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REGULATING ECOTOURISM IN GALÁPAGOS: A CASE STUDY OF DOMESTIC—INTERNATIONAL PARTNERSHIPS

Jane Heslinga, J.D.*

1. INTRODUCTION

A study of ecotourism in Galápagos exemplifies the problems faced by environmentally significant sites worldwide. The partnership approach to saving Galápagos provides a model for preserving ecosystems in other states. These partnerships will contribute greatly to establishing global norms regarding environmental issues.

In 1998, Ecuador enacted the first comprehensive legislation to protect Galápagos and curb the rapid growth of ecotourism that threatens the archipelago ecosystems.¹ The Special Regime Law for the Preservation and Sustainable Development for the Province of Galápagos [the Special Law] resulted from the domestic-international partnerships between Ecuador and two United Nations Educational, Scientific, and Cultural Organization [UNESCO] programs. Ecuador’s nomination of Galápagos as a Biosphere Reserve, under the Man and the Biosphere Program, and as a World Heritage Property, under the World Heritage Convention, laid the foundation for these partnerships.²

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Ecuador then formed funding partnerships with two world conservation organizations, the World Wildlife Fund and the Nature Conservancy, through a “debt-for-nature” swap.3

In 1978, the World Heritage Committee, recognizing the global significance of Galápagos, designated the archipelago a World Heritage site.4 The Man and the Biosphere [MAB] Programme Council included Galápagos on the Biosphere Reserve List in 1984.5 Assessments of conditions in Galápagos submitted by advisory bodies to the World Heritage Committee and the MAB Council portrayed a downward trajectory of the archipelago’s environmental health and the impetus for enactment of the Special Law.6 This partnership model continues to be tremendously important to preservation efforts in Galápagos.

The Galápagos Archipelago is “the largest, most complex and diverse oceanic island system that is still in relatively pristine condition.”7 Historically, the archipelago’s isolation provided a virtually undisturbed habitat for endemic species, those native only to a Galápagos ecosystem.8 Attracted by this isolated, previously inaccessible location, Galápagos ecotourism experienced accelerated growth during the last two decades.9

Ecotourism presents complex issues for Galápagos. Ecotourism revenue can inspire conservation efforts or lead to unregulated population growth, increasing pressures on ecosystems and civic infrastructures. Ecotourism educates visitors to the significance of Galápagos, creates sharpened awareness of that significance among Ecuadorians, and potentially develops support for conservation. Conversely, ecotourism increases the risk of introducing alien species to Galápagos, a principle threat to endemic species.10 The influx of capital from ecotourism transformed the Galápagos economy and complicated efforts at regulation.11

Before enactment of the Special Regime Law, regulation of Galápagos ecotourism was piecemeal. The laws in place suffered from lack of

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8 Id.
9 Id.
11 Banco Interamericano, supra note 7, § I, paras. B.G., B.M.
enforcement which, exacerbated by the remoteness of the archipelago, left Galápagos vulnerable to exploitation and degradation by fishing interests and ecotourism. UNESCO’s recognition of Ecuador’s conservation efforts, ongoing monitoring, and support for the Special Law perpetuates the incentive to preserve the Galápagos Archipelago in the future.

The partnerships between international organizations and a sovereign State provided a foundation and now provide a framework for environmental policies in Galápagos. These partnerships are a model applicable to environmentally significant sites worldwide. Partnerships serve to unite parties, protect areas of global significance, and clarify global environmental principles, while still honoring State sovereignty.

2. THE SIGNIFICANCE OF GALÁPAGOS

The United Nations Educational, Scientific, and Cultural Organization [UNESCO] recognizes the Galápagos archipelago as a globally significant site of great interest to the scientific community. The archipelago, comprised of about 120 islands, is 620 miles west of its sovereign Ecuador, and forms “the largest, most complex and diverse oceanic island system in the world that is still in relatively pristine condition.” Terrestrial and insular marine ecosystems contain a vast number of distinctive habitats, processes, and species, many not yet studied by the world scientific community.

The global scientific significance of the archipelago prompted the Charles Darwin Foundation to establish a research station on Isla Santa Cruz in 1964. Over 700 scientific missions have used the Charles Darwin Research Station [CDRS] as base according to a 1996 case study. The CDRS characterizes the ecological complexity of Galápagos as “still only poorly understood.”

The undisturbed habitat of the isolated archipelago fostered unusually high rates of endemism, especially plant, bird and reptile species. Marine biodiversity research indicates that eight out of sixteen known groups, representing 1,662 species, are highly rich endemically. Twenty-six of fifty-seven bird species are endemic, as are all reptiles with the exception of two marine tortoises.

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12 Id. § I, para. A.A.
14 C. McFarland & M. Cifuentes, Case Study: Galápagos, Ecuador, 1996.
15 Bustamante, supra note 13, at abstract.
16 Banco Interamericano, supra note 7, at § I, para. A.A.
17 Bustamante, supra note 13, at tbl. 1.
Geologists and seismologists from around the world are intrigued by the geologically young archipelago, which dates back only three to four million years in the oldest areas.\textsuperscript{19} Intense seismic and volcanic activity formed the islands leaving crater lakes, fumaroles, lava tubes, sulfur fields, a great variety of lava and other ejecta such as pumice, ash, and tuff. The recent seismic activity in the western archipelago provides significant data to seismologists studying patterns of volcanic eruption, data that may save lives by advancing the ability to predict eruptions elsewhere in the world.

