SOUTH-EAST ASIA

INDONESIA Ujong Kulon National Park

II.1 Introduction

Year of Inscription 1991

Organisation Responsible for the Report

 Balai Taman Nasional Ujong Kulon Jl. Perintis Kemerdekaan No. 51 Labuan, Pandeglang, West Java Indonesia

II.2 Statement of Significance

Inscription Criteria N iii, iv

Statement of Significance

- Proposed as follows:
 - "As the last significant habitat of the most endangered, single-horned Javan Rhinoceros... The Ecosystem of Ujong Kulong National Park demonstrates on-going evolution since [the last] Krakatau eruption."
- The park protects 57 rare species of plant, 35 species of mammal (including 5 primates), 72 species of reptiles & amphibians, and 240 species of birds.

Status of Site Boundaries

 Borders and buffer zone of the property are considered adequate.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

 The WH biodiversity value is considered to have been maintained. No changes are foreseen.



II.4 Management

Administrative and Management Arrangements

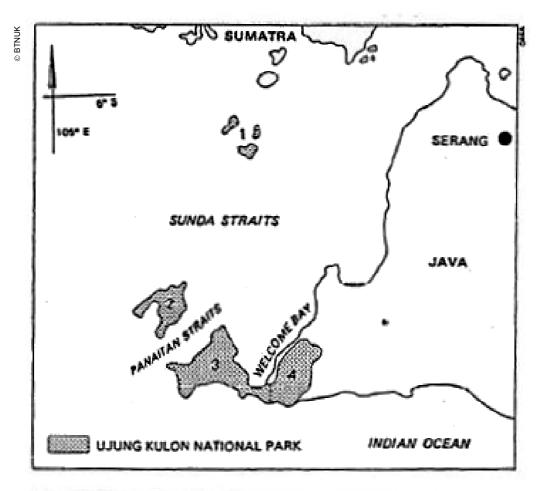
- The park has 5 integrated management programmes: (i) Java Rhino; (ii) Primates; (iii) Marine; (iv) Buffer Zone; and (v) Ecotourism.
- 20 Laws and Regulations are listed including recent regulations concerning Nature Reserves (1998) and the utilisation of flora and fauna (1999).
- Legislatively, the park has its own Rhino Management Protection Unit (RMPU) responsible for the implementation of programmes.
- The management plan (2001-2020) objectives are the following: (i) increase local community welfare; (ii) develop ecotourism; (iii) protect fauna and flora; (iv) establish the role of UKNP in science and education; and (v) sustainable utilization of biodiversity.

Present State of Conservation

- No poaching of the Java Rhino has allegedly occurred since 1992. However, there is a need for more research concerning Rhino age and sex distribution, as well as competition with wild cattle (banteng).
- Research on marine biodiversity surrounding the park should be improved.

Staffing and Training Needs

- The park has 132 employees (102 field and 30 administrive). 64% have high school education and 10% have a university degree.
- Staffing is considered inadequate. There is a need for more staff with a background in biology, forestry, fisheries, and marine science.





- I KRAKATAU
- 2 PULAU PANAITAN
- 3 UJUNG KULON
- 4 GUNUNG HONJE

FIGURE 1 Location map of Ujung Kulon

Location Map of Ujung Kulon National Park

Financial Situation

- The Government is the main source of funding which is considered inadequate. No figures supplied.
- Support from WWF, the International Rhino Foundation (IRF), Yayasan Mitra Rhino, Minnesota Zoo, and Wetland International, has been received.
- Bilateral assistance from the New Zealand-ODA is gratefully acknowledged.
- Some research funds come from the Government (Indonesian Research Authority for orchids), but most come from researchers (Bogor University for mangroves, rattans, lizards), and NGOs.

 * International Assistance from WHF as follows: (i) 1994, US\$20,000 Technical Co-operation for office building; (ii) 1995, US\$40,000 Technical Cooperation for Buffer zone.

Access to IT

- 8 PCs with limited internet access.
- The park has a GIS system with ARCview software.

