inbound operator charges an overhead of 20 percent for services rendered based on the costs incurred in country.

Having arrived in the host country, the group will spend one day in the capital city before continuing the trip to the field. Expenditures include lodging and meals and may include lump sum tourist taxes calibrated to the number of days the group will spend in the country. In the table a total of 13 days in country is assumed (1 day upon arrival + 11 days on the sites + 1 day upon departure). Also included in this category are local transportation costs, perhaps for charter flights to and from the sites, or ground transportation. Similarly, the tourists will usually return to the capital city after spending several days in the field before commencing the return trip.

5.3.4 On Sites

There are two site categories: a) the site being analyzed, and b) other sites. The reason for this breakdown should be understood. A major purpose of this study is to define an analytical framework by which USAID or host countries can consider nature tourism a viable natural resource development option. This entails the identification of potential tourist sites and determination of investment magnitudes required to eventually realize the tourism potential. The investments, therefore, are site specific. On the other hand, tourists buy a package including perhaps several sites in the same country. The analyst must estimate how much of this dollar package will be available for that one site to cover costs such as maintenance of park infrastructure, rural development activities in the buffer zones outside the park, etc., in order to analyze the feasibility of the investments.

**TABLE 5.1
BREAKDOWN OF THE TOURIST DOLLAR**

Group Size: 16 HI Seas: Apr 16 to Oct 14		Tourist	Group	Percent
International Airfare (rt)		\$1,500	\$24,000	32.4%
Tour Guide/Trip Leader		\$220	\$3,520	4.7%
Costs en route: 1 Day				
Lodging		\$50	\$800	1.1%
Meals		\$25	\$400	0.5%
Airport Taxes		\$0	\$0	0.0%
Sightsee bus: 1/day @\$100		\$6	\$100	0.1%
Transfers (transport:)		\$4	\$64	0.1%
Host Country, Arrival				
In-bound operator overhead 20%			\$4,213	5.7%
Lodging		\$40	\$640	0.9%
Meals		\$25	\$400	0.5%
Local airfare/ground transportation		\$40	\$640	0.9%
Tourist tax, total 13 days @ \$5/day		\$65	\$1,040	1.4%
On-site Being Analyzed 4 Days				
Lodging		\$35	\$2,240	3.0%
Meals		\$30	\$1,920	2.6%
Transportation \$50/day		\$12.50	\$800	1.1%
Entrance fees		\$30	\$1,920	2.6%
Local guides 2/day @\$15		\$1.88	\$120	0.2%
Porters 4/day @\$2.00		\$0.50	\$32	0.0%
Other Sites 7 Days				
Lodging		\$30	\$3,360	4.5%
Meals		\$25	\$2,800	3.8%
Transportation \$50/day		\$12.50	\$1,400	1.9%
Entrance fees		\$20	\$2,240	3.0%
Local guides 2/day @ \$15		\$1.88	\$120	0.2%
Porters 4/day @ \$2.00		0.50	\$32	0.0%
Host Country, Departure 1 Day				
Lodging		\$40	\$640	0.9%
Meals		\$30	\$480	0.6%
Airport taxes, departure		\$10	\$160	0.2%
Transfers (transport)		\$5	\$80	0.1%
En Route, Return Trip 2 Days				
Lodging		\$55	\$1,760	2.4%
Meals		\$30	\$960	1.3%
Airport taxes		\$0	\$0	0.0%
Sightseeing bus 1/day @ \$100		\$6	\$100	0.1%
International Tour Company OH 30%			\$17,118	23.1%
TOTAL COST PER GROUP			\$74,179	100%
Total no. Days: 16		Cost/day/tourist:	\$303	
TR \$4,850/tourist + surcharge of \$350 if < 15			\$77,600	
Net Revenues (profit)/group (TR minus TC)		\$3,421	4.6%	
Donations for conservation, from profits			15%	

- **Site being analyzed:** in the table it is assumed that tourists will spend a total of four days (bed nights) on the site being analyzed. Site expenditures covered by the tour package include lodging and meals, local guides and porters, local transportation and entrance fees. Isolating the fraction of the total tourist dollar spent on the site is the most important element of the analysis (as discussed in greater detail below). It entails the development of assumptions on the fractions of "generic" benefits such as tourist taxes, donations from international tour operators and the sale of educational materials, applicable to the site being analyzed.
- **Other sites:** In the table it is also assumed that the tourists will visit other sites (seven days) incurring similar expenditures. The analytical implication here is to carefully separate these expenditures from those incurred on the site being analyzed.

5.3.5 Portion of Tourist Dollar Remaining in Country

The portion of the tourist dollar that remains in country includes everything in Table 5.1 except international airfares, tour guide trip leader salary, costs incurred en route to and from the country, and the international tour operator overhead.

A summary of expenditures in the host country divided between off site (in the capital city), on site (the site being analyzed) and other sites, covered by the tour package is provided in Table 5.2. They include lodging and meals, local transportation, local guides and porters, airport taxes, tourist taxes, entrance fees, donations from the international tour operators (if the tour is profitable), and overhead collected by the in-bound tour operator.

In addition to the costs covered by the tour package, tourists will also spend money on souvenirs and handicrafts, in bars and restaurants off as well as on the site, for education materials, and sometimes give donations for conservation purposes. These latter expenditures should be added to those covered by the tour package for a grand total for each group. For example, it is estimated that each tourist will spend an average of \$20 for souvenirs and handicrafts on the site being analyzed (based on tourist spending behavior in other similar areas).

TABLE 5.2
SUMMARY - TOTAL EXPENDITURES PER TOURIST HOST COUNTRY

Cost Categories	On-site Analyzed	Other Sites	Capital City
Public sector, through tour operator			
Tourist taxes	NA	NA	\$65
Entrance fees	\$120	\$140	NA
Donations: international operators	NA	NA	\$32
Airport taxes	NA	NA	\$10
Private sector, through tour operator			
Lodging and meals	\$260	\$385	\$135
Transportation	\$50	\$88	\$45
Local guides and porters	\$9.50	\$10	NA
In-bound operator OH	NA	\$NA	\$263
Subtotal	\$440	\$622	\$550
Other Exp./Tours not through operator			
Souvenirs/handicrafts	\$20	\$30	\$35
Donations	\$10	\$20	\$0
Bars/restaurants	\$25	\$40	\$35
Educational materials	\$10	\$20	\$10
Subtotal, Additional expenditures	\$65	\$110	\$80
Grand Total Per Tourist	\$505	\$732	\$630
% of Total Tourist Dollar	10.4%	15.1%	13.0%
GRAND TOTAL			
Percentage of Tourist \$ Remaining in Country			38.5%

The total amount of money remaining in the country per group is summed at the bottom of Table 5.2, by the site analyzed, other sites and the capital city. In our hypothetical example, this amounts to a total of nearly 39 percent of the tourist dollars per group (10.4 + 15.1 + 13.0 percent).

Next, the crucial question is: how much of the estimated \$505 spent on the site per group (from Table 5.2) can be counted on as a funding source for the preservation of the park? In Table 5.3 we obtain an estimate of \$60.48 per tourist, representing less than 1.5 percent of the total amount collected by the international tour operator, given the assumptions (Table 5.1) plus additional expenditures made by the tourists (Table 5.2). This figure is composed of revenues generated from two sources -- public and private. Revenues generated through the public sector include tourist taxes (if applicable) collected upon arrival in the country, entrance fees to the park(s), donations for conservation purposes made by tourists, donations made from profits by the international tour operators, and proceeds from the sale of general conservation/education materials. All of these revenues may go into a general fund and then be

earmarked for specific parks. Revenues generated through the private sector are comprised of contributions from hotels, lodges, etc. in the form of a fixed percentage of the profits generated. The process of deriving the \$60.49 figure is summarized below:

- For the public sector, divide the total revenues (column 1) between the two sites visited by the tourist. Thus, the \$65 collected in the form of tourist taxes is divided by the number of sites visited (3) for a total of \$22 applicable to the site being analyzed. The sharing of revenues between sites in the country may also be weighted according to the geographical size of the sites, and their relative needs for recurrent cost funding.
- Apply the percent earmarking of the revenues as appropriate. Thus it is assumed, for example, that of the tourist taxes collected, a percentage (five percent in this case) will be earmarked for the site being analyzed ($\$22 \times .05 = \1.10 per tourist). Donations from the international tour operators and proceeds from the sale of educational materials are derived in a similar fashion. It is assumed, in this example, that 100 percent of the entrance fees and donations collected on the site is eligible for recurrent cost funding.
- For the private sector, the fraction applicable to lodging and meals on the site (10 percent in the example) is a percentage applied to the **margin between cost of providing these services and what the tourists pay**. For example, if the room and meals cost a total of \$65 per day per tourist (as in Table 5.1), and that this price includes a 25 percent profit margin to the hotel operator (see also Table 5.9), the 10 percent earmark in Table 5.3 is computed as follows: $\$65 \times .25 \text{ percent} \times .10 \text{ percent} = \1.62 per tourist per day $\times 4$ days on site = \$6.48 per tourist. The same procedure applies to the souvenir and handicraft category.

The fractions to earmark for different parks and from different revenue sources are policy decisions. The total revenues on an annual basis depends, again, on the carrying capacity of the site, which is discussed below in Section 5.4.

The difference between the \$505 (Table 5.2) and \$60.48 (Table 5.3), is money spent on in-bound operator overheads, salaries for the tour guides and porters, transportation, etc., money not used or earmarked for conservation purposes. There will be a multiplier effect in the local economy as a result of the infusion of this money, however, as people previously un- or under employed, now gainfully employed, will have money to spend. This

TABLE 5.3
PORTION OF TOTAL EXPENDITURES PER TOURIST
ON-SITE ELIGIBLE FOR RECURRENT COST FUNDING

	Total /Tourist	Avg. Exp. Per Site	% of Avg. Earmarked	Total Per Tourist
Number of Sites Visited Through the Public Sector	3	NA	NA	NA
Tourist taxes	\$65	\$22	5.0%	\$1.10
Entrance fees	\$120	\$40	100.0%	\$40.00
Donations by tourists	\$30	\$10	100.0%	\$10.00
Donations: int. operators	\$32	\$11	10.0%	\$1.10
Education materials	\$10	\$3	10.0%	\$0.30
Through the Private Sector				
Lodging, meals on sites	\$260	NA	10.0%	\$6.48
Souv/handicrafts on site	\$20	NA	15.0%	\$1.50
TOTAL				\$60.48
% of total tourist dollar				1.23%

will, in turn, enhance the overall economic well-being in the area. Estimation of the magnitude of this multiplier effect is beyond the scope of this study, however, Table 3 includes revenue categories not spent directly for services to the tour group such as general tourist taxes and donations by the tour operators.

5.4 Carrying Capacity

The concept of carrying capacity is essential to this study. It is a "fluid" concept in the sense that it is defined differently by different interest groups. It is important to distinguish between the interests of donors and host countries, for example. A.I.D. has a mandated concern for the preservation of biodiversity and thus will tend to define carrying capacity with respect to the ecological limitations of the site; i.e., placing strict limits on the number of visitor days so as to preserve the integrity of the natural resource base. Host countries may tend to be more favorably inclined towards mass tourism to maximize the generation of foreign exchange, knowing perhaps that this strategy will gradually destroy the natural resource base. Their argument could be that increased economic well-being in the country will, in the long run, do more for the environment in the country as a whole.

Also important to take into account is the propensity on the part of different interest groups to use their version of carrying capacity to justify the protection of an area. For example, they may define carrying capacity to be 100,000 visitor days per year translating into an expected net revenue flow of \$X million per year. Realistically, however, the maximum number of visitor days may not exceed 5,000 per year for a variety of reasons -- not enough

hotel space in the capital city en route to the site, poor in-country transportation facilities, political instability in the country, etc.