However, the global value of the Galápagos Archipelago extends well beyond its scientific value. Ecuador’s delegate to the World Heritage Committee called Galápagos “an exceptional treasure of the world.”\textsuperscript{20} Surrounded by the archipelago’s starkly serene beauty, one can imagine creation. The significance of the contrast between Galápagos and all other places goes beyond science for many of the same reasons it attracts scientific study: it has something to teach us, it provides a vision of a world essentially unaltered by humankind. All creatures in Galápagos are fearless of humans, and this oddity reminds us, by contrast, why so many other creatures fear us. This “exceptional treasure” has drawn ecotourists as well as scientists, and ecotourism ironically threatens the very environment to which it was drawn.

3. ECOTOURISM VS. ENVIRONMENT?

3.1 What is Ecotourism?

Definitions of “ecotourism” differ dramatically. The word “ecotourism” can emphasize the ecological significance of a destination and thus provide guidance to tourists as to appropriate conduct. The word can also impart the impression that a provider of travel services is “ecologically” committed. The commitment of ecotourism companies to environmental preservation is not uniform. In Galápagos, some tour operators are genuinely committed to environmental goals. They operate above and beyond the park rules, use four-stroke engines rather than the more polluting two-stroke, avidly recycle, and conduct ongoing personnel training. Other ecotourism companies barely meet the threshold requirements.

Nearly all Galápagos ecotourism is concentrated in the coastal-marine area and the immediate hinterland. Ecotours cruise between the islands, landing at approved sites for snorkeling, hiking, and boating in small puntas (dinghies). Galápagos National Park [GNP, the Park] currently admits tourists into designated visitor zones on 14 islands.\textsuperscript{21} Island conditions dictate the

\textsuperscript{19} Id. at 3.


\textsuperscript{21} Letter from D. Cruz, External Relations Officer, Galápagos National Park, Puerto Ayora, Galápagos, to Jane Heslinga (Oct. 30, 2000) (on file with author).
opening and closing of areas within those zones. The Park permanently closed five islands to land tourism; all the rest of the islands remain closed for an indefinite term. Near the outer islands, dive tourism operators charge a premium to divers attracted by the wealth of big marine animals, especially sharks.

Tourism operators view regulation of Galápagos ecotourism from the perspective of their own economic interest. The International Galápagos Tour Operators Association [IGTOA] predicts that if “nature tourism cannot produce sufficient revenues, the result will be unemployment, economic hardship, and skepticism about the wisdom of a nature-based tourist policy.” The economic interests of ecotour operators may or may not be consistent with environmental health and preservation. Ecuador must balance tourism revenues, sustainability issues, and environmental protection.

3.2 The Rapid Growth of Ecotourism in Galapagos

“Tourism is like fire. It can cook your food or burn your house down.”

Banco Interamericano de Desarrollo figures indicate that tourism has been the principal economic activity in Galápagos since the seventies and, as of December 1997, employed 40 percent of the Galápagos population. According to the CDRS, "economic benefits from tourism have been both the principal incentive for conservation and the motor driving immigration over the past 20 years."

In 1979, 11,765 tourists visited GNP. Tourism in the Park remained under 20,000 visitors per year until 1986, when the count rose 50 percent to 26,023. By 1990, over 40,000 tourists per year entered the Park. The number rose again sharply in 1994, to 53,825 visitors. In 1999, 66,053 tourists visited Galapagos. If tour boats operated at full capacity 52 weeks per year, those numbers could reach 80,000.

Note: Land tourism is currently permitted on the following islands: Genovesa, Fernandina, Isabela, Santiago, Rabída, Sombrero Chino, Bartolomé, Seymour Norte, Santa Cruz, Plaza Sur, Santa Fe, Santa María, Española, and San Cristóbal.

22 Id. Note: The islands of Pinzón, Marchena, Pinta, Darwin, and Teodoro Wolf are permanently closed to land tourism. Scuba diving near these islands is currently permitted.

23 IGTOA, Issues Facing the Galápagos (last modified Nov. 6, 1997), <http://www.igtoa.org/issues>.


25 Banco Interamericano, supra note 7, ¶ I, para. B.G.

26 Bensted-Smith, supra note 10, ¶ 3, para. 8.


28 Id.

29 Id.

30 Id.

31 Id.

32 Id.
As the number of visitors grew, tourism revenue dramatically changed the Galápagos economy. Galápagos ecotourism brought an estimated $55 million into the Ecuadorian economy in 1993.\(^{33}\) By 1994, the immigration of mainlanders seeking economic opportunities in tourism and fishing created a population growth rate estimated at eight and a half percent per year.\(^{34}\) The growing number of tourists and a rapid influx of immigrants drawn by the tourism economy strained the civic infrastructure of the four inhabited islands. By 1998, the three principal municipalities urgently required investment to repair, replace, and expand a sanitary infrastructure that was in critical condition.\(^{35}\)

Rapid growth also led to increased importation of foodstuffs and supplies. The CDRS characterizes importation as the main channel for inadvertent introduction of plants, insects, and diseases, the principal threat to biodiversity in the archipelago.\(^{36}\) Nearly 150 alien species found their way to Galapagos in the decade between 1987 and 1997, a period during which tourism doubled.\(^{37}\) In the preceding 400 years, humans introduced approximately 200 alien species.\(^{38}\) The World Heritage Committee identified the introduction of alien organisms associated with ecotourism as a primary threat to the Galápagos ecosystems.\(^{39}\)

### 3.3 Ecotourism and Environmental Education

Ecotourism’s potential to educate factors into the direction taken by UNESCO and Ecuador. Educating ecotourists on environmental issues facing Galápagos engenders additional support in foreign States for preservation of the archipelago. Appreciation of environmentally sound practices by ecotourists can be a market force in the tourism industry, providing further incentives for preservation and conservation.