"The number of Javan Rhino is

used as the main flagship

indicator since 1967. The Rhino

Visitor Management

- Approximately 4,000 visitors to the park per year.
- The park has a new project with UNESCO-UNEP-RARE to develop communitybased ecotourism.
- Alongside the existing guest houses, there is an identified need for guide books, visitor maps, slide programmes, and interpretation boards.

population seems to be stable at around 55 individuals."

- Visitor policy is outlined in the management plan.
- Park staff carry out extension work in 10 elementary schools in the district of Pandeglang each year.

The management plan for 2001-2020 identifies the following areas of priority activity: facilitating resettlement of villages outside the park; developing

seaweed, edible shell, and sea cucumber cultivation; increasing handicraft and home industries; strengthening post-harvest fishery processing and community-based forestry.

Support from the WHF may be required to increase park managers' skills through training

and site visit exchanges.

* No State of Conservation Reports

II.5 Factors Affecting the Property

Threats and Risks

- Large numbers of illegal inhabitants (roughly 100 families) clearing land for agriculture,
- Illegal fishing with destructive methods.

Counteractive Plans

- No emergency plan has been developed.
- Park management authorities co-ordinate their activities with the local police and army.
- It is planned to involve the local government to design a strategy for community development.

II.6 Monitoring

Monitoring Arrangements

 No formal monitoring system exists or is planned, but ongoing partners include WWF, IRF, and the Asian Rhino Specialist Group.

Monitoring Indicators

- The number of Javan Rhinos is used as the main flagship indicator since 1967. The Rhino population seems to be stable at around 55 individuals.
- The management plan for 2001-2020 also identifies the monitoring of Banteng as the main competitor for Rhinos; medicinal plant potential analysis; primate ecology and sea turtle monitoring; as well as Dugong, ornamental fish and coral reef monitoring every six months.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- "Indonesia has sufficient regulations to conserve its natural resources, but during the decentralization era, park managers need more guidelines [concerning] their authority for conservation."
- The park proposes to prepare a collaborative framework to involve all concerned parties for the achievement of conservation goals.

INDONESIA Komodo National Park

II.1 Introduction

Year of Inscription 1991

Organisation Responsible for the Report

Komodo National Park (KNP)
 Jl. Kasimo
 Labuan Bajo,
 West Flores NTT 86554
 Indonesia

II.2 Statement of Significance

Inscription Criteria N iii, iv

Statement of Significance

Proposed as follows:

"The specific values of Komodo National Park are high terrestrial and marine biodiversity, and that it is the only natural habitat of the Komodo Dragon in the world."

Status of Site Boundaries

- The borders of the property are considered inadequate due to several marine species which are at risk from over-harvesting and destructive fishing practices.
- It is recommended that 'sustainable harvesting zones' be created in the marine portion of the park.
- In the 25-year management plan, there is a proposal to include Gilibanta Island in the core WH zone and extend the buffer zone of the park.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

• The WH value is considered to have been maintained. No changes are foreseen.

II.4 Management

Administrative and Management Arrangements

 KNP proposes its 'activities plan' to the Ministry of Forests to receive its annual budget. The head of the KNP has the authority to make operational decisions, but not regarding boundary or personnel matters.



 A 25-year management plan (divided into 5-year operational segments) has been implemented since 2000. It proposes a zonation model for the park.

 It is deemed necessary to strengthen a collaborative management 'consortium' with different stakeholders.

- In 2001, a local regulation for Manggarai district was approved concerning types of fishing equipment permitted on the reefs. However, the enforcement support for the relevant laws must be strengthened.
- The 'Friends of Komodo' assist in English teaching and in "cleaning the park".

Present State of Conservation

 Since 1991, 20 floating mooring buoys have been installed to tie up boats and act as boundary markers for important marine biodiversity sites.

Staffing and Training Needs

- 73 rangers and 33 administrative/technical staff are employed on the site.
- Staffing numbers are considered adequate, but skills training needs are identified for surveys, data analysis, computer skills and programming, GIS, English language, and natural resource management.

Financial Situation

- Central Government funding for the KNP in 2002 was US\$ 198.000.
- Funding is considered inadequate. It is felt that the municipal government should allocate a budget to the park given that it takes part of the entrance fee to support the local economy.
- The WHF has funded the attendance of park managers in several workshops.
- * International Assistance from WHF as follows: (i) 1994, US\$49,500 Technical Co-operation for staff training and well digging; (ii) 1996, US\$30,000 Technical Co-operation.