Both perspectives must/should be reconciled. USAID cannot support something that is contrary to host country policy. The host country cannot expect to receive any support for activities contrary to DFA mandates. There must be a clear understanding of the issues to foster collaboration.

Lindberg (1991) discusses three kinds of carrying capacity -- ecological, tourist, and host social:

- **Ecological carrying capacity** of a site is the "...level of visitation beyond which unacceptable ecologic impacts will occur, either from the tourists or from the amenities they require." The unacceptable ecologic impacts are manifest in changed behavior of resident wildlife, disappearance of certain species, soil erosion, etc.
- **Tourist social carrying capacity** is the "...level beyond which visitor satisfaction drops unacceptably from overcrowding."
- **Host social carrying capacity** is the "...level beyond which unacceptable change will be caused to local cultural stability and attitudes toward tourists."

All of these definitions should be considered before deciding what the ultimate carrying capacity should be. The temptation will always be there to choose the option with the highest economic return. Suppose the maximum sustainable carrying capacity of the park is 100,000 visitor days per year in accordance with the above definitions corresponding to an internal rate of return (IRR) of 15 percent. Suppose further that another study shows an IRR of 30 percent based on 150,000 visitor days per year, far exceeding the sustainable carrying capacity. Which scenario will the government opt for? The former is calibrated to the sustainable management of the park, the latter will cause the resource base to gradually deteriorate over time until it ceases to be a tourist attraction.

Many developing countries with chronic foreign exchange shortages will opt for the latter scenario, realizing that the natural resource base will gradually deteriorate, unless the donor conditions the disbursement of funds on not exceeding the sustainable carrying capacity.

5.5 Total Amount Available For Recurrent Cost Funding

Ideally, tourism should generate enough local benefits to be able to cover all costs associated with operating and maintaining the tourist attraction. All investments in the development of the site (discussed in Section 5.6 below) will have recurrent cost implications. The benefits from tourism should (ideally) cover these costs.

Returning to the hypothetical example discussed above (Tables 5.1 - 5.2), attention is next focused on the total revenues generated on the site yearly, given an assumed carrying capacity of 5,000 visitor days per year and an occupancy rate of 80 percent (Table 5.4). The 5,000 visitor days carrying capacity is very important in that it defines the upper limit of the economic potential of the site. The limit is essentially defined through policy where host country decision makers receive advice on the ecological, tourist and host country social carrying capacities from the experts, and decide accordingly. For purposes of the analysis it is assumed that the 5,000 visitor days is defined on the basis of the ecological carrying capacity, and that it reflects the maximum use of the site in terms of geographical access points.

**TABLE 5.4
CARRYING CAPACITY ASSUMPTIONS**

Total visitor days per year	5,000		
Rate of occupancy per year	80%		
Total expenditures per year	Site Analyzed \$2,020,000	Other Sites \$2,928,000	Capital City \$2,520,000

A note of explanation is required here. The 5,000 visitor days may reflect only the "market share" of the total carrying capacity of the entire park. Suppose a potential tourist attraction has been identified consisting of a geographical area of, say 150,000 hectares. The planning and management of the development of this area for tourism are two very important factors. Determination of the maximum sustainable carrying capacity of the area requires careful planning of geographically separated access points and placement of tourist facilities so as to avoid excessive contacts between different groups visiting the park at the same time. In this sense, the total carrying capacity for the park may be 100,000 visitor days evenly spread during the year, of which the "market share" for the site analyzed may be only 5,000 per year. The management of the park and tourist infrastructure entails a tight control over the number of permits issued to build lodges or operate tours in the park. The investments in tourism facilities should be calibrated to the sustainable carrying capacity of the park.

Total revenues (tourist expenditures) per year in the host country by the site analyzed, other sites and in the capital city, can be derived given the sustainable carrying capacity assumptions. For example, the \$505 expenditures on the site being analyzed per group from Table 5.2 times 5,000 visitor days per year from Table 5.4 times 80 percent occupancy rate also from Table 5.4, equals \$2,020,000. The same process applies to the expenditures on other sites and in the capital city.

Finally, we have arrived at the "pool" of money -- tourism revenues -- made available each year to defray the public sector recurrent costs of sustaining the tourist attraction, given the assumptions (Table 5.5). These costs (discussed in Section 5.7 below) include trail improvement

and maintenance, salaries for rangers, vehicles and, most importantly, to fund rural activities outside the park to reduce encroachment pressures. The next question is whether the "pool" of \$241,943 per year is sufficient to cover all of the recurrent costs of maintaining the park. This question is also addressed below.

5.6 Required Investments: Private Sector

The analyst should distinguish between private and public sector investments. Private entrepreneurs will invest in revenue generating infrastructure and activities such as lodges, the provision of local guides and porters and vehicles for the tourists. Donors and the host country may have to "package" the private investments with support in the forms of the construction of interpretation or education centers, training of additional park rangers, provision of vehicles for the rangers, and technical assistance, extension and training for the local population in the buffer zones and inside the parks, etc. In this sense, the private and public sectors will form a "partnership" sharing the costs of maintaining a viable tourist attraction. The private sector investments in the site being analyzed are summarized in Table 5.6. As before, all numbers are hypothetical, intended only to illustrate the analytical process.

Private investors are motivated largely by profits. Although environmentalists, biologists, ecologists and others may have the very best of arguments in support of preserving an area, they will carry little weight in the end unless there is something "in it" for the private sector. If a viable tourist attraction is to be developed, the private sector must be a full partner. It is generally not the business of the government to run hotels or (low impact) lodges or wine and dine tourists who visit the park. These activities should be carried out by the private sector. The business of the government is to make investments in maintaining and operating the publicly owned parks and natural resources. Without adequate facilities developed for tourists inside or adjacent to the parks, tourists will not come and revenues needed to preserve the park will not be generated. If the private sector invests in and maintains hotels, lodges and other infrastructure, but the government does not adequately maintain the park, the attraction will fade away and progressively fewer tourists will come. Both the public and private sectors will have to uphold their ends of the partnership bargain.

TABLE 5.5
PORTION OF TOTAL EXPENDITURES/YEAR ON
SITE ELIGIBLE FOR RECURRENT COST FUNDING

	TOTAL PER YEAR
Through the Public Sector	
Tourist taxes	\$ 4,333
Entrance fees	\$160,000
Donations by tourists	\$40,000
Donations: international operators	\$ 4,276
Education materials	\$ 1,333
Through the Private Sector	
Lodging and meals on site	\$26,000
Souvenir and handicraft sales	\$ 6,000
TOTAL	\$241,943
Real Appreciation Rate Over Time	0.0%

5.6.1 Fixed Facilities: Land, Buildings, Lodges

The category labeled "fixed facilities: land, buildings, lodges" in Table 5.6 provides an overview of the kinds of infrastructure investments to be made by the private sector. They include the acquisition of land needed for the construction of lodges or hotels, perhaps a "bush" garage, a storage building, and an airstrip for small aircraft. All of the buildings will have to be maintained and resupplied (room furniture, linens, restaurant supplies, etc.) over time, expressed in the table as a percentage of the initial investment. In addition, investments are also made in fencing and gates around the tourist compound, which is, again, subject to maintenance over time. Also included is an estimate of the cost of utilities per month. The list is not exhaustive, only illustrative.

The investments should be calibrated to the carrying capacity of the park applicable to the site being analyzed. If, for example, the total carrying capacity is 100,000 visitor days and, if park planners have identified 10 convenient geographical access points and lodge sites, then each lodge site will have a defined "market share" of X visitor days per year (as discussed above). Suppose the average market share for each site being analyzed is 5,000 visitor days per year. This translates into an average need for 13.7 beds/rooms per lodge. The turnkey cost of construction (including furniture, bedding, kitchen appliances, etc.) is \$600 per m², or a total of nearly \$165,000 for the facility assuming a space requirement of 20 m² for each room (including corridors, bathrooms, and common areas, etc.

**TABLE 5.6
PRIVATE SECTOR INVESTMENTS**

Fixed Facilities: Land Buildings, Lodges etc.			Yr 0	Yr 1-n
Land acquisition	5 Ha @ \$600		\$ 3,000	
Building construction	<u>Cost/m2</u>	<u>M2 needed</u>		
Lodge(s) 14 beds/turnkey	\$587	20/bed	\$164,384	
Bush garage	\$150	150	\$22,500	
Storage	\$150	130	\$19,500	
Maintenance/supply/yr				\$16,511
Utilities (electricity, etc.)	\$350/mo			\$4,200
Other construction	<u>Cost/m</u>	<u>M needed</u>		
Private air strip	\$200	800	\$160,000	
Fencing and gates	\$50	700	\$35,000	
Maintenance/yr	5% of init. inv./yr			\$9,750
Temporary Facilities				
Tents (turnkey)	6 @ \$0		\$0	
Replacement/year	0% beg. yr 0			\$0
Generators	0 @ \$0		\$0	
Replacement/year	0% beg. yr 0			\$0
Hot water tubing	0 m @ \$0		\$0	
Utilities (electricity, etc.)	\$0/ mo			\$0
Procurement				
Vehicles		<u>Gal/Yr</u> <u>\$/Gal</u>		
4WD	4 @ \$15,000	1,000 \$3.50	\$60,000	\$14,000
Motorbikes	5 @ \$2,000	150 \$3.50	\$10,000	\$2,625
Bicycles	2 @ \$200		\$400	
Maintenance of above	5% of init. inv./yr			\$3,520
Replacement/year	6% beg. year 4			\$4,224
Labor				
Guides	1 per 8 tourists \$15/day (250 days/yr)			\$7,500
Porters	1 per 4 tourists \$2 /day			\$2,000
Laborers	5 @ \$2.00/day for 360 Days			\$3,600
Hotel staff	10 @ \$30/day for 360 Days			\$108,000
Drivers	4 @ \$15/day for 360 Days			\$21,600
Training				
Guides	25 Days @ 2 instr. @ \$225/day		\$11,250	
Porters	2 Days @ 1 instr. @ \$50/day		\$100	
Laborers	2 Days @ 1 instr. @ \$50/day		\$100	
Hotel staff	10 Days @ 2 instr. @ \$225/day		\$4,500	
Retrain/yr	5% beg. year			\$798
TOTAL			\$490,734	\$198,327
Loan Rate	11.0% 10 Years 2 years Grace			25% Equity
Real materials cost appreciation rate				0.000%
Real labor cost appreciation rate				0.000%
Discount rate				15.00%

5.6.2 Temporary Facilities, Vehicles, Labor

An alternative to the fixed facilities -- permanent hotels or lodges -- is provision of more rustic temporary facilities in the form of tents and bedding, and the provision of hot water and electricity. All temporary equipment will eventually have to be replaced. As indicated in the table, however, temporary facilities are envisioned in this example.

Lodge operators may procure several vehicles to transport tourists inside the park to the observation sites. Laborers may need motorcycles or bicycles. Again, all vehicles will have to be maintained and eventually replaced as indicated in the table.

Local workers hired through the private sector (the lodge operators) include trained nature guides, porters (if the tourism experience requires considerable hiking), general laborers to maintain the lodge grounds, and hotel staff such as managers, cooks, maids, etc.

5.6.3 Training

During start-up, all staff will have to receive some form of training. Local guides will have to receive fairly rigorous training in how to conduct on-site tours, where to go, what to point out, when during the day tourists should observe certain events, etc. Laborers and porters should also receive some minimal training. Hotel staff may also need training in catering to the standards required by international tourists. Retraining costs should also be factored in where appropriate.