Naturalist guides, trained and licensed by the GNP, provide the tourist education. Park rules require that a naturalist guide accompany tourists at all times. The guides describe the ecosystems of the islands and marine reserve, emphasize sound preservation practices, and insure that all tourists are cognizant of Park Rules.\(^{40}\) Naturalist guides repeat these rules throughout the

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33 Banco Interamericano, supra note 7.
35 Banco Interamericano, supra note 7, at \(\S\) I, para. B.M.
36 Bensted-Smith, supra note 10, at \(\S\) 3.
37 Banco Interamericano, supra note 7, \(\S\) I, para. B.J; Letter from Charles Darwin Foundation, supra note 27. Note: Tourism figures for 1987 and 1997 were 32,595 and 62,809, respectively.
38 Banco Interamericano, supra note 7, at \(\S\) I, para. B.J.
39 World Heritage Committee, Eighteenth Sess., supra note 34, at 50.
40 Galápagos National Park, Park Rules, Puerto Ayora, Galápagos: 1) No plant, animal, or remains of such (including shells, bones, and pieces of wood), or other natural objects should be removed or disturbed. 2) Be careful not to transport any live material to the islands, or from island to island. 3) Do not take any food to the uninhabited islands. 4) Do not touch or handle the animals. 5) Do not feed the animals. 6) Do
duration of a tour. This is important, because the rules are not all intuitively obvious. Stepping off of a marked trail to retrieve trash, ostensibly, would be good environmental behavior, but in breeding season, leaving the trail can do more harm than leaving the trash in place. For ecotourism to educate ecotourists in Galápagos, excellent guides are essential.

As ecotourism increased, the demand for guides grew as well. In the past, naturalists who hired on as guides were committed to preservation, and their employment was an outgrowth of this commitment. Now many guides may be more motivated by the “good job” and less committed to the environment, underscoring the need for naturalist training. There is a feeling among some of the veteran guides that the naturalist guide training has become looser as the demand has grown.

The Charles Darwin Research Station and the Galápagos National Park are expanding their education programs. CDRS personnel explain that “the aim goes beyond changing attitudes and behavior. It is to incorporate into the emerging island culture . . . a universal understanding of the vulnerability of Galápagos and concern to defend Galápagos against alien organisms.” Many residents who immigrated to Galápagos during the expansion of ecotourism are not able to distinguish between native and non-native species, nor do they understand why alien species are undesirable. Most school children in Galápagos do not have the opportunity to see the other islands. It is important to educate them about the importance of their home beyond its attraction to ecotourists.

The Spanish government contributed $2.7 million in international aid for development of education programs and the construction of the Park’s Interpretation Centers. Spain has long provided aid and technical assistance to Ecuador to protect the biodiversity of Galápagos and has advocated limiting the number of visitors to the archipelago.

The Interpretation Centers exemplify ecotourism’s potential to educate the world about conditions in Galápagos. The Interpretation Centers impart information to tourists about threats to the environment and ecosystems of the archipelago. Because ecotourism is not alone responsible for environmental

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1 Interview with naturalist guides in Galápagos National Park, June 24, 2000.
2 Id.
3 Bensted Smith, supra note 10, § 3, para. 6.
4 Id.
6 Id.
7 Galápagos National Park Interpretation Center, Isla San Cristóbal, Galápagos.
damage in Galápagos, the Interpretation Centers increase awareness of other threats to Galápagos, and support for protection spreads within the tourists’ home countries.

3.4 Other Threats to the Biodiversity of Galápagos

The ecosystems of Galápagos have suffered threats from man since the earliest days of exploration. In the late 19th and early 20th centuries, sailors, whalers, and explorers nearly wiped out the giant tortoise. They slaughtered mass numbers of tortoises and loaded many live onto ships to supply meat during ocean voyages.\(^{48}\) The Park Interpretation Center displays photos from this era: photos of dead tortoises, tortoises in cargo holds, mounds of tortoise shells.\(^{49}\) Early exploration was only the first chapter of exploitation in the archipelago.

Fishing in the marine reserve has resulted in environmental degradation and has engendered conflict.\(^{50}\) Industrial fishing boats from mainland Ecuador threaten the marine ecosystems.\(^{51}\) The earliest fishing heavily exploited the Grouper, which is now only occasionally found in these waters.\(^{52}\) Lobster fishing severely depleted that population; a February 1998 dive survey of 25 sites counted only three lobsters.\(^{53}\)

On June 23, 1994, the National Fisheries Development Council lifted a ban on fishing allowing “experimental” fishing of sea cucumbers, lobster sharks, serranids and other species.\(^{54}\) Fishermen exceeded the limit on sea cucumbers after a mere twenty days.\(^{55}\) The sudden “gold rush” atmosphere depleted resources, damaged the environment, and threatened to extinguish the entire population of sea cucumbers.\(^{56}\) As a result, the Ecuadorian Subsecretary of Fisheries ended the “experimental” fishing season on December 15, 1994.\(^{57}\)

Access to Asian markets to sell illegally caught species still exacerbates pressures on marine ecosystems and threatens the populations of sea horses, snails, sea urchins, and black coral.\(^{58}\) The Asian market for illegally caught sharks, sought primarily for their fins, threatens depletion of an ecologically important top predator.\(^{59}\) Efforts by maritime patrols to detect illegal shark fishing are constrained by the archipelago’s size and location.\(^{60}\) However, the

\(^{48}\) Id.

\(^{49}\) Id.

\(^{50}\) Note: The problems cause by industrial fishing are extensive and beyond the scope of this paper.

\(^{51}\) Bustamante, supra note 13, at § 1, para. 1.2; Banco Interamericano, supra note 7, § I.

\(^{52}\) Bustamante, supra note 13, at § 3, para. 3.1.1.

\(^{53}\) Id.

\(^{54}\) World Conservation Monitoring Centre, supra note 18, at 6.

