ECOTOURISM: A Strategy for Forest Conservation

Aliya Haq
Greg Hornby
Heather Irvine
Kim Portmess
The Tourism Industry

• World’s LARGEST Industry
  – Generates 10% of World’s GDP
  – In 1999, tourists spent $453 billion
  – Tourism growth predicted at 4.1%

• World’s Biggest Employer
  – 255 million people employed worldwide
  – Accounts for 10% of all jobs, globally
What is Ecotourism?

• "Responsible travel to natural areas which conserves the environment and sustains the well-being of local people." – The International Ecotourism Society

• But that’s too easy…
What is Ecotourism?

- Specialty sector of the “Natural Tourism” Market

- Several Types:
  - Hard Ecotourism
  - General (Soft) Ecotourism
  - Adventure Ecotourism
  - Educational Ecotourism
The Potential of Ecotourism

• UN declared 2002 as the “International Year of Ecotourism”

• Highlights the possibility of sustainable economic development

• Motivation to preserve natural areas, while generating revenue
Ecotourism as an Environmental Strategy

- **Ecotourism**: “purposeful travel that creates an understanding of cultural and natural history, while safeguarding the integrity of the ecosystem and producing economic benefits that encourage conservation” (COSTTOUR)

- In 1970’s - 1980’s Environmental groups began to push for developing commercially viable & **sustainable** uses of the rainforests.

- Encouraged local inhabitants to practice stewardship. (COSTTOUR)
What is the real effect on the environment?

• Of a golf-tourism resort proposed in a pristine wilderness area where Cambodia, Laos and Thailand meet.
• Head of Thailand’s National Park division claims this could be considered ecotourism…
• “Golfers could watch wildlife from surrounding protected areas”…(Samabuddhi in Pleurman)
• “Fore!”
The Case of Wildlife & Development in Sabah, Malaysia;

- High pressures towards development and agricultural expansion have limited wildlife habitat.
- This is exciting for tourists because as habitat shrinks, wildlife is more visible. But there is a limit to what can sustain the population!
- Because this limit has been realized, a 27,000 acre wildlife sanctuary was set aside that would not have been without eco-tourism. (Elegant)
- Kinabatangen has attempted to provide corridors to connect fragments…but this is economically and politically tricky.
- “Elephants don’t read road signs”…(Teo of Borneo Ecotours)
Belize & Protected Areas Conservation Trust

- Great potential, because almost 70% of country is still covered by natural forests.
- Important hot spot for endemic species & passage area for migrants.
- 36% of Belize is under some form of protected area status; Forest Preserves, Marine Reserves, National Parks, Wildlife Sanctuaries, Nature Reserves, Natural Monuments, Archeological Reserves & Private Nature Reserves.
• Part of the reason that Belize has been able to maintain wildlife habitat is previously low population pressures.

• Increasing population pressures and economic development have threatened this status.

• Catch is that this system is seriously underfunded. Some “protected areas” are really just “paper parks”.

• PACT taxes (collected from exiting tourists) developed to provide “long term sustainable funding for conservation”. (Spergel)
Proposed best allocation of Belize’s PACT funds for conservation purposes (Spergel)

- **Most effective**
  - Those that maintain protected areas;
  - Increasing staff to protected areas, esp. those w/ no permanent staff
  - Especially Guards and Rangers

- **Least effective**
  - Salaries for existing government officials/staff
  - Salaries for core or permanent staff of NGO’s
  - Recurrent expenses of government agencies
Costa Rica as a Model for analysis and understanding of ecotourism

- Costa Rican ecotourism boom began in 1987.
- By 1995 generating $659.6 mill/annum (largest econ sector!)
- Costa Rica accounts for ~ 5% of biodiversity (INCAE)
- Most deforested land of any Latin American Country (Blake)
- But! Highest percentage of protected land in World! (Fenel&Eagles)
- Preserved in way that is most accessible to tourists (Budowski, 93)

...economic asset but potentially environmental vulnerability???
Why Ecotourism as a Forest Conservation Strategy

- 17 Million Hectares of Rain Forest (size of Wisconsin) are lost annually to deforestation?

- Idea is to replace extraction of wood and clear cutting for agriculture with ecotourism.
Early advantages in preservation continue to add eco intellectual appeal

• Early visitation by scientists and conservationist and development of national park. (INCAE)
• OTS Organization of Tropical Studies & INBIO Institute of Biodiversity publicized in a way that appealed to ecotourists (Rovinsky, Y)
• Conservation system is now valued at $1.2 Billion US!
Environmental Impacts of Ecotourism are difficult to categorize and measure.