5.6.4 Financing

Private investors will usually put up some equity to demonstrate serious commitment to the proposed investments, and seek bank financing for the rest. A 25 percent equity position is assumed in Table 5.6. Table 5.7 shows the debt servicing over time given the assumptions where borrowers pay off the loan over a 10-year period following the two-year grace period during which only interest is paid. The total debt to service is \$368,050, or 75 percent of the \$490,734 total capitalization required in year 0 (from Table 5.6). The total annual payment required will amount to \$71,520 (interest and principal) taking into account the two years grace period and 10-year pay-back period.

5.6.5 Real Cost Appreciation Rates

The right column of Table 5.6 shows the investments to occur in the future, between years 1 and n. Assumptions must be made as to the probable behavior of these costs over time in real terms. Real rates are not disturbed by the influence of inflation. For example, although the cost of an input may have increased nominally by 10 percent per year, its real cost will actually have declined if the average rate of inflation during the same time period was higher than the average nominal cost increase.

**TABLE 5.7
DEBT SERVICING**

Int.	11.00%	Repay/yr	\$71,520
Year	Interest	Principal	Remaining Balance
0	0	0	\$368,050
1	40,486	0	\$368,050
2	40,486	0	\$368,050
3	40,486	31,034	\$337,016
4	37,072	34,448	\$302,568
5	33,282	38,237	\$264,330
6	29,076	42,444	\$221,887
7	24,408	47,112	\$174,774
8	19,225	52,295	\$122,480
9	13,473	58,047	\$64,432
10	7,088	64,432	\$0

The materials and labor cost appreciation (or depreciation) rates reflect any real increases or decreases over time. Over a long time period (20 years) any real increase may have a substantial impact on the feasibility of the proposed investments. If real costs increase faster than real prices, for example, feasibility will be more difficult to attain. In our example (Table 5.6) we assume that neither materials or labor costs will increase in real terms over time. Analysts should look carefully at available statistics in the country (relevant price and cost indices, etc.) to determine if the projection of real cost and prices into the future is warranted.

5.6.6 Discount Rate

A key element for the analysis is which discount rate to use. A discount rate allows the analyst to express future costs and benefits in present value terms so that alternative development options can be easily compared. Low discount rates generate high net present values (NPVs), and high rates generate low NPVs.

The discount rate has three basic elements: a) the percentage rate when there is basically no risk, b) inflation rate, and c) a risk factor. What is most often referred to as the opportunity cost of capital is composed of the riskless plus inflation rates. Discount rates can be varied for different individuals or institutions by adjusting the risk factor. In the example, a 15 percent rate is assumed for both the private and public sectors. Private sector investors in tourism projects tend to be financially strong (airlines, hotel chains, large tour operators, etc.) with large and diversified investment portfolios. For the public sector (the government), the situation is similar where the risks can be spread over a diversified investment portfolio.

5.6.7 Summary of Investment Costs and Benefits: Private Sector

Tables 5.8, 5.9 and 5.10 summarize the private sector investments and benefits over a 20-year period. Table 5.8 derives its numbers from the right column of Table 5.6 which shows all costs to be incurred in the future, by investment categories. Table 5.9 provides an overview of the benefits anticipated to accrue to the private sector as a result of the investments. The lodge with 14 beds (Table 5.6) will generate room and meal benefits of \$260 per tourist (\$65 x 4 days, see Table 5.1) given the assumptions, \$50 worth of transportation, \$10 worth of guide and porter services and \$20 from souvenir and handicraft sales per tourist (from Table 5.2). The profit margins for each of these revenue categories, less what has already been committed for conservation purposes (see Table 5.3) equals the net revenues accrued to the lodge owners (the private sector) -- a total of \$93 per tourist, or approximately \$372,000 per year given the assumptions made in Table 5.4. These revenues could also be subjected to a real increase over time if so warranted. Table 5.10 summarizes everything into a net cash flow (NCF) statement - - total benefits minus total costs -- which generates a "bottom line" estimate of the NPV of \$442,238 and an IRR of 29 percent. This result indicates feasibility since the NPV is positive and the IRR exceeds the 15 percent opportunity cost of capital assumed in this example.

5.7 Public Sector Investments

Table 5.11 summarizes the public sector investments required for the development of the tourist attraction. The private sector is upholding its end by investing in tourism infrastructure - - lodges, etc. -- now the public must invest in the park itself to make the park a viable tourist attraction. Following are brief discussions on the different investment categories. The list is not exhaustive, only illustrative.

5.7.1 Fixed Facilities

The public sector may also have to invest in fixed facilities, particularly in non-revenue generating facilities. They may include tourist or nature interpretation center as warranted, ranger stations, improved road access and fencing and gates where needed. In addition, provision must be made in the budget for utilities (electricity, water, etc.) for all structures built as well as building maintenance.

TABLE 5.8
SUMMARY INVESTMENT COSTS, PRIVATE SECTOR

Year	Facilities		Vehicles	Labor	Training	Debt Service ^(a)	TOTAL
	Fixed	Temporary					
0	404,384	0	70,400	0	15,950	0	490,734
1	30,461	0	20,145	142,700	0	40,486	233,791
2	30,461	0	20,145	142,700	0	40,486	233,791
3	30,461	0	20,145	142,700	798	40,486	234,589
4	30,461	0	24,369	142,700	798	37,072	235,399
5	30,461	0	24,369	142,700	798	33,282	231,610
6	30,461	0	24,369	142,700	798	29,076	227,404
7	30,461	0	24,369	142,700	798	24,408	222,735
8	30,461	0	24,369	142,700	798	19,225	217,552
9	30,461	0	24,369	142,700	798	13,473	211,800
10	30,461	0	24,369	142,700	798	7,088	205,415
11	30,461	0	24,369	142,700	798	0	198,327
20	30,461	0	24,369	142,700	798	0	198,327

^(a) Taken from Table 5.7

TABLE 5.9
PRIVATE SECTOR BENEFITS PER TOURIST

	TR	MARGIN	DONATED	NR
Lodging and meals	\$260	25%	\$6.48 ^(a)	\$58.50
Transportation	\$50	50%	NA	\$25.00
Local guides and porters	\$10	10%	NA	\$1.00
Souvenir/handicraft sales	\$20	50%	\$1.50 ^(a)	\$8.50
TOTAL Per Group			\$340	\$93
TOTAL Per Year				\$371,800
Real Price Appreciation Rate Over Time				0.0%

^(a) Taken from Table 5.3

TABLE 5.10
NET CASH FLOWS, PRIVATE SECTOR

YEAR	Total Benefits	Total Cost	Net Cash Flow
0	0	490,734	(490,734)
1	371,800	233,791	138,009
2	371,800	233,791	138,009
3	371,800	234,589	137,211
4	371,800	235,399	136,401
5	371,800	231,610	140,190
6	371,800	227,404	144,396
7	371,800	222,735	149,065
8	371,800	217,552	154,248
9	371,800	211,800	160,000
10	371,800	205,415	166,385
11-20	371,800	198,327	173,473
NPV			442,238
IRR			29.0%

5.7.2 Improvements

In the park itself, the public sector must invest in necessary park improvements. Hiking trails should be carefully planned, for example, to minimize ecological damage, maximize the quality of the tourist experience, and to minimize interactions between different tour groups in the park at the same time. In addition to the trail improvements, provision must also be made for sanitary facilities, garbage disposal, clean water supplies, medical kits at convenient rest stops along the trails, plus annual maintenance.

5.7.3 Labor, Training and Vehicles

The administration of the park will require personnel including rangers to police park activities and collect entrance fees, and laborers to maintain the trail and the park infrastructure. Personnel will have to be trained and subsequently retrained over time. The personnel will also require some means of transport to carry out their activities -- 4 wheel drives, motorbikes, and/or bicycles, all of which must be maintained and eventually replaced, as assumed in the table.

5.7.4 Indirect Costs

The majority of nature tourism attractions in Africa are wildlife based. It is certain, however, that wildlife will migrate outside the park boundaries and often cause substantial damage to crops and livestock on adjacent private farms. This damage must be compensated as included in Table 5.11. Analysts must estimate the number of hectares of crop land at risk

in the area adjacent to the park and the percentage of the crops likely to be destroyed per year. To evaluate the economic losses, the analyst must know which crops are grown, their yields and their prices. The estimate made in the table indicates that a sum of at least \$25,000 will have to be budgeted each year to compensate for crop and livestock damages likely to occur.

5.7.5 Investments Outside the Park

What will it cost to maintain the integrity of the tourist attraction, to ensure that it is not overused and gradually depleted over time? This can become a very complex process because it involves local people and the extent to which they depend on the park for their livelihoods. For example, how many people or households live inside the park or outside but directly adjacent to it, and to what extent do they depend on the park for their livelihood. If the current (encroachment) wood offtake (for fuelwood and poles) is 15 m³/ha/year and the sustainable offtake is only 5 m³/ha/year, we are losing ground by 10 m³/ha/year. Perhaps continued sustainable harvest in the area may be permitted -- i.e., the 5 m³/ha/year -- but alternatives will have to be provided to make up for the 10 m³/ha/year local people can no longer harvest.

The provision of alternatives costs money. Alternatives may include direct monetary compensation and/or the provision of technical assistance (TA) to help encroaching farmers produce enough for their own needs outside the park. If fuelwood shortage is the problem, alternatives may be to increase fuelwood production outside the park by way of community woodlots, or by way of agroforestry schemes. Or, if the area adjacent to the park is erosion prone because of poor farming practices, investments will have to be made on erosion control measures (windbreaks, contour dikes, etc.) outside the park to protect the resources inside the park. Technical assistance and extension agents will be required to accomplish objectives such as these. Other TA may be required to teach local people how to benefit economically from the influx of tourists -- make handicrafts and souvenirs, etc, for example.

**TABLE 5.11
PUBLIC SECTOR INVESTMENTS**

				ON SITE ANALYZED	
				Yr 0	Yr 1-3
Fixed Facilities: Land Buildings, Lodges etc.				\$0	
Land acquisition	0 Ha @ \$0				
Building construction	<u>Cost/m²</u>	<u>M² needed</u>	\$60,000		
Tourism centers	\$240	250	\$22,500		
Ranger stations	\$150	150		\$3,300	
Building maintenance/yr	4% of init. inv.			\$8,400	
Utilities (electricity, etc.)	\$700/mo				
Other construction	<u>Cost/Km</u>	<u>Km. needed</u>	\$240,000		
Road access	\$17,000	20	\$10,000		
Fencing and gates	\$50	200			
Maintenance/yr	5% of init. inv./yr			\$12,500	
Improvements					
Trail improvements	100 km @ \$50		\$5,000		
Trail toilets	5 @ \$300		\$1,500		
Garbage disposal	5 @ \$100		\$500		
Water supplies	5 @ \$500		\$2,500		
Medical kits	2 @ \$150		\$300		
Tool Kits	3 @ \$250		\$750		
Maintenance of above	5% of init. inv./year			\$490	
Vehicles					
	Ltr/Yr \$/Ltr				
4WD	10 @ \$15,000	1,000 \$3.50	\$150,000	\$35,000	
Motorbikes	2 @ \$2,000	150 \$3.50	\$4,000	\$1,050	
Bicycles	3 @ \$200		\$600		
Maintenance of above	5% of init. inv./yr			\$7,730	
Replacement/year	10% beg. year 4			\$15,460	
Labor					
Rangers	2/ranger station @ \$20/day			\$14,600	
Laborers	3/ranger station @ \$2.00/day			\$2,190	
Training No. Sites in Park Requiring Inv. 10					
Rangers	10 days @ 2 instr. @ \$500/day		\$1,000		
Laborers	2 days @ 1 instr. @ \$60/day		\$12		
Retrain/yr	25% beg. year 3			\$253	
Indirect Costs					
		Subsist. Crops	Cash Crops	Real Price	
Ha prone to WL damage		1,000	800	Apprec.	
% est. destruct. by WL		3%	2%	Rate	
Avg. yields/ha/year		750	1,300		\$25,470
Avg. farm gate price/kg		\$0.30	\$0.90	0.0%	
Other Investments Outside the Park (rur. dev. etc.)					
TA	3 Yrs @ \$15,000			\$4,500	
Ext. agents	20 @ sal/mo \$200 5 Yrs			\$2,000	
Bicycles	20 @ \$200			\$400	
Replacement/yr	10% beginning year 3			\$4	
Agent trng	30 days @ 2 instr. @ \$500/day			\$3,000	
TOTAL				\$502,072	\$132,947

The investments listed in Table 5.11 consist of the provision of TA and extension agents to meet a multitude of different rural development needs in the areas adjacent to the park. The

example assumes that 20 extension agents will be needed to cover the critical area outside the park. If there are 10 sites in the park (Table 5.11), the investments applicable to the site being analyzed for the TA and extension agents components respectively, are derived as follows:

- 3 years of TA x \$15,000 = \$45,000/10 sites = \$4,500
- 20 extension agents x \$200/mo x 5 years = \$20,000/10 sites = \$2,000

In addition, the extension agents will need transportation, perhaps bicycles, which need replacing over time, and they will need training in appropriate extension techniques. These have also been prorated among the 10 sites in Table 5.11.