\(^{55}\) Id.

\(^{56}\) Id.

\(^{57}\) Id. at 4.

\(^{58}\) Id. at 6.

\(^{59}\) Id. at 4.

\(^{60}\) Banco Interamericano, supra note 7, § I, B.I.
expanding dive tourism industry, attracted by the opportunity to see sharks in their marine habitat, may inspire tighter patrols that will help to protect these species.61

3.5 The Status of Regulations Re Ecotourism Prior to the Special Law

Three months before passage of the Special Law, discussed at length below, Banco Interamericano de Desarrollo published an update on conditions in Galápagos.62 The bank completed its December 1997 assessment in conjunction with a $32 million loan to Ecuador’s Ministry of the Environment.53 According to the bank’s project team, various government entities carried out general management of the Galápagos; however, no entity held a clear leadership role in formulating policy.64 This piecemeal management approach, combined with the rapid growth of ecotourism and immigration, stalled implementation of management plans.

The growth of tourism simply outpaced regulations. Unplanned urban development around tourist bases and economic dependence grew as rapidly as the tourist numbers.65 The rapid influx of immigrants from the mainland strained civic infrastructures. The three principal municipalities were all characterized by deficiencies in sewer and solid waste management services.66 The potable water systems were in poor condition, unprepared for the ensuing rapid population growth.67 The demand for importation of foodstuffs and other goods increased, which in turn increased the number of alien species introduced.68 Civic problems reached a crisis point, and on April 29, 1997, the Ecuadorian President issued an Emergency Decree restricting immigration and requiring the Congress to draft a Special Law for the Galápagos.69

Although the now defunct Ecuadorian Forestry Institute [INEFAN] approved a Marine Reserve Management Plan in 1992, establishing zones for tourism, that plan remained unimplemented in 1997.70 The zoning plan was outdated and, according to the World Conservation [IUCN] Monitoring Centre, was inadequate to address “the new types of tourism which [were] developing such as diving, sport fishing, day tours, and driving tours.”71 In 1997,

61 Bustamante, supra note 13, ¶ 1, para. 1.2.
62 Banco Interamericano, supra note 7.
63 Id. Note: Bank project number: EC-0134, Environmental Program for the Protection of the Galápagos Islands.
64 Id. at ¶ I, para. C.Q.
65 World Conservation Monitoring Centre, supra note 18, at 7.
66 Banco Interamericano, supra note 7, at ¶ I, para. B.M. Note: The three municipalities are Puerto Ayora on Santa Cruz, Puerto Baquerizo on San Cristóbal, and Puerto Villamil on Isabela.
67 Id.
68 Id.
69 Executive Decree No. 245, 2d Supplement to Official Registry No. 55, Ecuador, April 29, 1997.
70 World Conservation Monitoring Center, supra note 18, at 6. Note: The management plan also established zones where industrial fishing is allowed, discussion of which is beyond the scope of this paper.
71 Id. at 7.
the CDRS revised INEFAN’s plan, in conformity with the UNESCO Agreement for the Creation of the Biological Reserve, discussed below. In 1998, the Special Law, discussed below, created an Inter-institutional Management Authority charged with the power to approve and implement a management plan for the marine reserve.

Banco Interamericano identified the need to strengthen enforcement of tourism, fisheries, and pollution control regulations. Although required by agricultural regulations since 1994, a monitoring system for inspection and quarantine of cargo was not initiated until mid-1997. Increased importation of uninspected cargo continually risked the introduction of alien species, a danger that remained unaddressed.

A pilot program, initiated in mid-1997, inspected inter-island boat traffic from Isle Santa Cruz. Coverage expanded to the other islands in 1998. The CDRS points out that inspection and quarantine in and around Galápagos points of entry are merely a final line of defense. An effective program must include monitoring mainland ports serving Galápagos and inspection of boats destined for the marine reserve. Inspection of private yachts entering the marine reserve is crucial, particularly when the yacht comes from a foreign port.

4. PARTNERSHIPS BETWEEN INTERNATIONAL ORGANIZATIONS AND ECUADOR

Ecuador’s enactment of the Special Law, discussed below, and UNESCO’s guidance provide the ongoing framework for preservation of Galápagos. Regulation of ecotourism is possible because this framework is now in place.

UNESCO’s Man and the Biosphere Programme, recognizing the significance of Galápagos’, included the archipelago on the Biosphere Reserves List in 1984. That year, 18,858 tourists visited Galápagos. The ecotourism boom was in its infancy, and the pristine archipelago appeared secure from harm.

Galápagos became a designated World Heritage Site on September 8, 1978, but by December 1995, the World Heritage Committee considered changing its status to a World Heritage Site in Danger. During those seventeen years, the number of tourists visiting Galápagos climbed from 11,000 to over 55,000, per year.

72 Id. 73 Special Law, supra note 1, at tit. 1, chap. IV, arts. 13-14. 74 Banco Interamericano, supra note 7, at § II, para. A.E. 75 Bensted-Smith, supra note 10, at § 3, para. 3. 76 Id. 77 Id. 78 Id. 79 Letter from Charles Darwin Foundation, supra note 27. 80 Id.
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The environmental health of Galápagos was in jeopardy. Although Ecuador had secured funding for conservation through “debt-for-nature” swaps with the World Wildlife Fund and the Nature Conservancy, environmental assessments revealed an inadequate and unimplemented conservation plan.\textsuperscript{81}