Access to IT

- 5 Pentium PCs with irregular internet access.
- The park has an ARCview GIS system, but staff do not have the skills to operate this software.

"Deficient areas include:

(iii) communication

equipment;

schemes:

creation."

(i) fire observation towers;

mobile patrols;

(iv) migrant resettlement

(v) alternative livelihood

(ii) floating ranger stations for

Visitor Management

- Statistics show a steady decrease in visitor numbers from 29,842 in 1997 to some 12,612 in 2001.
- The KNP has shelters, bungalows, a cafeteria, an information centre, a research library, 4 speedboats, snorkelling and diving gear.
- There is an identified need for interpretation boards, maps, an emergency medical facility, toilets, and a waste management system.
- The park needs to draw up a public use plan to anticipate the environmental impact of tourism.

II.5 Factors Affecting the Property

Threats and Risks

- High migration (and high population growth) within the park boundary,
- · Low education of the local community,
- Increasing conflicts over ownership rights,
- Pressure on the ecosystem of KNP from illegal felling,
- destructive fishing (decreasing) and forest fires,
- Inadequate waste management,

.Noise pollution from tourist boats

Counteractive Plans

- No emergency plan has been developed.
- "Whenever an accident happens in the field, the rangers contact the KNP office in Labuan Bajo by radio." KNP staff, the police, or army, will then visit the park site which is about 4 hours away.
- Deficient areas include: (i) fire observation towers; (ii) floating ranger stations for mobile patrols; (iii) communication equipment;
 - (iv) migrant resettlement schemes; (v) alternative livelihood creation.

II.6 Monitoring

Monitoring Arrangements

- Visitor numbers have been counted since 1980.
- The Nature Conservancy (TNC) has assisted the park authorities since 1995 in developing a marine biology monitoring system (for coral reefs, sea turtles), aquaculture, and in law enforcement.
- Monitoring of terrestrial animals with the Zoological Society of San Diego (since 2001).
- Other partners include: the Komodo Foundation; University of California-Berkeley; Bogor Agricultural University; and Gadjah Mada University.

Monitoring Indicators

- Established indicators exist but are inadequate.
- In 1998, the KNP and the TNC sampled 185 sites and estimated live coral reef coverage was 19%.
- In 2001, the KNP sampled 78 plots and estimated the population of the Komodo Dragon to 2259.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The Komodo Dragon population is relatively stable, and the coral reefs are improving in the KNP.
- There is a need to continuously review the 25-year management plan. In particular, the issues of land ownership need to be resolved.
- Although the Komodo dragon is the main reason why people visit the WH site, the authorities wish to stress the importance of other natural resources "to the community, the nation, and even to the world".

*State of Conservation Reports

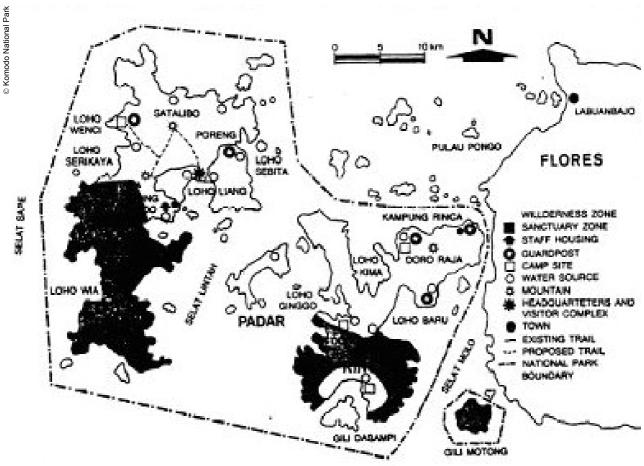
1995 Committee CONF.203/5 A mission to consider the state of conservation of Komodo NP took place in July

1995 under the leadership of the Chair of the Indonesian Committee. accompanied representatives from the Directorate General for Forest Protection and Natural Conservation (PHPA), the Komodo Chief of Police, and staff from UNESCO Jakarta. The party left for Komodo Island on a small boat provided under international assistance from the WH Fund. Due to bad weather conditions and a rough sea, the boat capsized. The accident was fatal for four persons. Despite

rescue operations only one body was recovered a few days later. The boat, the 'Iwardunia', was located but was beyond repair. Further monitoring missions to Komodo and Ujung Kulong National Parks were postponed until

The Bureau noted that with the help of the WH Fund, a Geographical Information Project and zonation map of the KNP had been prepared.