The public sector may also have to make investments away from the sites (not in Table 5.11). Tourism cannot be an island of efficiency in a generally inefficient economy. The efficiency of other sectors must also be upgraded, otherwise bottlenecks will develop. For example, an efficient local transportation system, availability of power, clean water, etc. must be assured in the tourism package offered. The fact that all facilities inside or adjacent to the tourist attraction itself may be in tip top condition means little if tourists cannot get there without major difficulties. Potential bottlenecks en route to the tourist attraction must be identified and addressed.

Tourist attractions are relative. It is important to know which factors are important to potential tourists. If the attraction is wildlife viewing, Kenya, Tanzania and Botswana are formidable competitors with well developed facilities and experience that caters to the welfare and comfort of tourists. The infrastructure is in place, guides are well trained, and the countries have a reputation for being tourist oriented. Uganda, for example, may have natural resources judged to be potentially attractive for tourism. But, in the minds of many potential tourists, Uganda means Idi Amin, AIDS, and political instability. Further, investments may have to be made not only in the tourist site(s), but in breaking down the "reputation barriers" as well as in upgrading facilities en route to the site(s).

5.7.6 Summary of Investment Costs and Net Cash Flows: Public Sector

The public sector investments and net cash flows (benefits minus costs), as assumed in Table 5.11, are summarized in Tables 5.12 and 5.13 respectively. The figures appearing in Year 0 are the initial investments needed for infrastructure, vehicles, etc. amounting to approximately \$502,000. The figures appearing in subsequent years reflect operating (or variable) costs for the maintenance and replacement of procured items (vehicles, etc.), retraining of personnel, the indirect costs associated with damages caused by wildlife encroaching on private farms adjacent to the park, and rural development investments outside the park for the five years assumed in Table 5.11.

The total cost column in Table 5.12 is reproduced in Table 5.13. The total benefits (TB) column is taken from Table 5.5. Together, TB minus TC equals the net cash flow (NCF) which

is subjected to the NPV and IRR calculations. The end result indicates feasibility since the NPV is positive given the assumed discount rate and the IRR is higher than the assumed discount rate. In other words, the project should be an attractive proposition for the government, all else being equal.

The results obtained here describe only the financial feasibility of the proposed investments from the public sector perspective. The differences between economic and financial feasibility are discussed in Section 5.9 below.

TABLE 5.12
SUMMARY INVESTMENT COSTS, PUBLIC SECTOR

Yr	Facilities		Vehicles	Labor & Training	Indir. Costs	Other Investm.	Total
	Fixed	Improve					
0	332,500	10,550	154,600	1,012	0	3,400	502,062
1	24,200	490	43,780	16,790	25,470	6,500	117,230
2	24,200	490	43,780	16,790	25,470	6,500	117,230
3	24,200	490	43,780	17,043	25,470	6,504	117,487
4	24,200	490	59,240	17,043	25,470	2,004	128,447
5	24,200	490	59,240	17,043	25,470	2,004	128,447
6-20	24,200	490	59,240	17,043	25,470	4	126,447

TABLE 5.13
NET CASH FLOWS, PUBLIC SECTOR

Year	Total Benefit	Total Cost	Net Cash Flow
0	0	502,062	(502,062)
1	241,943	117,230	124,713
2	241,943	117,230	124,713
3	241,943	117,487	124,456
4	241,943	128,447	113,496
5	241,943	128,447	113,496
6 - 20	241,943	126,447	115,496
NPV			239,603
IRR			23.4%

5.8 Employment Impact: Private and Public Sectors

The impact of the project on local employment is an important variable in the decision making process. The employment estimate presented in Table 5.14 is based on the assumptions given in Tables 5.6 and 5.11, the private and public sector investments respectively. Each table has a section on labor assumptions including categories of labor (guides, porters, general laborers, hotel staff and rangers), their anticipated salaries and periods of employment per year. Based on these assumptions there will be 8,340 private sector work days plus 1,800 public sector work days provided per year, divided by 260 workdays = 52 full time equivalent (FTE) work years.

**TABLE 5.14
EMPLOYMENT IMPACT**

	<u>No. Workers</u>		<u>Days Work/Year</u>	
	Private	Public	Private	Public
Guides	2	0	1000	0
Porters	4	0	4000	0
Laborers	5	3	1800	1080
Hotel staff	10	0	3600	0
Rangers	0	2	0	720
Drivers	4	0	1440	0
Total			11840	1800
1 work year =	260 Days =		Total FTE years	
				52

Table 5.14 does not include other employment generated as a result of the project but not directly associated with it. For example, several handicraft operations may spring up as the influx of tourism increases. As the economic well-being of the region increases, more people may find gainful employment.

5.9 Analysis and Interpretation of the Results

5.9.1 Economic and Financial Analysis

Will the pool of money identified in Table 5.5 be sufficient to cover the public investments identified above? In that table we identified the magnitude of the available funding to be a total of \$241,943 per year. This is what the tourists pay. But, this is not the sum total of benefits provided through tourism. There is also the many other benefits that accompany the preservation of a natural resource -- watershed protection values such as erosion control, flood control, ecological enhancement such as fixing and cycling of nutrients, soil formation, cleansing

of air and water, biodiversity protection, education and research, consumptive benefits such as timber, wildlife, etc., non-consumptive benefits such as aesthetic, cultural, existence value, and future values such as option value, etc. (Dixon and Sherman, 1990). These values should be included in the economic analysis of the project.

Dixon and Sherman (1990) emphasize the need to carry out both economic and financial analysis. Financial analysis is most important from the perspective of the investor. However, financial analysis leaves out many important factors that are not bought or sold. "Many of the benefits of conserving natural areas are difficult to measure and are not exchanged in markets and, consequently, the value of conserving, rather than developing, an area is often underestimated in a financial analysis. This leads to a bias toward development and exploitative use of an area." The inclusion of such non-market values should be in quantified form, if possible, and added to Table 5.5 -- the estimate of benefits to be used for conservation purposes. Thus, if we can estimate that the project will be responsible for a reduction in soil erosion of X tons per hectare per year, we can also estimate the economic impact this will have in terms of reduced siltation into a downstream reservoir. Such effects should be included in the economic analysis. Effects that cannot be quantified should be described and discussed qualitatively.

In the economic analysis, analysts must also apply shadow prices in Table 5.11 where appropriate. Anything imported (vehicles, materials, etc.) will probably have to be shadow priced to remove the influences of subsidies or pegged foreign exchange rates. Labor may have to be shadow priced to reflect current levels of unemployment in the country.

5.9.2 Sensitivity Analysis

Sensitivity analysis is the "what-if" portion of the analysis. What if the assumptions are not as realistic as the analyst may claim? What if the estimate for construction costs in Table 5.11, for example, should be \$300 instead of the assumed \$240 per m²? How sensitive is the NPV or IRR to this change? All key assumptions should be varied in a sensitivity analysis where the base case assumptions are incrementally changed upwards and downwards over a wide range, to perhaps plus or minus 60 percent. The analysis is redone for one variable at a time, holding all the other variables constant.

Using the net cash flows from Table 5.10 as the base case, Table 5.15 illustrates the sensitivity analysis process for the private sector analysis by varying three variables -- the discount rate, lodging and meal costs on the site being analyzed and building construction costs. Each variable is increased and decreased, one by one, by plus and minus 15, 30 and 60 percent holding all the other variables constant at the base case level. The objective is to determine the change in the NPV as a result of having varied one variable. If a small change in the variable leads to a substantial change in the NPV, perhaps even switching it from positive to negative, then the variable is sensitive and should be carefully monitored.

TABLE 15
SENSITIVITY ANALYSIS, PRIVATE SECTOR

Variables	-60%	-30%	-15%	Base Case	+15%	+30%	+60%
Disc. Rate	1,288,561	759,172	581,802	442,238	330,782	240,522	104,947
Lodg/meals	-436,572	2,833	222,535	442,238	661,940	881,643	1,321,048.
Infrastr.	697,375	569,807	459,664	442,238	378,453	314,669	187,100

Of the three variables tested it appears that lodging and meal prices are the most sensitive to changes. A 30 percent reduction in the prices (perhaps attributable to competitive pressures) will reduce the NPV to \$2,833. This is calculated as follows: lodging and meal prices are given in Table 5.1 for the site being analyzed. These prices are reduced by 30 percent and the NPV is recalculated giving the results of \$2,833. At this rate the project is still financially feasible since the NPV is positive, but barely so. The management implication here is that the lodge administrators must carefully monitor food procurement costs and the prices charged per room. On the positive side, if the market can bear higher prices for food and lodging, the overall attractiveness of the project will increase rapidly.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Major Conclusions

This section extracts from the preceding five chapters the major conclusions concerning ecotourism and the major roles of the travel industry, donors, NGOs, and host country governments.

6.1.1 Tourism is big business

Tourism is big business. It is one of the world's biggest industries bringing in more than \$2 trillion dollars in 1989 (Edgell, 1990). In the next few decades, international tourism is expected to grow at average annual growth rate of 4.2 percent. Africa's share of the tourism market has declined slightly in past years, but increased crowding of popular tourism destinations, it is likely to increase faster than the world average. Tourism has the potential to be one the most important stimulants for improvement in the social, cultural, economic, political, and ecological well being of African countries.

Most development assistance agencies have avoided funding mainstream tourism because of difficulties such as high capital costs, poor in-country profit retention, and equitable distribution of benefits. While it is probably not appropriate for AID to support tourism in general, ecotourism is different.

6.1.2 Ecotourism - the concept

Ecotourism has become an increasingly popular concept in the last few years. Widespread agreement perceives the concept of ecotourism as "good", yet there is little agreement as to what the term means. There is general agreement that ecotourism is a form of responsible travel that can generate revenue for the conservation of parks, protected areas and wildlife as well as providing employment and other benefits to the local community. However, ecotourism should not be confused with environmentally sound tourism. While ecotourism should be environmentally sound, there are many other types of tourism which can also meet this goal. What distinguishes ecotourism is that it adds value to the environment.