4.1 1978: Inclusion on World Heritage List

During its second session in 1978, the UNESCO World Heritage Committee [WHC, the Committee] included Galápagos on the World Heritage List [the List].\textsuperscript{82} Designation as a World Heritage Property evidences global recognition of a property’s outstanding universal value.\textsuperscript{83} A brief overview of the Committee’s Principles and Guidelines demonstrates the importance of this designation. In 1972, the General Conference of UNESCO adopted the World Heritage Convention and The General Principles, which state: “[the List] is not intended to provide for the protection of all properties of great interest, importance, or value, but only for a select list of the most outstanding of these from an international viewpoint.”\textsuperscript{84} The “conditions of integrity” state that a nominated property should:

i. . . . contain all or most of the key interrelated and interdependent elements in their natural relationships . . . .

ii. . . . have sufficient size and contain necessary elements to demonstrate the key aspects of processes that are essential for the long-term conservation of the ecosystems and biodiversity they contain . . . .

iii. . . . be of outstanding aesthetic value and include areas that are essential for maintaining the beauty of the site . . . .

iv. . . . have adequate long-term legislative, regulatory, institutional or traditional protection . . . .

v. . . . be the most important sites for the conservation of biodiversity.\textsuperscript{85}

Evidence of the full commitment of the nominating government, within its means, is a prerequisite for the inscription of a property on the World Heritage List.\textsuperscript{86}

The World Heritage Fund administers international assistance for any property inscribed on the List.\textsuperscript{87} State Parties may qualify for five broad forms

\textsuperscript{81} Fuller, supra note 3.
\textsuperscript{82} Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, supra note 4, at ¶ VIII, para. 38, Sept. 5-8, 1978.
\textsuperscript{84} Id.
\textsuperscript{85} Id. at ¶ I, para. D.44.b.
\textsuperscript{86} Id. at ¶ I, para. A.6.v.
\textsuperscript{87} Id. at ¶ IV, para. 122.
of financial assistance: preparatory, emergency, technical co-operation, and educational. 88 Ecuador received a 1998 grant for $61,000 under technical cooperation and $31,500 under training to combat invasive species. 89 In May 1999, UNESCO approved funding of $3,999,850 to build on the Special Law and address the threat of invasive species in Galápagos, which was identified as a consequence of increased ecotourism. 90

In 1994, the WHC deferred decision on Ecuador’s nomination of the marine reserve as an extension to the World Heritage site. 91 Although the Committee commended Ecuador on efforts to enlarge the World Heritage Site to include marine habitats, it indicated that it was “seriously concerned” by threats to the integrity of the Galápagos archipelago. 92 The Committee identified four threats: human pressures from population increases and ecotourism, inadequate management and infrastructure, introduced species, and illegal and over fishing. 93 Ecotourism is a primary factor in three of the four identified threats. In September 1999, the advisory World Conservation Union [IUCN] reported to the WHC that the management plan of the 1998 Special Law, discussed below, may provide a good basis for re-nomination of the marine reserve. 94 At its 24 session, the Bureau of the WHC thanked Ecuador for considering extending the World Heritage Area to include the marine zone. 95 The Bureau recommended that a monitoring mission be linked with the IUCN evaluation of the marine extension in 2001.96

4.2 1984: Designation as a Biosphere Reserve

The UNESCO Man and the Biosphere [MAB] Programme included Galápagos in its Network of Biosphere Reserves in 1984.97 Biosphere Reserves are intended to fulfill three basic functions: 1) conservation of landscapes, ecosystems, species, and genetic variations; 2) development that is socio-culturally and ecologically sustainable; and 3) logistical support for research, monitoring, education, and information related to local, national, and global issues of conservation and development. 98 Participation in the

88 Id. at § IV, paras. A.94-111.
90 Id.
91 World Heritage Committee, Eighteenth Sess., supra note 34, at 50.
92 Id.
93 Id. at 50-51.
96 Id.
97 MAB, Biosphere Reserve Directory, supra note 5.
Network of Biosphere Reserves is voluntary, and reserves remain under the sole sovereignty of the State concerned.99 By participating, State parties are better able to respond to political, economic, and social pressures that could compromise the ecological and cultural values of an area.100

After ten years, the MAB Advisory Committee conducts a “periodic review” to assess the Biosphere Reserve’s compliance with Article Four/Biological Reserve criteria.101 The Advisory Committee conducted the first periodic review of Galápagos in 1999, concluding that the site was “mainly managed as a classical national park” and that it did not fulfill the Biosphere Reserve criteria.102 Concerns identified included the increasing human pressure from tourism, exotic species, and immigration.103 The International Coordinating Council [ICC] pointed out that one of the merits of the review exercise is to re-establish contact between authorities responsible for the Biosphere Reserve and the MAB Secretariat.104

Although a 1997 report, pre-dating enactment of the Special Law, formed the basis for the Advisory Committee’s review, problems caused by tourism cannot be quickly remedied. The ramifications of rapid growth in the areas of tourism, immigration, and importation are to some extent self-sustaining. Although alien species are a primary threat to Galápagos ecosystems, eradication of those species is an expensive and lengthy process, and years of work lie ahead.