Benefits

• Greater protection of **public** lands, rangers and staff to enforce conservation regulations.

• Funds **private** investment in conservation, which enables biodiversity conservation, watershed protection and carbon sequestration.
More Environ. Benefits in Costa Rica

• Hotels & other establishments are generally kept smaller and more eco-friendly (with exceptions of course). (Inman)

• Evidence: (70% of hotels in Costa Rica have fewer than 20 rooms.) (Price in Inman)

• A two-year study of 92 lodges around National Parks found that 49% of them were doing “more than necessary to pursue their environmental bottom line”. (Segleaeu in Inman)
Negative Environmental Impacts

- Environmentally destructive business sitting
- “Most of the negative environmental and social impacts of tourism are predetermined in the siting, design and construction phases. There are too many cases where developers build a hotel or destination that is an environmental disaster, institute a water reduction and recycling program and then demand a rating as an environmentally responsible business”. (L. Pratt in Inman)
More Negative Environmental Impacts

• **Visitor Impacts** exceed natural carrying capacity.

• Resorts have effect of degrading habitat, or causing species to migrate. (Public presence on Cabo Blanco reserve has decreased the howler monkey population by 40% and White Faced Monkey population by 27%)
More Environmental Benefits

- **Local Environmental Stewardship**
  - Changes local attitudes and behavior, decreasing overexploitation, creating ‘untouchable’ zones and user quotas
- Local entrepreneurs can shift from environmentally exploiting/extracting businesses to those which appeal to eco-tourists
Economic Factors

**Supply**
- Image
- Perceived Safety (especially political)
- Highly Concentrated Biodiversity & Landscape Diversity
- Uniqueness of experience
  (In Africa you have to be protected from wildlife, in Costa Rica you have to submerge yourself into landscape to discover niches)

**Demand**
- Interested
- Educated
- Affluent
  (Includes many levels of affluence and minimal impact, minimal cost vacations are becoming more popular.)

Minimal consumerist vacations may be more in line with true hard ecotourism, because it has less severe effect of corrupting livelihoods of natives (which can result in exploitation of natural resources)
Is Ecotourism really a successful conservation strategy?

HOW MUCH IS REALLY GETTING BACK TO THE LOCALS??
- alleviating poverty
- supporting local economy
Ecotourism and Local Economics

• Limited Growth Potential = Recreation Carrying Capacity
  – Catch 22 of Ecotourism (sounds familiar)
• Dollars and sense??
• “Ecotourism is not farm tourism, nature tourism, or adventure ecotourism, but a unique tourism form that has become very popular due to the greening of markets, increasing knowledge of the fragility of the environment, better informed managers and the recognition that there is a close relationship between good ecology and good economy (Bjork)”
• The true cost of travel
Ecotourism and Local Economics -of a Developing Nation-

Costa Rica

• Revenue Leakage

• World Bank calculated that ≈ 50% of gross tourism revenues to developing countries leak back to developed countries (Ziffer)
Costa Rica Value Chain

• Definition: Depict how customer value accumulates along a chain of activities that lead to an end product or service

• Importance to Costa service providers: Knowing position within this value chain allows the identification of activities that are more or less critical to achieve a competitive advantage.

• Importance to ecotourist
Costa Rica Value Chain

1. Identify Structure– mean total cost to key actors
Mean Price of Costa Ecotour Package in Industrialized Country = $288.33/day

Local Entrepreneurs
- On site
  - Food
  - Hotel
  - Guide
  - Park Fees
  - Transport

Land Operator
- San Jose
  - Mean Markup 16%

Travel Agent
- Indust Cntry
  - Mean Markup 50%

Ecotourist
2. Assign Costs and Revenues: $288.33/ day

Value Added to Costa Rica’s Ecotourism (Inman)

- Others 5%
- Guide 4%
- Entrance Fee 4%
- Meals 7%
- Hotel 10%
- Transportation 8%

Ecotourism to Local Costa Rican Entrepreneurs

- Land Operator
- Tour Operator 23%
- Airline 33%
- Land Operator 6%
- Local Entrepreneurs 38%

Ecotourism to Costa Rican Land Operators

Ecotourism to Ecotourist From Industrialized Country

- Local Entrepreneurs 38%
Ecotourism and Local Economics

- 44% of ecotourist expenditure stays in country
  - Leakage due to imports and foreign investment