Some have preferred to narrowly define ecotourism, ascribing to it a variety of attributes. A definition that covers the broad range of nature tourism opportunities in Africa is more appropriate for A.I.D.'s and other development agencies needs. It has been noted that a broad definition of ecotourism is more likely to survive as a viable concept. Therefore, we suggest the definition travel with a concern for the environment, with an appreciation of the natural attraction being the prime purpose of the trip. Alternatively, within the mission statement

of the Ecotourism Society is a reasonable definition **responsible travel dedicated to conserving natural environments and sustaining the well-being of local people.**

Ecotourism holds promise of being an economically, socially and environmentally sound tool for development. It also has the potential to directly support A.I.D. (as well as other donors and host governments) objectives for biodiversity and natural resources conservation and private sector development. As such, the Africa Bureau should continue and expand its current level of ecotourism support.

6.1.3 Literature and Research

The literature on ecotourism is largely descriptive and theoretical, describing the pros and cons of the subject. There is a dearth of research in Africa on the policy and environmental aspects of ecotourism needed to develop plans that will be compatible with sustained resource management. But little systematic study has been devoted to the social implications of ecotourism. There is virtually no rigorous economic analysis to determine if ecotourism does, in the broadest sense, lead to sustainable economic development.

One pressing operations research need is the development of effective tools for balancing the economic, social and environmental benefits and costs at a particular site. Most often the success of ecotourism has been gauged by the foreign exchange it has generated, without due consideration to the degradation of parks and wildlife as well as the impact on local people. In this context, the idea of "success" needs to be redefined to include benefits to the local community and conservation of the protected area.

6.1.4 The Travel Industry

While tour operators and ground operators are dependent on natural resources, there is no structure to encourage these operators to follow, or indeed establish, rules that support and protect the environment or offset local communities' resource-use loss. In their highly competitive, secure industry, many operators aim to maximize short-term profits, even at the expense of long-term sustainability.

As it currently exists, the U.S. travel industry is not the most appropriate vehicle for site-specific ecotourism development assistance. Most tour operators use local ground operators to handle logistics and in-country travel arrangements. Ground operators typically live in the capital, use their own guides and infrequently use goods and services purchased from local communities. Yet ground operators are perhaps the most important link with local communities and the natural resource base. It is the ground operators who must be organized or focused on responsible ecotourism, including carrying capacity concerns, establishing and following regulations, and supporting local enforcement of rules.

There is no accrediting body or licensing procedure for tour operators, making it easy to enter the tour operator business with little investment. An uncontrolled business environment

may be beneficial for economic reasons, but is not conducive to responsible travel. Without raising the issue of government regulation, there is much the NGOs and the U.S. travel industry can do to improve the standards of nature-based tour operations. This includes establishing a code of conduct and standards of operations, training of tour and ground operators in these standards, improvements in the educational quality of the visits, and consideration of environmental and social impacts in developing sites.

6.1.4.1 Lack of Training and Information

Tour operators complained about the lack of information and training available to assist responsible ecotourism develop. The two areas most often mentioned were staff training and educational materials for travelers. Staff training needs encompass knowledge of proper service techniques, social and environmentally appropriate behavior, ecology and communications. Educational materials about the local natural history and culture are needed to supplement the discussions provided by drivers and guides. In addition, slide shows, videos and other more sophisticated communication media have only begun to be explored.

6.1.5 Planning for Ecotourism

6.1.5.1 Lack of Coordination

Major players now involved in planning and managing ecotourism development, include:

- the travel industry which is promoting ecotourism for profits;
- NGOs who are interested in the role of ecotourism as a conservation tool for protected areas and wildlife;
- development assistance agencies which see ecotourism as an activity that leads to sustainable economic development; and
- governments who are interested in the role ecotourism can play in national development and balance of payments.

The interaction of these players is crucial to the successful implementation of ecotourism projects. Unfortunately, coordination between them is quite weak leading to misguided plans, lost opportunities, and low revenues. Still, virtually all tour operators, NGOs, and donor agencies we interviewed expressed interest in improved coordination among the major players.

Planners and developers of potential ecotourism attractions need to consult with tour operators, hoteliers, airlines, i.e., the entire range of players in the travel industry. Government and NGO planners believe "if we build it, they will come." Many ecotourism sites being developed do not have a proper feasibility studies or business management plans. In addition to providing an excellent perspective on demand and competition, travel industry representatives

could identify the collaborative efforts e.g., marketing, that the industry would support once a destination is established. Finally, industry representatives could assist in making management plans more effective, and provide ongoing advice on how to improve tourist satisfaction with park/attraction operations. However, the major benefit of including the travel industry in the planning phase will come once tours begin and their participation translates into a ready made market.

6.1.5.2 The Role of Public Relations

Effective public relations is essential in establishing a new tourist destination, yet is often overlooked in developing a new ecotourism project. Most often funds are not set aside and responsibilities are not identified to carry out this task. Understanding the media, generating newsworthy stories and knowledge of their use in trade and consumer travel publications is critical to establish and build demand for new products and new destinations.

6.1.5.3 Carrying Capacity

Carrying capacity, the number of travelers that can visit a site without causing unsustainable damage, is a important concept in planning ecotourism sites. It has four different aspects:

- Physical/biological--the level and type of tourism that can be carried on indefinitely without detriment to the natural resource base;
- Social/psychological--the number of travelers that can enjoy the attraction and still have a quality experience;
- Facilities/services--the limitations imposed by the facilities and services provided (hotel rooms, parking spaces, number of guides, visitor permits, etc.); and
- Economic/financial--the requirement of the site to make money or, lacking that, the willingness of the government or some other entity to cover the losses.

Carrying capacity analyses were originally developed for biological fields and the techniques are reasonably well established. Their application in Africa, however, has mainly been qualitative guesses as to the appropriate visitor rate. Analytical techniques for assessing carrying capacity for the social and facility aspects are not well developed. While economic and financial analysis are well developed techniques, they are rarely conducted properly. Developing a balanced carrying capacity analysis remains one of the most important preliminary steps in ecotourism planning.

6.1.6 Non-Government Organizations

NGOs are important players in ecotourism because of their long-standing support for the primary ecotourism resources of Africa--its parks, protected areas, and wildlife. They are well suited to provide assistance to ecotourism development in their traditional fortes (research, training, information collection and dissemination, education) and have potential for increased participation in more recent innovative approaches to ecotourism (buffer zone, local community management, privatization of ecotourism resources).

The recent establishment of the Ecotourism Society offers a forum for U.S. NGOs to meet with other major players, especially donors and the travel industry, to discuss common concerns. The Society still needs to prove that it can garner widespread support from the travel industry and effectively communicate, despite its good start.

Mainline development PVOs have not played much of a role in ecotourism development in Africa. There is a need for their services particularly in local community management and buffer zone programs.

6.1.7 Host Country Governments

Ultimately, African governments are the most important players in ecotourism. Their responsibilities include: setting tourism policies, strategies and plans; controlling tourists, the travel industry and other resource users; managing natural resources; and, building and maintaining infrastructure. They do not belong in competition with the private travel industry by running tours, lodges, and restaurants.

Unfortunately, many African governments are not able to satisfactorily meet their responsibilities. They are hampered by inadequate funding, poorly trained staff, crumbling infrastructure, fundamental economic woes, corruption, and an outdated approach to management. Resolution of these constraints will be incremental and improvement will come slowly. Ecotourism development should ensue at the same pace. In the meantime, innovative approaches to addressing government weaknesses should be explored. These include: privatization of park management and ecotourism development planning; development of buffer zones programs; liberalization of policies limiting external investment; and focus on appropriate tasks (e.g., enforcement, international public relations and permitting).

6.1.8 Local Communities

Local communities are the overlooked players in ecotourism. They are largely ignored or treated as a curiosity. In reality, they have considerable potential to do good (or harm) to a local ecotourism attraction and, as such, should be fully integrated into the planning and operations of ecotourism. Innovative approaches that go beyond "shows" and handicrafts are needed. Few have been developed, but more are needed. NGOs and PVOs are best able to lead the development of these, but the travel industry, in particular ground operators, should join the effort.

6.2 Recommendations

The following recommendations result from the conclusions drawn of ecotourism in Africa. They address each of the four major members of this report's audience: AID, the travel industry, NGOs, and host country governments. Given the scope of this report, the recommendations are intended to apply to Africa and the operations of the major players there. It has been noted, however, that most of the recommendations apply equally well to other regions.

6.2.1 AID:

- **Develop a strategy for supporting ecotourism** as an element of the Plan for Natural Resources Management (PNRM) for Africa. The strategy could rationalize the current A.I.D.-funded ecotourism and related activities (e.g., park management) underway in Africa and set priorities for future support. This strategy should be developed with the full participation and input of local USAIDs, the travel industry, and NGOs.

The development of an A.I.D. African Ecotourism Strategy would be a most timely development. Such a strategy could be incorporated into the Africa Bureau's Plan for Natural Resource Management (PNRM) which will be revised in early 1992.

Even the quick survey of ecotourism activities conducted for this report indicated that there are at least half a dozen major A.I.D.-funded projects underway that are ecotourism-related. An Ecotourism Strategy could help bring some coherence to these projects and guide the creation of more systematic AID support to the sector.

The strategy could address the issues such as the following:

- How much research is needed before full field projects can be considered?;
- What types of support are needed and how can it best be channeled to Africa, especially to local communities and ground operators?;
- What is the scope and nature of the current ecotourism-related activities supported by A.I.D.?;
- What are the plans of other major donors?;
- What are the priority countries and activities that A.I.D. would like to support?; and
- What are the steps that Missions should take to build ecotourism activities into their portfolios and what assistance will they need from A.I.D. in Washington to do this?

A thorough Ecotourism Strategy might take up to six months or more to complete. Given vested interests and implications for funding, it might be best if: (a) the authors were not provided by one of the major players; or (b) the authors were selected from each of the major players.

- **Fund a ecotourism umbrella project** that would initiate and coordinate technical assistance, research, training, policy analysis and local field initiatives. The purpose of the project would be to catalyze and support ecotourism activities.

It logically follows that a multi-year umbrella project could be sponsored by AID to help implement the Ecotourism Strategy. The project could fund: technical assistance to missions; short-term, in-country training; research, case studies and analyses; and, through a mechanism similar to PVO/NGO NRMS, support small field projects in nature tourism. Support to U.S. travel industry and NGOs/PVOs could be funneled through this project to help them organize and develop their own programs overseas. To keep costs low and encourage self-sufficiency, the activities funded should be of limited duration or have a plan for developing support from another source within a relatively short time.

The umbrella project should include a Steering Committee comprised of major players in ecotourism to advise A.I.D. and the project officer (as opposed to the implementor) on the project's implementation strategy. The Steering Committee could review work plans, make suggestions for improvements, and identify potential collaboration. Members of the Steering Committee could be asked to participate in evaluations and later adjustments of the project design. This will give the Steering Committee a strong sense of participation and commitment to the project and fully develop the synergism between the various institutions.

- **Establish linkages with the travel industry** to learn more about their problems and opportunities, strengths and weaknesses, and to determine how to best channel support to the industry.

While A.I.D. has long-standing working relationships with most of the major NGOs and official agencies involved in ecotourism, it is not well connected to the travel industry. A working relationship could be established between the travel industry and A.I.D. that would take advantage of each other's strengths. A.I.D. could make grants to the non-profit, professional associations of the travel industry, either under the umbrella fund or directly, to support certain industry activities such as training, educational materials and establishing standards of responsible travel. In return, the travel industry might be expected to develop programs to assist African nations develop their ecotourism plans (especially feasibility studies), provide assistance to ground operators in more effective management, and provide advice to NGOs on their development plans.

- **Fund more research** into priority areas of information needs. Emphasis should be placed on primary data collection and analysis should be oriented toward helping field operations in ecotourism programs more effectively meet their goals.