In 1987, the World Wildlife Fund (WWF) and other conservation organizations began discussing “debt-for-nature” swaps with nations heavily indebted to banks in the United States.105 Developing countries, burdened by debt, swap a portion of that debt for conservation efforts.106 In October 1987, Ecuador became the second debtor-nation to initiate a swap.107 The plan allowed the Central Bank of Ecuador to convert up to $10,000,000 of Ecuadorian debt into local currency bonds to be held by Fundacion Natura, an

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99 Id. at art. 3.
101 Man and the Biosphere Programme, Statutory Framework, supra note 98.
103 Id.
104 International Coordinating Council, MAB, Provisional Agenda (for the Sixteenth Sess., Nov. 2000), Sept. 11, 2000, SC-00/CONF.208/2.
105 Fuller, supra note 3.
106 Note: The Treasury Department provided lenders a full-cost-basis deduction for these donations, 1987-2 C.B. 205; Rev. Rul. 87-124.
107 Fuller, supra note 3.
advisory to the drafters of the Special Law and Ecuador’s leading conservation organization.\textsuperscript{108}

The World Wildlife Fund initially purchased $1,000,000 of Ecuadorian debt.\textsuperscript{109} In April 1989, the World Wildlife Fund and the Nature Conservancy announced two additional debt-for-nature swaps, with $5,400,000 from the WWF and $3,600,000 from the Nature Conservancy.\textsuperscript{110} Interest on the bonds helps fund Galápagos National Park, the training of personnel, environmental education, and local conservation efforts.\textsuperscript{111} The principal provides an endowment for Fundacion Natura.\textsuperscript{112}

According to Kathryn S. Fuller, then vice president of the World Wildlife Fund, “debt-for-nature swaps promote and highlight the value of partnerships between conservation organizations in the developed world and their counterparts in the developing world.”\textsuperscript{113} She sees it as tremendously significant that the model for the swap in Ecuador originated in that country.\textsuperscript{114} Fuller explains, “Experience has shown [disruption] can be avoided by listening to the in-country partners, learning from them about their needs, and working with them to ensure that joint conservation efforts incorporate local views and experiences.”\textsuperscript{115}

4.4 1995: Consideration of “World Heritage Site in Danger” Status

During the December 1995 session of the World Heritage Committee, IUCN and the Delegate of Ecuador identified the primary threats to Galápagos: invasive species, unbalanced tourist activities, human population growth, inadequate legal and administrative structure, and illegal fishing.\textsuperscript{116} The Committee considered placing Galápagos on the List of World Heritage sites in Danger. To do so requires a finding of ascertained danger [a serious decline of endangered species, severe deterioration by human settlement, human encroachment on boundaries] or potential danger [modification of legal protective status, planned resettlement or development, armed conflict, or a management plan either inadequate or not fully implemented].\textsuperscript{117} The Committee reviews and monitors property on the In Danger List at regular intervals.\textsuperscript{118}

\textsuperscript{108} Id.
\textsuperscript{109} Id.
\textsuperscript{111} Fuller, supra note 3.
\textsuperscript{112} Id.
\textsuperscript{113} Id.
\textsuperscript{114} Id.
\textsuperscript{115} Id.
\textsuperscript{116} World Heritage Committee, Nineteenth Sess., supra note 20, at 13.
\textsuperscript{117} World Heritage Committee, *Operational Guidelines*, supra note 82, § III, para. B.83.
\textsuperscript{118} Id. at § III, para. C.92.
At Ecuador’s invitation, the WHC Director led a mission to Galápagos June 1-11, 1996, and reported to the Bureau of the World Heritage Committee later that month. The Bureau concluded that the serious problems in Galápagos required remedial actions to safeguard the values of the site and surrounding marine areas. The Bureau called on Ecuador’s President and Congress to enact “special legislation” as an emergency measure and to submit a report the following November.

At its next session, in December 1996, the Bureau recommended inscription of Galápagos on the In Danger List. The Delegate of Ecuador requested that the Committee refrain from this action. The Delegate emphasized his country’s efforts: the establishment of a Ministry of the Environment and a working group preparing the “Special Legislation.” The Committee decided to inscribe Galápagos on the In Danger List effective November 15, 1997, unless Ecuador took effective actions and submitted a substantive written reply by May 1, 1997.

In June 1997, the Bureau reviewed reports from Ecuador and IUCN. The Bureau decided against inscribing Galápagos on the In Danger List and stated, “such effective actions have been taken that the efforts of the Ecuadorian authorities should be honoured.” The Bureau called for Ecuador to submit annual progress reports on all issues.

International efforts to encourage preservation of Galápagos fostered domestic legislation. Ecuador’s response to environmental assessments by IUCN solidified the partnership approach. Ecuador’s enactment of the Special Law in 1998 was greeted enthusiastically by international organizations.

5. ECUADOR RESPONDS

5.1 Special Regime Law for the Preservation and Sustainable Development of the Province of Galápagos

On March 6, 1998, then Ecuadorian President Fabián Alarcón signed the Special Regime Law for the Preservation and Sustainable Development of the Province of Galápagos [the Special Law], a series of sweeping new protective measures characterized by the World Wildlife Fund as “the biggest
milestone” in Galápagos protection in the last 50 years.128 The Preamble to the Special Law references Galápagos’ designation as a World Heritage Site and its inclusion in the World Network of Biosphere Reserves, and states:

Therefore, the Ecuadorian State assumed before all the nations of the world the unavoidable and historical commitment to preserve Galápagos... Archipelago for present and future generations... The Ecuadorian State is bound to ensure the preservation of National Heritage Sites in Natural, Land and Marine Areas, as well as the development of surrounding human settlements and to adopt legal measures aimed at fostering a harmonic relationship with the inhabitants of the province of Galápagos. ...129

The Ecuadorian State declares it to be its policy to protect and preserve the land and marine ecosystems and the exceptional biodiversity of Galápagos.130 The Special Law incorporates that policy into law.