1996 Bureau CONF.202/2 The Bureau was informed that the PHPA of the Ministry of Forestry had prepared a full state of conservation report on the KNP dated February 1996. The report called for protective measures, including the legal protection of the site and management plans on different levels; and outlined the main factors affecting the site, which were population pressure, forest fires, poaching of deer, coral blasting and fish poisoning, and tourism pressures (with an increase of visitor numbers from 7,692 in 1989/90 to 25,760 in 1994/95).



Map ok Komodo National Park

The report also outlined the monitoring procedures on damaged areas and yearly animal censuses for mammals, birds and the Komodo dragon populations conducted by the Park management. The report further indicated that the substantial support from the WH Fund for both infrastructure and human resources development had been crucial for the management of the Park.

The Bureau requested the Centre to write a letter of appreciation to the Indonesian authorities expressing satisfaction on the actions taken and commending them for the detailed state of conservation report received for Komodo National Park.

1997 Bureau CONF.204/2B The Bureau recalled the fatal boat accident during the July 1995 monitoring mission, in which four Indonesians lost their lives. With a view to equipping the Park with a boat capable of undertaking open-sea travel, the Committee approved a sum of US\$ 30,000 at its 19th session, and requested that the State Party provide an additional US\$ 30,000 to purchase a large fibreglass catamaran. In February 1997, the PHPA informed the Centre that they had approved the release of a sum of US\$ 30,000 as counterpart funding for the US\$ 30,000 approved by the Committee in 1995.

1999 Bureau CONF.204/5 IUCN informed the Centre that it had received a report indicating an increase in illegal dynamite and cyanide fishing in coastal waters which has had a serious impact on large areas of coral in the northern half of the marine component of the Park. The Nature Conservancy had provided two speedboats for patrolling the coastal waters, but destructive fishing techniques have had a major impact. Immigration to the islands was also increasing bringing more pressure on fishery resources.

1999 Committee CONF.209/14 The Committee noted that the Permanent Delegate of Indonesia had informed the Centre that the PHPA was greatly concerned about indications of an increase in illegal dynamite and cyanide fishing in the coastal waters of Komodo National Park. He pointed out that a government team was expected to visit the site to assess the damage. The Bureau requested the State Party to submit a report on the findings of the mission and possible mitigation measures that need to be undertaken. The Committee requested the Centre and IUCN to review the report and submit their findings and recommendations, including the need for any additional Centre/IUCN mission that may still prevail for examination at its next session.

2000 Bureau CONF.202/5 In November 1999, the Permanent Delegate of Indonesia informed the Centre that the recommended UNESCO/IUCN mission to the site could proceed if the costs of the mission were borne by the WH Fund. In addition, a proposed mission to be undertaken by a Government team in late 1999 could not proceed due to budgetary constraints. The Centre, in cooperation with the UNESCO Office in Jakarta, contacted the PHPA and obtained its co-operation for fielding a mission comprising of an IUCN expert, the Marine Sciences specialist in UNESCO-Jakarta, and a selected number of Indonesian Government participants. The site manager of KNP, Ujung Kulong NP, and a representative of PHPA, were due to attend a workshop for the development of a project on "Sustainable Tourism and Biodiversity Conservation of World Natural Heritage sites" in May 2000. The concept for the project had been jointly elaborated by the Centre, the UNEP Office for Technology, Industry and Economics (TIE) in Paris, and the RARE Centre for Tropical Conservation in Washington D.C., USA. The project concept was endorsed by the UN Foundation for further development and submission for consideration for financing at the UNF Board Meeting in July 2000. The KNP was also being considered as one of the 6 pilot sites to benefit from this project on sustainable tourism activities developed as an alternative for unsustainable fishing practices.