Research (used here in its broadest sense) for ecotourism is needed in a wide range of areas. While additional state-of-the-art reviews may be needed (e.g., community-based management of sport hunting), the most critical need is for current, quantitative data that is critical to planning for ecotourism. This type of information is not likely to be found in the literature or other secondary sources.

Top research priorities are likely to include: policy analysis, feasibility studies, economic analyses, environmental and social impact assessments (carrying capacity), and demonstration programs for incorporating local communities in ecotourism activities. One of the most pressing needs is for solid financial feasibility studies that include a demand analysis, a review of competing attractions, and an analysis of marketing and profit potential including a cost/benefit analysis and sensitivity analysis.

Other potential research topics might include: a study of the distribution of the tourist dollar and an analysis of how a greater percentage can be captured locally; developing an economic model for comparing the net present value of land for ecotourism with other forms of land use; determining optimal park entrance fees and assessing the desirability of fee earmarking; and exploring innovative financing schemes for ecotourism development.

Before launching the research program, there is a need for a complete annotated bibliography and a well organized repository of information on ecotourism. The A.I.D./R&D Environment and Natural Resources Information Center (ENRIC) project might be able to organize this database.

- **Provide overall coordination among the players in ecotourism.** If AID could identify and fund a coordinating body to provide these disparate groups with quality leadership, sound data and information and an open forum for frank discussion of views, problems and successes, this would provide compelling impetus to the various programs that are needed in Africa.

Why should AID become involved with coordinating the activities of so many diverse groups? While it may not be best for A.I.D. to assume this role itself, by supporting a coordinating activity it would lend considerable credence to the recognition that effective ecotourism development in Africa cannot take place without full involvement of the major players. The coordination intended here could take place under the aegis of an international body such as the International Union of Conservation of Nature and Natural Resources (IUCN). Alternatively, support could be provided to one of the regional offices such as the Club du Sahel. The entity selected must be able to command the respect of all the major players, and it would be best if it were not chosen from one of the vested interest groups. AID should consider, notwithstanding the reservations it may have, if it could not best perform this function. Alternatively, a consortium of the major players, that is truly representative might be created to provide this leadership.

6.2.2 Non-Governmental Organizations

- **Improve coordination among NGOs themselves and between NGOs and other players, especially the travel industry.** This coordination could be based on the excellent start made by the Ecotourism Society but quickly needs to focus on coordination in the field.

Although NGO programs in ecotourism are relatively new there are already reports from their field officers of inadequate coordination. They would like to know more about the plans and activities of their sister NGOs, especially successes and failures in ecotourism. In addition, the ecotourism work of many NGOs suffers from not being better informed by private operators as to what the traveling public wants at a destination and what NGOs can expect in terms of demand and revenue from a given site. If AID helps create a ecotourism coordinating body, then this could suffice to meet this need. If not, then NGOs might consider establishing a coordinating committee or using an existing body, e.g., the Ecotourism Society, to do this.

- **Develop priorities and guidelines for research in ecotourism, actively develop support for conducting this research, and provide a vehicle for disseminating the results.**

NGOs and academic institutions are well suited to identify gaps and set research priorities to pass along to AID and other donors for funding. In addition, NGOs should be committed to seek funding and staff support for conducting their own research as they cannot entirely rely on others to meet their research needs: donors like to put their own twist on priorities and many academics will not pursue operational research and demonstration projects. An equally critical need is the dissemination of research results to the users in the field. Given their widespread programs and contacts, NGOs are also well suited to help with putting research results to work. Again, the Ecotourism Society might, through its communications program, be a suitable vehicle.

- **Educate the public about responsible ecotourism.** Through their development education programs NGOs should expand the worthy effort they have already begun to reach the U.S. public about the importance of ecotourism, what responsible travel is and where to find it.

One of the linchpins of successful ecotourism development will be consciousness raising about responsible ecotourism among the U.S. traveling public. If people were aware that they had an option to help solve developing countries problems (other than mailing a check off to their favorite international charity) while enjoying themselves, they should increasingly select responsible travel. Clearly the travel industry will play a role in publicizing the environmental value of ecotourism, but NGOs will be more credible bearers of the message. A program of educating the U.S. public about the conservation and developmental benefits of ecotourism could fit under the aegis of the Biden-Pell development education grant program.

6.2.3 Travel Industry

- **Establish standards for responsible travel and recognize operators that practice it.**

This should be done in conjunction with NGOs to maintain the credibility of the standards and recognition. Awards such as ASTA/Smithsonian Magazine's Environmental Award can be used to single out firms for exceptional service to ecotourism. Beyond this, the industry could consider establishing a certification program for tour operators that practice responsible travel. Operators meeting standards could use this certification in their advertising. ASTA/Smithsonian Magazine are already considering such a certification program. The Ecotourism Society is exploring a related tour operator evaluation program, but doubts if certification will work.

There are a number of potential problems with a certification program: who is going to evaluate the operators (the consensus currently is that the travelers will); how can an operator's certification be effectively rescinded; or even if certification will make enough of a difference to the traveling public to encourage the operators to apply. Also, in order to work, certification programs will need to be applied to ground operators, either vicariously through an international operator they work for or directly by establishing a local certification program.

Whether certification is the proper way to proceed or not needs further analysis. What is clear is that a set of standards and a means of reviewing how well they are being followed is a prerequisite to industry-wide practice of responsible ecotourism.

- **Create an ecotourism advisory board for the travel industry with the objective of fostering responsible ecotourism.**

This board, consisting of tour operators, hoteliers, airlines and cruise lines, could be vested with the responsibility for maintaining standards of responsible travel, a voluntary code of ethics and, perhaps, a fund for voluntary contributions to conservation. The board could also oversee development of literature to be disseminated to the traveler, opportunities for tourists to contribute directly to non-profits, and ticket jackets printed specifically for overseas travelers with travel "dos and don'ts", etc. It could also take responsibility for fund raising for certain relevant projects, possibly with grants from major institutions, such as hoteliers and airlines.

The board could also help to synthesize and present the views of the industry to donors and governments. Acting through international and local travel industry trade associations it could survey their members and present AID, other donors and governments with their concerns, needs and recommendations for actions to improve ecotourism.

- **Develop training programs for ground operators to improve the environmental and social soundness of their operations as well as the service they provide to travellers.**

International tour operators, wishing to satisfy the needs and expectations of their clients, have a vested interest in properly trained ground operators. In addition, tour operators that wish to

conduct responsible travel (either for its own sake or to meet certification requirements) will be interested in training for ground operators in environmentally and socially sound operations. Training needs will vary considerably from place to place but should ensure that ground operators: (1) know and carry out environmentally responsible practices; (2) are capable of providing basic ecological information to tourists; and (3) are sensitive to the needs and participation of local communities in ecotourism. A training program sponsored in part by the travel industry is likely to be more responsive to the training needs of, and more respected by, the ground operators than training run by a non-industry group.

6.2.4 African Governments

- **Establish or improve national tourism boards.**

One of the common weaknesses of African governments' tourism programs is the lack of an effective tourism board. These boards should promote tourism by organizing international media campaigns that are out of the reach of individual operators. They can also work toward effective standards of operations and service. And, in the best case, they can provide a valuable liaison service between various government agencies and the travel industry.

Major improvements needed in national tourism boards include: results-oriented management (perhaps by tying their budget to success); better training for staff; improved long-term planning; and clarity of mission.

- **Develop public relations campaigns to advertise the countries' products.**

Tourism to Africa has not benefited from a concerted public relations and advertising campaign. Most of their publicity comes from the media, including movies such as "Out of Africa", and is often negative reports of disease, corruption and civil strife. As any frequent visitor to Africa knows, these reports are, at best, half-truths. African nations should actively seek to offset this image by increasing the play of its own stories in the press. These can be travelogues or positive, touching stories about life in Africa. The strong traditions of family and community and the thousands of examples of good things in Africa should provide plenty of positive copy.

- **Revise immigration procedures to facilitate entry.**

One of the least costly improvements to tourism in Africa would be to relax immigration procedures. Relatively small investments in computerized screening of travelers could do a much better job of controlling major points of entry than the often difficult, multiple checkpoint system so common now. Issuance of visas could be streamlined, or waived, to make access easier for travelers at least from those nations that provide the most tourists.

- **Listen to the private sector.**

The private sector has developed certain expertise that would be useful to African governments. Paramount among these is the ability to estimate the profitability of a venture. In addition, the private sector can often pinpoint, without lengthy and costly analysis, just where the constraints to improved tourism lie. Listening to their suggestions and complaints, and acting on them when appropriate, is an inexpensive and effective means of improving ecotourism.

ANNEX 1
Bibliography

- Abramowitz, Janet. Investing in Biological Diversity-U.S. Research and Conservation Efforts in Developing Countries, World Resources Institute, March, 1991.
- Alderman, Claudia L. A Study of the Role of Privately Owned Lands Used for Nature Tourism, Education and Conservation, Conservation International, May 30, 1990.
- Ankomah, Paul Kwame and J. Crompton. "Unrealized Tourism Potential - The Case of Sub-Saharan Africa," Tourism Management, Volume 11, Number 1, March, 1990.
- Ashton, Ray. Fundamentals of Ecotourism: A Workbook for Nonprofit Travel Programs, Water and Air Research, Inc., December, 1990.
- Bangs, Richard. Adventure Vacations, Muir Publications, Santa Fe, New Mexico.
- Borge, Lila, W. Nelson, J. Leitch and F.L. Leisgritz. Economic Impact of Wildlife-Based Tourism in Northern Botswana, Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, September, 1990.
- Boo, Elizabeth. Ecotourism: The Potentials and the Pitfalls, Volume 1 and 2, The World Wildlife Fund, Wickersham Printing Company, 1990.
- Ceballos-Lascurain, H. "The Future of Ecotourism", Mexico Journal, January 17, 1988.
- Curcio, Barbara Ann. "Tenting Tonight on the Plains of Kenya", Washington Post, October 28, 1990.
- DeGeorges, Andre. Nature Tourism Feasibility Study of The Northern Rwenzori Mountains, Memorandum to Bob Rose, USAID/REDSO/ENG, December 21, 1990.
- de Kadt, Emmanuel. Tourism: Passport to Development?, A joint World Bank-Unesco Study, Oxford University Press, 1979.
- DeWall, Barbara. "Ecotourism-taking the 'ism out of tourism" in Ecotourism Management Workshop Background Papers, International Institute of Tourism Studies, The George Washington University, June 18-22, 1991.
- Dixon, John and P. Sherman. Economics of Protected Areas-A New Look at Benefits and Costs, East West Center, Island Press, Washington, D.C., 1990.
- Domestic Technology International, Inc. "Low Impact Tourism: Coupling Third World Natural Resource Conservation and Economic Development", A Prospectus, 1989.