The Special Law responded to issues identified by IUCN and the Bureau of the World Heritage Committee. Ecuador acted with determination to prevent inclusion of Galápagos on the In Danger List. Protections enacted by the Special Law include:

- the first inspection and quarantine system to combat invasive species;
- specific limitations on permanent residency status in Galápagos;
- expansion of the range of protected waters, in which industrial scale fishing is banned, from 15 to 40 miles around the islands;
- a protection area of 60 nautical miles from the baseline to regulate the transport of toxic or high-risk products, a limit that can be increased; and
- prohibition of pesticide use.131

Title V. of the Special Law authorizes and mandates environmental audits, civil and criminal liability, prohibitions against enumerated means of pollution, and provisions for waste management.132 Title VII. provides penalties, including prison sentences and fines, for infractions.133

The National Galápagos Institute (INGALA), a public entity created by the Special Law, has “the legal status and capacity to exercise rights and assume obligations.”134 The 13 member INGALA Council includes the Minister

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129 Special Law, supra note 1, at Preamble.
130 Id.
131 Id. at tit. II; tit. I, chap. IV, para. 1°, arts. 12, 16; tit. I, chap. III, arts. 54-55. Note: “Baseline” refers to the Archipelago and its inland waterways.
132 Id. at tit. V, arts. 61-63.
133 Id. at tit. VII.
134 Id. at tit. I, chap. I, art. 3.
of the Environment as chair person, the Minister of Tourism, and the Charles Darwin Foundation as a non-voting member. \(^{135}\) INGALA exercises responsibility over planning and coordination for Galápagos Province, including environmental management and social issues. \(^{136}\)

The Special Law charges officials of Galápagos National Park with administration and management of the Marine Reserve, granting GNP jurisdiction over the management of natural resources. GNP has the duty to program, authorize, control and supervise tourist activities. \(^{137}\) The Special Law restricts tourism activities to those based on the principle of “nature-oriented tourism” operating in a mode compatible with conservation principles. \(^{138}\) Although the phrase “nature-oriented tourism” can be as loosely defined as the word “ecotourism,” the GNP determines what is “nature-oriented.” The GNP works closely with the Charles Darwin Research Station and strives to protect Galápagos.

The Special Law places specific legal restrictions on tourists’ conduct. Tourists may not carry out profit-making activities, may only remain on provincial territory for a maximum of 90 days each year, must obtain a Transit Control card issued by INGALA, and must buy a round-trip ticket from the mainland. \(^{139}\) The Park entrance fee ($100.00 adults, $50 children under 12) is payable in cash, and by provision in the Special Law, that money “will not be entered into the Single Account of the National Treasury [but] will be administered by the Board of the National Park.” \(^{140}\) In the past, the money generated from Park fees paid by check or credit card would process through mainland banks and would not return to Galápagos.

It is critically important to appreciate that the Special Law promotes the interest of Galápagos residents by encouraging their involvement in tourism activities and by reserving the rights for tour authorizations or permits to permanent residents. \(^{141}\) Tour operation authorizations and permits granted prior to enactment of the Special Law “will be respected and maintained.” \(^{142}\)

\(^{135}\) Id. at tit. I, chap. II, art. 5. \(^{136}\) Id.

\(^{137}\) Id. at tit. I, chap. IV, para. 1\(^{\circ}\), art.15; tit. IV, chap. II, art. 46.

\(^{138}\) Id. at tit. IV, chap. II, art. 45.

\(^{139}\) Id. at tit. II, arts. 30-31.

\(^{140}\) Id. at tit. I, chap. IV, para. 2\(^{\circ}\), art. 20.

\(^{141}\) Id. at tit. IV, chap. II, art. 47.

\(^{142}\) Id. at tit. IV, chap. II, art. 48.
Whether those authorizations and permits are renewable upon expiration is unclear.

5.2 Regulations for the Concession of Permits to Vessels

Regulation of Galápagos tourism requires regulation of sea-going vessels, the only means of traveling between the islands. Galápagos National Park imposes limitations, through the system of authorizations and permits, on the number and capacities of boats authorized to enter the Marine Reserve. The limitations on boats determine the number of ecotourists, which is not otherwise officially limited. Demand determines whether a particular tour travels at full capacity; demand and weather determine the number of weeks per year a vessel is out on tour.

5.2.1. Foreign Vessels

In 1980, Ecuador enacted Regulations for the Concession of Permits to Foreign Vessels to Visit the Territorial Sea, the Coasts and the Islands of the Galápagos Archipelago for Scientific, Cultural, or Tourist Purposes. The Regulations cover enforcement of the Maritime Police Code, Navigation to the Colon Archipelago. The Special Law affirmed that non-commercial foreign vessels must comply with the Special Regulations, but amended the Chapter “Resupply in Galápagos.” The Special Law prohibits tourism activities on board any non-commercial foreign vessel that has dropped anchor to replenish supplies. All foreign vessels must be inspected to prevent the introduction of alien organisms, and foreign vessels must obtain a fumigation certificate at the previous port of call.

Private foreign vessels entering the Marine Reserve for the purpose of tourism must obtain two authorizations: an agreement from the General Marine Command of the National Defense Ministry, 60 days prior to the vessels’ entry into Ecuadorian waters, and an authorization from Galápagos National Park. The National Defense Ministry may delay or deny any authorization that it considers inappropriate, inconvenient, or affecting the national

144 Regulations for the Concession of Permits to Foreign Vessels to Visit the Territorial Sea, the Coasts and the Islands of the Galápagos Archipelago for Scientific, Cultural, or Tourist Purposes, Executive Decree No. 812, Official Registry No. 346, Ecuador, Dec. 29, 1980.
145 See id.
146 See id.
147 Id. at ch. IV, arts. 8-9; Special Law, supra note 1, tit. IV, chap. II, art. 50.
148 Consulado General del Ecuador, New Jersey, USA, http://www.consuladeecuadornj; see, Special Law, supra note 1, tit. IV, chap. III, art. 56.
149 Regulations for Concession of Permits, supra note 144, chap. 1; Special Law, supra note 1, tit. IV, chap. II, art. 46.
The Ministry may invalidate authorizations as a response to circumstances or noncompliance with requirements. These broad discretionary powers provide a balance against the potential for ecotourism yachts to increase capacity.