- Conservation Implications
Ecotourism and Social Implications

- Kenya

- Developing vs. Developed Countries
  Developing country lack of national policy to integrate ecotourism initiatives with resource management and conservation
Eco-Tourism In British Columbia, Canada
Ecological Reserves in British Columbia are established for scientific research and educational purposes. Click on the map for locations.
B.C. Eco-tourist Activities

- Very large variety of activities, both land and water based.
- B.C. specializes in wildlife viewing, rainforest tours, helisking, heli-hiking, hiking, fishing, hunting, river and sea kayaking, etc.
- Cultural Experiences: indigenous people provide cultural elements to eco-tourism. In B.C., eco-tourism can visit native petroglyphs, ancient villages, museums, and can contact local people.
- The boreal forest is home to 85% of Indigenous Peoples living in Canada and important to their livelihood, culture and spirituality.
B.C. Eco-tourism Market

- The primary market for Canadian eco-tourism companies is to fellow Canadians (57% of the market).
- In 1995, a Tourism Canada survey revealed that 23% of eco-tourists to Canada were of American decent, which is the second largest market, and 20% was from visitors from overseas, which comprised the rest of the market.
- With such a high value of the American dollar, Canadians eco-tourism companies often market their product to the U.S.
B.C. Eco-tourism Revenue

• The North American Eco-tourist Market Profile (1993) revealed that out of 7 million American’s on average a person would pay $2000-3000 a nature-based tour.
• In 1999, GDP for tourism was second at $5 billion behind forestry at $9 billion
• In 2000, tourism employed 111, 890 and was fifth highest employer in BC
• In 2001, there were 22.5 million overnight guest to BC, and they spent $9.5 billion
• 15.8% of all tourism revenue came from adventure and attraction tourism which is mainly comprised of eco-tourism.
• In 2000, $1.4 billion was made from accommodations (hotels, motels, lodges, etc) directly tied to tourism
B.C. Timber Products Market

• British Columbia is comprised of 605.6 thousand km sq. of inventoried forest land, and 517.4 thousand km sq. is timber productive forest land.

• In 2000, 204,472 hectares of forest land was harvested, and 193,177 hectares of that was of “Clear-cut” origin.

• In 2000, the forest industry employed 34,000 people in B.C.

• In 1999, the forest industry had the highest GDP of all B.C industries, at $9 billion.
B.C. Parks

• In 1997, there were 637 Provincial Parks, Recreation Areas and Ecological Reserves in B.C. covering over 8.2 million hectares.
• Parks and protected areas account for 9.2 percent of British Columbia’s land base.
• Total visitation to BC Parks has increased from approximately 3,000,000 visits in 1960 to nearly 25,000,000 in 1995 (over 7 times).

(http://wlapwww.gov.bc.ca/bcparks/facts.htm)
Robson Bight Ecological Reserve

- Unique protected area located in Coastal British Columbia.
- Protect forest land adjacent to ecologically valuable beach used by Orca (Killer) whales.
- Size: 1,715 hectares (467 ha of upland and 1248 ha of foreshore)
- Took forest land out of production to ensure stable Orca populations, which will sustain eco-tourism operations.
Robson Bight Ecological Reserve Con’t

• This is a specific example of how forest land is preserved for eco-tourism.
• Forest land is preserved for the well-being of Orca whales and the local economy.
• Whale watching, sea kayaking, and wildlife tour eco-tourism companies benefited from this reserve and many others like it!
Problems

• Eco-tourism is an industry based on natural beauty and wildlife and preservation of the land.

• Logging is a part of B.C culture and is based on degradation of forests.
  - Traditional way of life.
  - The province was founded by the forest industry, and still heavily relies on it.
  - Rural Dynamism: what happens to towns when the forest industry diminishes?

Can both industries co-exist in the future?
Possible Benefits of Ecotourism

• Creates economic value for existing forest
• Promotes conservation measures (such as formation of nature reserves)
• Profits and Employment
• Amenities and infrastructure to isolated rural areas
Challenges to Overcome

• More infrastructure, roads, development in pristine areas

• Greenwashing, “fake” ecotourism

• Conservation benefits are often ambiguous
Possible Drawbacks

• Unpredictable economic demand

• May not provide enough profits to sustain forest

• Exploitation of local culture
The Ultimate Problem

- Tourism can degrade the land it is designed to protect

- CATCH-22: Increasing profits = decreasing forest preservation

- Need carefully maintained balance between profit and conservation