- Edgell, David. Charting a Course For International Tourism in The Nineties: An Agenda for Managers and Executives, U.S. Department of Commerce, U.S. Travel and Tourism Administration and Economic Development Administration Washington, D.C., February, 1990.
- Filani, M.O. "The Role of National Tourist Associations in the Preserving of the Environment in Africa", Journal of Travel Research, Vol 13, No. 4, pg. 7, Spring, 1975.
- Graefe, Alan. "Visitor Impact Management" in Ecotourism Management Workshop Background Papers, International Institute of Tourism Studies, The George Washington University, June 18-22, 1991.
- Graefe, Alan and J. Vaske. "A Framework for Managing Quality in the Tourist Experience", Annals of Tourism Research, Volume 14, Pg. 390-404, 1987.
- Green, Howard, C. Himle and B. Moore. "Assessing the Environmental Impact of Tourism Development-Use of the Delphi Technique" in Tourism Management, Volume 11, Number 2, June, 1990.
- Gunn, Clare. Tourism Planning, Taylor & Francis, New York, Philadelphia, London, 1988.
- Hawkins, Donald, E. Shafer and J. Rovelstad. "Summary and Recommendations: International Symposium on Tourism and The Next Decade", The George Washington University, 1988.
- Ingram, Denise and P. Durst "Nature Oriented Travel to Developing Countries", Southeastern Center for Forest Economics Research, Research Triangle Park, N.C.: FPEI Working Paper No. 28, 1987.
- "Interim Report: Global Assessment of Tourism Policy", Tourism Policy Forum, International Institute of Tourism Studies, The George Washington University, March 1991.
- Kutay, Kurt. "Ecotourism: Travel's New Wave", Vis a Vis, July, 1990.
- Kutay, Kurt. "The New Ethic in Adventure Travel", Buzzworm-The Environmental Journal, Volume 1, Number 4, Summer, 1989.
- Laarman, Jan G. and P. Durst. "Nature Travel and Tropical Forests", Southeastern Center for Forest Economics Research, N.C. FPEI Working Paper No. 23, 1987.
- Laarman, Jan G. and P. Durst. "Nature Tourism as a Tool for Economic Development and Conservation of Natural Resources", Draft. Unpublished, July, 1991.

- Laarman, Jan G. and R. Perdue. "Tropical Tourism as Economic Activity: OTS in Costa Rica", Southeastern Center for Forest Economics Research, N.C.FPEI Working Paper No. 33, 1987.
- Laarman, Jan G. and M. Wilson. "Nature Tourism and Enterprise Development in Ecuador", Southeastern Center for Forest Economics Research, Research Triangle Park, FPEI Working Paper No. 27.
- Leisher, Craig and S.Soltis. "Ecotourism: The Greening of Global Travel", Washington Flyer Magazine, March/April, 1991.
- Lillywhite, Malcolm. Low Impact Tourism as a Strategy for Sustaining Natural and Cultural Resources in Sub-Saharan Africa, Mid-Term Report, Unpublished Paper for AID/AFR/TR/ANR.
- Lindberg, Kreg. Nature Tourism as an Agent for Sustainable Development. International Conservation Financing Project, World Resources Institute, July, 1990.
- Lindberg, Kreg. Policies For Maximizing Nature Tourism's Ecological and Economic Benefits, International Conservation Financing Project Working Paper, World Resources Institute, February, 1991.
- Manning, Robert. "Planning for Tourism: A Guide for Vermont Communities", University of Vermont Extension Service.
- McNeely, Jeffrey A. Economics and Biological Diversity: Developing and Using Economic Incentives to Conserve Biological Resources, International Union For Conservation of Nature and Natural Resources, McGregor and Werner, Inc., Washington, D.C., 1988.
- Norton, Brian "Sustainability, Human Welfare and Ecosystem Health", Ecotourism Management Workshop, The George Washington University, June 18-22, 1991.
- "Ecotourism" in ASTA Agency Management, August, 1990.
- Olmstead, Marty. "Travelers who tread lightly on the land", in Marine Independent Journal, April 20, 1990.
- Olokesusi, Femi. "Assessment of the Yankari Game Reserve, Nigeria: Problems and Prospects", in Tourism Management, Volume 11, Number 2, June, 1990.
- Passoff, Michael. "Ecotourism Re-Examined", Ecotourism Management Workshop, The George Washington University, June 18-22, 1991.
- "A Perspective Plan for Uganda Tourism Development", Ministry of Tourism and Wildlife, Kampala, Uganda, October, 1990.

- Pedersen, Art. "Issues, Problems, and Lessons Learned from Three Ecotourism Planning Projects", 2nd International Symposium and Workshop on Ecotourism, November, 1990.
- "Projections of World Tourist Arrivals to the Year 2000", Global Assessment of Tourism Policy, International Institute of Tourism Studies, Background Papers, George Washington University, October/November, 1990.
- "The Responsibilities of International Organizations in Tourism" Global Assessment of Tourism Policy, Tourism Policy Forum, Background Papers, The George Washington University, October/November, 1990.
- Richards, David C. "Small Enterprise Development and Conservation Programs", Ecotourism Management Workshop, The George Washington University, June 18-22, 1991.
- "Riding the Tourist Boom" in South Magazine, August, 1989.
- "Risks of Saturation or Tourist Carrying Capacity Overload in Holiday Destinations". World Tourism Organization, Madrid, Spain.
- Sharkey, Nancy. "A Sampling of Expeditions", The New York Times, Sunday, May 19, 1991.
- "A Survey of World Travel and Tourism". The Economist, March 23, 1991.
- "Sustainable Tourism Development in the Third World" in Global Assessment of Tourism Policy, Tourism Policy Forum, Background Papers, The George Washington University, October/November, 1990.
- Smith, Stephen. Tourism Analysis: A Handbook. Longman Scientific and Technical and John Wiley and Sons, 1989.
- Tourism Sector Working Paper, The World Bank, 1972.
- "Travel and Tourism is Big Business", The Statistical Newsletter of the American Society of Travel Agents, January, 1989.
- Warner, Edward. "Ecotourism: New Hope for Rainforests?", American Forests: The Magazine of Trees and Forests, April, 1991.
- Webley, John. "The Effect of Eco-Tourism on African Cultures and Lifestyles" in the 1991 World Congress on Adventure Travel and Eco-Tourism.
- Western, David and W. Henry. "Economics and Conservation in Third World National Parks", BioScience, Vol 29, No. 7, 1979.

Whelan, Tensie. Nature Tourism: Managing for the Environment, Island Press, Washington, D.C., 1991.

Yenckel, James T. "Fearless Traveller Update: Hotspots to Watch and Rules to Remember", The Washington Post Sunday, October 28, 1990.

Youth, Howard. "Ecotourism: Loving Nature to Death", Worldwatch, September-October, 1991.

Ziffer, Karen A. "Ecotourism: The Uneasy Alliance", Conservation International and Ernst & Young, Fall, 1989.

ANNEX 2
Organizations Involved in Ecotourism

The following is a sampling of the key organizations including non-profits in travel and private sector operators involved in nature based tourism.

1. Non-Profits in Travel

American Museum of Natural History Discovery Tours

Central Park West at 79th Street

New York, NY 10024

800-462-8687 or 212-769-5700

The largest natural history institution in the world, the museum has been conducting study tours since 1953 and attracts 1,100 participants a year. Although the trips may be more expensive than those with identical itineraries offered by private companies, they are led by teams of museum scientists. The museum offers 14 cruises, ranging from Scandinavia to Melanesia and nine tours in Hawaii, Africa, India, Central America, and Mexico.

Cornell Adult University

626 Thurston Avenue

Ithaca, NY 14850

607-255-6260

This program offers natural history workshops at Cornell's campus during the summer and two dozen expeditions at varying lengths year round, all led by Cornell professors. The programs are designed by the university's professors and adult university. The trips range from New Zealand treks to insect-study in upstate New York.

Earthwatch

680 Mount Auburn Street, P. O. Box 403-N

Watertown, MA 02272

617-926-8200

An organization devoted to a grass roots approach and "hands-on" environmental agenda, Earthwatch was founded in 1971 to preserve fragile lands, monitor change, and conserve endangered species. Its scientific expeditions draw about 3,500 people a year who are willing to work on their vacation. Members have supported nearly 2,000 projects throughout the world and have contributed \$17 million to scientific research. The range of its programs is wide, from tracking timber wolves and counting humpback whales off Mozambique to exploring ancient civilizations in Europe and Africa.

Foundation for Field Research

P.O. Box 2010
Alpine, CA 91903
619-445-9264

Founded in 1982 as a matching service between scientific researchers and volunteer assistants, the foundation supports projects in anthropology, oceanography, archeology, botany, and biology. Volunteers are both expedition members and financing sources. Programs range from protecting leatherback turtles in Mexico to examining agricultural problems caused by prairie dogs in Missouri. The foundation's current offering of 38 programs includes travels mostly to Mexico and the Western United States as well as Grenada, Wales, Mali, Micronesia, and British Columbia.

Nature Conservancy International Program

1815 North Lynn Street
Arlington, VA 22209
703-247-3720

Helping to preserve fragile areas by buying land in North America, or helping local groups abroad who make the acquisition, the conservancy protects the world's largest private reserve system, consisting of 5.5 million acres in 50 states and Canada in 1,200 individual preserves. In addition, a vigorous Latin American program has protected 25 million acres in Belize, Bolivia, Costa Rica, and other countries. The international travel program, begun four years ago, sends about 400 people a year to Central and South America. Part of their payment includes \$300 for an emergency land-protection fund. The trips are packaged by International Expeditions, Geostar Travel, and Society Expeditions, and they use two guides: a Nature Conservancy escort and an in-country naturalist. The average group size is 15.

National Audubon Society Travel Programs

950 Third Avenue
New York, NY 10022
212-546-9140

The society offers 24 programs a year--all over the world-- including both cruises and land programs. Some examples of its natural history cruises include expeditions in the Pacific Northwest, the Amazon, Greenland, Iceland and the North Atlantic, the Hudson River and the Chesapeake Bay.

Oceanic Society Expeditions

Fort Mason Center, Building E
San Francisco, CA 94123
415-441-1106
800-326-7491

Founded in 1972, the society designs its own programs, supporting research and further conservation with proceeds and donations. The organization recently merged with Friends of the Earth, an environmental advocacy group. The trips focus on sea coasts and oceans, with whale watching, dolphin research, and shore bird photography. The society's naturalists and marine biologists accompany the trips.

Sierra Club Outing Department

730 Polk Street
San Francisco, CA 94109
415-923-5630

This organization was founded by a group of private citizens to preserve California almost a century ago. The club has 600,000 members and attracts about 5000 travelers a year for its programs. Almost 90 percent of the trips are domestic, with many in national parks. A large number are active vacations, with hiking, biking, cross-country skiing, and river rafting featured. The travel program reflects the grass-roots philosophy of the organization with tour leaders designing their own trips and itineraries.

Smithsonian Institution National Associate Program

1100 Jefferson Drive, SW
Washington, DC 20560
202-357-4700

The Smithsonian, like the American Museum of Natural History and the Audubon Society, contracts with private operators to offer tours. These trips are usually accompanied by Smithsonian lecturers. Of the 150 study tours offered, half are domestic and half are international. The majority are academic--with topics like Rembrandt's art in the Netherlands, the literature of Ireland, and projecting global air power. Recently, the Institution has begun offering research expeditions to countries like Costa Rica to observe an active Volcano. Cultural expeditions like attending the Crow Indian fair in Montana have also become part of the Institution's programs.

World Wildlife Fund Membership Travel Program

1250 24th Street, NW
Washington, DC 20037
202-293-4800

The World Wildlife Fund and its partner The Conservation Foundation work to preserve tropical forests in Latin America, Asia, and Africa. The organization also works with local residents to help improve living standards, confronting the root causes of threats to nature. As an example, in Annapurna, the fund has set up a program that combines habitat protection with sustainable development in forestry, agriculture, and tourism.

2. Private Operators**Abercrombie and Kent and Society Expeditions**

1520 Kensington Road
Oak Brook, IL 69521
800-323-7308 or 708-954-2944

A luxury tour operator, Abercrombie & Kent started offering safaris in Africa 29 years ago. In addition the company's owners founded a non-profit organization, Friends of Conservation which helps preserve land and assists the Kenya Wildlife Service headed by Dr. Richard Leaky.