2000 Committee CONF.204/10 The Committee was informed that a team of experts from IUCN, the UNESCO Office in Jakarta, and the National Park Agency of Indonesia had conducted a monitoring mission to the site in September 2000. A report on the findings of the mission would be presented at the time of the next extraordinary session of the Bureau. In July 2000, the UN Foundation also approved a US\$ 2.5 million project entitled "Linking Conservation of Biodiversity and Sustainable Tourism at WH sites" for 6 sites, including the Komodo and Ujung Kulon National Parks in Indonesia.

2001 Committee CONF.208/10 The State Party submitted a report on the state of conservation of the site using the format prescribed in the periodic reporting brochure which had been reviewed by IUCN. The report noted that the 25-year old Management Plan had been completed in June 2000, and had proposed the expansion of the Park to include an extension at Gili Banta Island and a connection to Gili Mota. The proposed extensions would add 504 square kilometres to the Park, 479 km of which would be marine habitat. The new Park would therefore comprise 27% terrestrial and 73% marine areas. The proposed extension was based on the high level of coral and fish diversity and associated aesthetic value, biological corridors, and the importance of areas for migratory cetaceans. The plan also included a new zoning system with 7 zones covering both marine and terrestrial environments: (i) core zone; (ii) wilderness zone with limited tourism; (iii) tourism zone; (iv) traditional use zone; (v) pelagic use zone; (vi) special research and training zone; and (vii) traditional

settlement zone. Regulations were formulated for each zone. A map of the Park was being completed for wide dissemination.

According to the ongoing coral reef and fish monitoring programme conducted by The Nature Conservancy of USA (TNC) and Park personnel, a slow recovery (i.e. 2% increase in hard coral per year) had occurred around Komodo since 1996. Eight demersal fish spawning grounds had been identified within the park waters, and the Park had applied regulations to prohibit exploitation during the spawning season. In the terrestrial sector, forest fires occurred frequently, largely the result of human activities during the dry season. Deer poaching was a significant threat to the integrity of the Park, with poachers using fire to herd deer. Park patrols involved local police, navy and army personnel, as Park rangers were not equipped with firearms. The report also stated that a floating boat patrol, equipped with communication systems to allow contact with Park headquarters, had been added to the law enforcement programme. Overall, the incidences of dynamite and cyanide fishing and deer poaching had declined significantly with improved and intensified patrolling. Park regulations prohibited anyone from entering the Park without a permit, except officials and local people practicing traditional fishing.

Despite this prohibition, illegal fishermen originating from other islands continues to be a significant issue. TNC was working on an innovative management scheme for the Park. This involved TNC, the private tourism sector and the government of Indonesia in a partnership to establish sustainable financing for the Park. IUCN had played a supportive role providing technical input, in cooperation with the International Finance Corporation (IFC). The establishment of the tourism concession was seen as a sustainable financing mechanism to be tested within the implementation of the 25-year Management Plan. IUCN commended ongoing discussions on sustainable financing and collaborative management of the Park. UNESCO-Jakarta also supported the establishment of the tourism management concession but stressed the need to closely monitor the work of the concession and all other projects designed to support the implementation of the 25-year Management Plan.

The Committee welcomed the initiatives to strengthen protection of the site and acknowledged the important contributions that TNC, IFC, GEF, the tourism sector and other partners towards the long-term conservation of KNP. However, the Committee noted with concern the illegal entry of outsiders from other islands, and invited the State Party to provide increased resources for patrolling the marine environment of the Park. The Committee invited the State Party to provide a status report on the establishment of the tourism management concession and a timeframe for nominating the extensions to the WH property for its next session in

2002 Bureau CONF.201/11rev As indicated by the Observer of Indonesia at its last session in December 2001, a report from the State Party had been expected by March 2002. A joint UNESCO/UNEP/RARE Centre for Tropical Conservation mission to the site was fielded in January-February 2002, as part of the UNF-financed project. The Consultant of the Centre who participated in the mission, after discussions with the Director of the Park and his staff, reported to the Committee that cooperation between Park staff, the navy and the police had been considerably strengthened, and joint patrols were being undertaken. The patrols were likely to help curtail the illegal entry of fishermen from other provinces and nearby islands to exploit the marine areas of the Park. In addition, discussions regarding the nomination of extensions to the Park for inclusion in the WH property were underway.