The imposition of fees also controls the number of private and foreign vessels. The Park charges $200 per day for each person, including crewmembers, on a private yacht in addition to park entrance fees. One naturalist guide must be hired for every fifteen passengers, and the guide or guides must accompany the tourists for the duration of their stay within the Marine Reserve.

5.2.2. Quota and Permit System for Vessels Registered in Galápagos

Ecotourism operators and ship owners must obtain an authorization and permit from Galápagos National Park. The GNP authorized permits for four vessels in 1999-2000, bringing the total to 91. INEFAN, the former permit authority, did not issue any new permits in the last decade.

The now defunct INEFAN issued the original permits only to boats flying under the Ecuadorian flag, allegedly without restriction on sale or transfer other than the requirement of Ecuadorian registration. The scrutiny given to original applicants would be compromised by transfer, but that issue is of less practical importance in light of GNP’s authority to invalidate a permit. The Special Law mandates that future authorizations or permits shall only be accorded to “permanent residents.” It remains unclear whether the permanent residency must be in Galápagos or simply in Ecuador.

INEFAN’s and now GNP’s authority over tourism vessel permits prevented incalculable damage to the Galápagos Archipelago. It also serves as a functioning example of a coherent legal and regulatory framework. Effective implementation of the Special Law over a period of time will cause the legal and regulatory framework of preservation to become the norm. The World Heritage Committee, IUCN, the MAB International Co-operation Council, and the Advisory Council to ICC will all be monitoring and supporting Ecuador’s progress in environmental preservation.
6. THE PARTNERSHIP MODEL

The word “partnership” describes a cooperative effort by parties of equal importance. Partnership is distinguishable from “participation,” a term often used to describe a State’s activities in global affairs. The latter term can imply that the participant is joining in as an auxiliary or subordinate party. In that case, the efforts in which one particular State party participates will presumably continue regardless of that party’s participation. The efforts of a partnership, on the other hand, reflect the combined perspectives and concerns of the partners who are individually essential to achieving the partnership goals.

An international organization, in which sovereign States participate, can become a partner with a particular sovereign State regarding environmental preservation within that State. The World Heritage Committee and Ecuador undertook a partnership approach to preservation of Galápagos. The inclusion of Galápagos on the List of World Heritage Properties provides a standard by which the partnership can assess the environmental health of the archipelago and the success of the partnership’s efforts.158

The Man and the Biosphere Programme, which is based on voluntary participation by the States, acts in partnership with Ecuador to maintain biodiversity in the Galápagos Archipelago. As previously stated, one of the merits of MAB periodic review is that it re-establishes contact between the authorities responsible for a Biosphere Reserve and the MAB Secretariat.159 This illustrates the inherent value of partnerships: the building of contact and communication, the qualities in a relationship that encourage clarification, mutual benefit, and respect.

In a world forum, the substance of principles such as sustainable development, biodiversity, universal value, and environmental protection are rather vague absent accord among a significant number of States. Preservation of the global environment requires a definition of principles as applied to the world at large consistent with the definition of principles as applied by the world community to a site within a sovereign State. Continued partnerships between world organizations and States will clarify global environmental principles and encourage respect of sovereignty.

Principles, unlike rules, do not set out legal consequences that follow automatically when the provided conditions are met. Twenty-five years ago, the International Law Commission stated: “It seems undeniable that the existing rules of general international law on [environmental protection] and those which will of necessity be added to them in the future are bound to be regarded to a great extent as ‘preemptory’ rules by the environmental community as a whole.”160 Rules that evolve from participatory relationships will tend to be

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159 International Coordinating Council, supra note 104.
based on the rights of participants. Rules that evolve from partnerships will tend to reflect community norms.

7. CONCLUSION

Growing tourism threatens the ecosystems of the Galápagos Archipelago, and those threats exemplify issues faced by environmentally significant sites worldwide. Ecotourism, if properly monitored and managed, can contribute to environmental preservation through increased awareness, education, and financing. However, if inadequately regulated, ecotourism will degrade or destroy the ecosystems of globally significant areas.

The World Heritage Committee, the Man and the Biosphere Programme, and the World Wildlife Fund worked in partnership with Ecuador for preservation of Galápagos. Ecuador responded by enacting the Special Law, regulations, and management plans for protection of Galápagos terrestrial and marine areas.

Ecuador is subject to national and international pressures to increase the number of tourists admitted to Galápagos. According to the Bureau of the World Heritage Committee, these pressures are usually economic and applied to other States responsible for environmentally significant sites. In November 1999, the Bureau stated: “The Special Law on the Galápagos provides a useful model for the management of other World Heritage sites, in particular in relation to tourism management.”

Partnerships between international organizations and sovereign States can address global environmental concerns while respecting State sovereignty. These partnerships can clarify environmental principles on a global scale, serve to foster global environmental rules, and lay a foundation for environmental rules based on cooperation and consensus.

161 Bureau of the World Heritage Committee, supra note 74, at 19.
162 Id. at 64.
163 Id.
164 Post Script: An Oil Spill near Galápagos. On Tuesday January 16, 2001, the tanker Jessica ran ashore near Isla San Cristóbal. On Friday the 19th, fuel and diesel began leaking into the marine reserve. Ecuador declared a state of emergency for the Galápagos Archipelago the following Monday. The World Wildlife Fund, in a press release, urged the Ecuadorian government to “urgently approve and apply a series of regulations that would assure effective implementation of the Special [Law].” WWF, Conservation in Galápagos Needs More than Clean Up, says WWF, press release, January 24, 2001. WWF is calling on governments to identify Particularly Sensitive Seas Areas [PSSAs] that need protection through action by the International Maritime Organization.