Ecotour Expeditions

39 Mount Pleasant Street, Suite 2, P.O. Box 1066
Cambridge, MA 02238
800-688-1822 or 617-876-5817

Founded by an American lumber exporter in Brazil, this small company conducts tours in three regions of South America: Amazonia, Matto Grosso, site of the vast savannah known as the Pantanal, and Ecuador with its widely varied terrain. Guides are scientists and naturalists who lead excursions into remote areas of the Amazon jungle.

International Expeditions

1 Environs Park
Helena, AL 35080
800-633-4734 or 205-428-1700

Founded in 1980 by a research scientist with a doctorate in biological sciences, International Expeditions focuses on rain-forest expeditions in Ecuador, Costa Rica, Belize, the Peruvian Amazon, and Venezuela. It also offers safaris in Africa, a cruise and river raft trip in Alaska, and visits to parks and wildlife refuges in Australia, India, Thailand, Malaysia, Nepal, and China. Trips are accompanied by members of the International Expeditions staff of experts in botany, zoology, and archaeology. The group has also founded a non-profit center in Peru called the Amazon Center for Environmental Education and Research which provides a research station for scientists and a headquarter for visitors.

Journeys

4011 Jackson Road
Ann Arbor, MI 48103
800-255-8735 or 313-665-4407

Founded by a former Peace Corps volunteer with a doctorate in natural resources, the company's focus is to support environmental conservation with adventure travel. While a large number of the trips strictly focus on adventure, some of their profits are turned over to a non-profit corporation, the Earth Preservation Fund, that supports local environmental programs in Zimbabwe, Botswana, Nepal, and other places on the company's itinerary. Journeys has 25 itineraries, with 150 departures a year. The average group size is 6 to 8 with a maximum of 12. Local guides accompany participants.

Mountain Travel-Sobek

6420 Fairmount Avenue
El Cerrito, CA 94530
800-227-2384 or 415-527-8100

The two of the largest adventure travel companies are in the process of merging. While adventure travel remains the primary purpose of both organizations, they are beginning to offer environmental programs as well, with trips to the Amazon rain forest. Sobek offers 125 different itineraries, about 20 percent of which are river trips with more than 1000 departures a year. Mountain travel offers 125 different itineraries and about 400 departures a year to Asia, Africa, Europe, and South America, with a few programs in North America, Australia, and Indonesia.

Natural Expeditions International

474 Willamette, P.O. Box 11496

Eugene, OR 97440

800-869-0639 or 503-484-6529

Founded by a pair of science professors in Palo Alto, CA, the company grew out of a series of armchair lectures on natural history. Gradually, demand for field trips increased and the company expanded to a full-fledged itinerary of expeditions and safaris in Africa, Asia, South America, Australia, the South Pacific, Alaska, Hawaii, and the Southwest. Leaders, who all have college-level teaching experience, give informal evening lectures and daily interpretive sessions along the trail. The company sends out 30 to 50 tours a year, with a maximum group size of 8 to 12 participants.

Victor Emanuel Nature Tours

P.O. Box 33008

Austin TX 78764

800-328-8368 or 512-328-5221

The leading tour operator for bird-watchers, Victor Emanuel founded the company bearing his name 17 years ago and now offers 100 bird-watching and natural history tours around the world. Leaders include well-known ornithologists and naturalists. Group size ranges from 8 to 16, with 150 departures a year in an equal mix of international and domestic itineraries. The company donates part of the tour fee to half a dozen specific projects in regions visited, and it estimates that 70 to 80 percent of foreign tours directly benefit local economies.

Source: New York Times, Sunday, May 19, 1991

108

ANNEX 3
Chief Contacts in Ecotourism

The following is a list of names, compiled from meetings and conferences, of persons who are directly or indirectly involved in ecotourism. It is not a comprehensive list of all the players in the field; rather it is a sample of people IRG came in contact with during the course of the project.

Marsha Adams
Deputy Secretary
New Mexico Dept. of Tourism
1100 St. Francis Drive
Montoya Building
Santa Fe, NM 87503
(505) 827-0291 (Tel)
(505) 827-0396 (Fax)

Bridget Bean
Director
International Outreach Programs
The Nature Conservancy
1815 N. Lynn Street
Arlington, VA 22209
(703) 841-5300 (Tel)
(703) 841-4880 (Fax)

Sylvie Blangy
Ecotourism Researcher
American Museum of Natural History
Discovery Tours
822 Martin Street
Tallahassee, FL 32303
(904) 222-3577 (Tel)

Elizabeth A. Boo
Ecotourism Program Officer
World Wildlife Fund
1250 Twenty-Fourth St. NW
Washington, DC 20037
(202) 778-9624 (Tel)
(202) 293-9211 (Fax)

Gaü Bruner
Zoo Biologist
Zoo Atlanta
800 Cherokee Avenue, SE
Atlanta, GA 30315
(404) 625-5600 (Tel)
(404) 627-7514 (Fax)

Sylvana Campalo
Brazil Program Officer
The Nature Conservancy
1815 N. Lynn St.
Arlington, VA 22209
(703) 841-5300 (Tel)
(703) 841-4880 (Fax)

Richard Carroll
Program Officer, Africa
World Wildlife Fund
1250 24th Street, NW
Washington, DC 20037
(202) 293-4800 (Tel)
(202) 293-9211 (Fax)

Costas Christ
Experiment in International Living
Kipling Road
Brattleboro, VT 05301
(802) 257-7751 x 2106 (Tel)

Gene Cope
International Fisheries Management
Specialist
N.O.A.A./N.M.F.S. Protected Resources
1335 East West Highway, Room 6254
Silver Spring, MD 20910

Doreen Crompton
Principal Environmental Specialist
World Bank-LATEN
1818 H St. NW Room 14045
Washington, DC 20433
(202) 473-8597 (Tel)
(202) 676-9373 (Fax)

Barbara DeWall
Associate Professor, Department of
Recreation & Leisure Studies
Ithaca College
School of Health Sciences and Human
Performance
Ithaca, NY 14850
(607) 274-3335 (Tel)

John A. Dixon
Environmental Economist
Environment Division-Latin America
and the Caribbean Region
Technical Department
The World Bank
1818 H Street, NW
Washington, DC 20433
(202) 473-8594 (Tel)
(202) 676-9373 (Fax)

Patrick B. Durst
Coordinator for Asia and the Near East
Forestry Support Program
1st Floor SE Wing Auditor's Building
USDA Forest Service
P.O. Box 96090
Washington, DC 20090-6090
(202) 205-1589 (Tel)
(202) 453-3603 (Fax)

Frances A. Gatz
The Ecotourism Society
801 Devon Place
Alexandria, VA 22314
(703) 549-8979 (Tel)
(703) 549-2920 (Fax)

Alan Graefe
Pennsylvania State University
203 Henderson Building S.
University Park, PA 16802
(814) 865-1851 (Tel)

Donald E. Hawkins
Director and Professor
International Institute of Tourism
Studies
The George Washington University
817 23rd Street, NW K-305
Washington, DC 20052
(202) 994-7087 (Tel)
(202) 994-7087 (Fax)

Howard Hills
Counsel General
Overseas Private Investment
Corporation
1615 M Street, NW
Washington, DC 20527
(202) 457-7020 (Tel)
(202) 872-9305 (Fax)

Jorie Butler Kent
Chairman
Friends of Conservation
1520 Kensington Road
Suite 103
Oak Brook, IL 60521
(708) 954-3388 (Tel)
(708) 954-1016 (Fax)

109

Jon Kusler
Association of Wetlands Managers
Box 2463
Berne, NY 12023-9746
(518) 872-1804 (Tel)

Gregory A. Miller
Director, Andean Region
International Program
Latin America Division
The Nature Conservancy
1815 N. Lynn Street
Arlington, VA 22209
(703) 841-5300 (Tel)
(703) 841-4880 (Fax)

Douglas Maguire
Director, Tourism Sector
Caribbean/Latin American Action
(202) 466-7464 (Tel)
(202) 822-0075 (Fax)

Fred Medero
Vice President
Environmental Investment Fund
Kidder Peabody
(202) 463-4414 (Tel)
(202) 296-4214 (Fax)

Malcolm Lillywhite
President
Domestic Technology International
Box 2043
Evergreen, CO 80439
(303) 674-1597 or 7022 (Tel)
(303) 674-1597 (Fax)

Robert E. Manning
Professor and Chairman-School of
Natural Resources
University of Vermont
George D. Aiken Center
Burlington, VT 05405
(802) 656-2684 (Tel)

Susanna Mudge
Manager
International Finance and Investment
Consulting Services
1225 Connecticut Avenue, NW
Ernst and Young
Washington, DC 20036
(202) 862-6314 (Tel)
(202) 862-6399 (Fax)

Diana McMeekin
Vice President
Africa Wildlife Fund
1717 Massachusetts Avenue, NW
Washington, DC 20036
(202) 265-8394 (Tel)

Michael Passoff
Baikal Watch-Earth Island Institute
Yellow Ferry Harbor #3, Gate 6 Road
Sausalito, CA 94965
(415) 331-9334 (Tel)

Arthur D. Pederson
Nature Tourism Planning Expert
4808 Red River Street
Austin, TX 78751
(512) 467-2403 (Tel)

Ann Quattlebaum
Executive Vice Chairman
Blue Ridge Sierra Club
Route 1, Box 339
Faber, VA 22938
(804) 361-9197 (Tel)

Laila Rach
Coordinator
Graduate Program in Tourism
Administration
The George Washington University
817 23rd Street, NW
Washington, DC 20052
(202) 994-7071 (Tel)
(202) 994-1420 (Fax)

Martin J. Riddle
International Finance Corporation
1818 H Street, NW
Washington, DC 20433
(202) 473-0661 (Tel)
(202) 334-8705 (Fax)

Kathryn Ries
Ecotourism Management
National Oceanic and Atmospheric
Agency
1825 Connecticut Avenue, NW, #615
Washington, DC 20235
(202) 673-5178 (Tel)
(202) 673-3957 (Fax)

Richard Ryel
President
International Expeditions
1776 Independence Court
Birmingham, AL 35216
(205) 870-5550

Craig Sholley
Senior Associate, African Wildlife
Foundation
2206 Colston Drive, Apartment 101
Silver Spring, MD 20910
(301) 588-8450 (Tel)
Re: Mountain Gorilla Project, Rwanda

Michael Sweatman
President
NATUREPLACE
(802) 253-8142 (Tel)
(802) 253-9857 (Fax)

Barbara Schneider Tuceling
Program Manager
Smithsonian Study Tours and Seminars
Smithsonian Institution
1100 Jefferson Drive, SW Room 3045
Washington, DC 20560
(202) 357-4700 (Tel)
(202) 786-2315 (Fax)

Marie E. Uehling
Trip Operations Coordinator
International Program
Latin America Division
The Nature Conservancy
1815 N. Lynn Street
Arlington, VA 22209
(703) 841-5300 (Tel)
(703) 841-4880 (Fax)

Joseph C. Washington
National Oceanic Atmospheric Agency
1825 Connecticut Avenue, NW
Suite 618
Washington, DC
(202) 673-6336 (Tel)
(202) 673-3957 (Fax)

John L. Webley
Executive Vice President
Friends of Conservation
1520 Kensington Road
Suite 201
Oak Brook, IL 60521
(708) 954-3388 (Tel)
(708) 954-1016 (Fax)

Megan Epler Wood
Executive Director
The Ecotourism Society
801 Devon Place
Alexandria, VA 22314
(703) 549-8979 (Tel)
(703) 549-2920 (Fax)

Karen Ziffer
Micro Business
Ecotourism Coordinator
Conservation International
1015 18th Street NW, Suite 1000
Washington, DC 20036
(202) 429-5660 (Tel)
(202) 887-5188 (Fax)