PHILIPPINES Tubbataha Reef Marine National Park

II.1 Introduction

Year of Inscription 1993

Organisation Responsible for the Report

- Tubbataha Protected Area Management Board (TPAMB)
 2nd floor Basaya building, Puerto Princesa, Palawan Philippines
- WWF Philippines
 43 Wescom Rd., Puerto Princesa,
 Palawan
 Philippines

II.2 Statement of Significance

Inscription Criteria N ii, iii, iv

Statement of Significance

Proposed as follows:
 "Tubbataha is an excellent example of a coral atoll (the only one in the Philippines); is an important source of larvae for the greater Sulu Sea area; and a significant natural habitat for in situ marine & seabird biodiversity conservation, providing [an] opportunity to better understand

"The multi-sectorial TPAMB has been effective in managing the property as evidenced by improved compliance by the private sector and Philipino fishermen in general."

marine processes." Status of Site Boundaries

 The 'Tubbataha Protected Area Bill' is pending in the Philippine Congress for the extension of the park from 33,200 ha. to 87,655 ha. with the inclusion of the Jessie Beazley Reef in the northwest of TRMNP.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- Cultural artefacts have been found in the Tubbataha reefs which are currently awaiting scientific study.



II.4 Management

Administrative and Management Arrangements

- The multi-sectoral Tubbataha Protected Area Management Board (TPAMB), which holds quarterly meetings, is composed of 15 members drawn from national, provincial & municipal levels.
- An Executive Committee made up of the Philippine Navy; Philippine Coast Guard; Palawan Council for Sustainable Development (PCSDS); Provincial Environment & Natural Resources Office; Dept. of Environment & Natural Resources (PENRO); Saguda Palawan; and WWF-Philippines meets once a month to decide on matters of operation and endorse TPAMB programmes.
- The Tubbataha Management Office (TMO) executes all decisions of the TPAMB & its Executive Committee and is charged with the day-to-day affairs of the Marine Park.
 - Strategies stipulated in the management plan (currently under review) have been implemented since 1996 and include: (i) effective patrols; (ii) creation of the TPAMB; (iii) community development in the Cagayancillo Islands; (iv) development of a long-term management scheme; and (v)

expansion of the marine park boundaries.

 Relevant 'Republic Acts' include the: (i) Local Government Code (1991); (ii) National Integrated Protected Areas System Act (1992); (iii) Strategic Environmental Plan for Palawan (1992); (iv) Philippines Fisheries Code (1998); and (v) Wildlife Resources Conservation & Protection Act (2001).

Present State of Conservation

- "No major anthropogenic perturbations have occurred in the area in the last 7 years."
- "Coral cover decreased due to the El Niño in 1998 but maintained to present. Fish biomass increased."
- The multi-sectoral TPAMB "has been effective in managing the property as evidenced by improved compliance by the private sector and Filipino fishermen in general."

 "Too much leniency against foreign nationals (poachers) may attract more incursions." The national government has been petitioned for stricter handling of Chinese poaching cases.

Staffing and Training Needs

- The TMO employs 1 manager, 2 rangers & 1 technical assistant. 5 Philippine navy & coast guard personnel are also attached to the office.
- Staffing level is considered inadequate for the implementation of the revised management plan.
- Training needs are identified for: (i) environmental awareness for military personnel; (ii) equipment maintenance; (iii) site exchange for rangers; and (iv) conflict resolution techniques.

Financial Situation

- Total funding for 2001 was US\$115,000 coming from WWF, the Philippine Navy & Coast Guard.
- Funding is considered inadequate for 2002-2003 while the annual contribution of US\$80,000 from WWF-Philippines remains in place.
- A list of about 20 research programmes was attached contributing about US\$36,000 for 1 research officer, 5 assistants & 4 boat crew.
- International assistance has been received from UNACOM for a scuba compressor; GEF-UNDP; the Government of Japan; Marine Centre of Japan; Henry Foundation; Packard Foundation; and WWF-US
- * International Assistance from WHF as follows: (i) 1996, US\$20,000 Preparatory Assistance; (ii) 1997, US\$30,000 Training; US\$20,000 Technical Cooperation for conservation project; (iii) 1998, US\$30,000 Training on WH property management.

Access to IT

- 1 Acer Celeron Laptop & 3 Pentium PC desktops.
- Internet & GIS with ArcInfo/Arcview software.

Visitor Management

- Statistics show only 692 & 642 visitors (in about 60 vessels) to the reef in 2001 and 2002.
- Visitors stay on dive boats. The TPAMB provide concrete mooring buoys (in need of embedding).
- Entry fees issued in Puerto Princesa City are as follows: US\$ 50 per vessel; US\$ 50 per foreign guest; US\$ 25 for locals/expats.
- Photo exhibits are organised in schools, alongside the dissemination of leaflets, videos & posters.

II.5 Factors Affecting the Property

Threats and Risks

- Poaching,
- Cement sinker buoys dragged to reef edge,
- Damage from El Niño events,
- Peace & order problems threat to tourism.

Counteractive Plans

- An emergency plan exists for possible terrorist attacks on tourists, and medical/diving incidents.
- Improvement is desirable in: (i) strengthening litigation & prosecution; (ii) improved mooring system; and (iii) peace & order.

II.6 Monitoring

Monitoring Arrangements

- Since 1997, monitoring of marine resources within TRNMP has been conducted annually by WWF-Philippines between April-September.
- The current revision of the management plan for the park has identified "ecosystem research and monitoring" as one of its priority areas.

Monitoring Indicators

 Indicators include: (i) coral cover; (ii) fish biomass; and (iii) visitor numbers.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- WH status has allowed TRMNP to benefit from international schemes on marine parks & the IUCN-WCPA Management Effectiveness Initiative.
- "The passage of the Tubbataha Protected Area Bill will provide for more stringent punitive measures for encroachment into Park waters. It will further strengthen the institution for management and provide annual funding allocation for management."
- WHF assistance may be required for fixed mooring buoys, law enforcement & conflict resolution.

* State of Conservation Reports

1997 Bureau CONF.204/2B The Committee recalled that the Chairperson had approved US\$ 20,000 in 1996 for the implementation of a project entitled 'Protection and Information and Education Campaign for the Conservation of Tubbataha Reef Marine Park'. The Project Management Team (PMT) comprising of individuals from the Marine Sciences Research Institute of the Philippines, the Protected Areas & Wildlife Bureau of the Dept. of Environment and Natural Resources, and the UNESCO National Commission, visited Palawan in March 1997 to consult with representatives of the Provincial Government, the Provincial Environmental & Natural Resources Office (PENRO), and the Naval Forces.

The UNESCO National Commission subsequently submitted a report to the Centre highlighting the following conclusions: (i) the protection of Tubbataha Reef directly affects the people of the Cagayancillo Municipality who have in the past had resentment for being left out conservation initiatives. In response, the PMT was facilitating training of the local people to enhance their participation in patrolling, data collection, monitoring impacts of recreational activities, and exploring possibilities for developing community-based tourism ventures. (ii) Given the remote location of the site in the Sulu Sea, Park staff frequently opted to be transferred to other parts of the country; hence training in protection and patrolling was of limited benefit.

The creation of an inter-sectoral group comprising of naval personnel and representatives of PENRO, in combination with the continuing education of local communities, was considered to be an optimal approach. Funding for food, fuel and the salary of members of the patrolling teams was expected to be met by the respective Government agencies. Training in role clarification was also foreseen as part of the WH-Funded project in order to resolve leadership conflicts between naval and civilian personnel who were expected to constitute the patrolling teams. A local NGO was further supporting the information and education component of the project. The Marine Parks Centre & the Environment Agency of Japan had also contributed to the production of a brochure on Tubbataha in English which would be translated into three local languages. In addition, a Presidential Task Force for Tubbataha Reef has brought together all actors interested in the conservation of the WH site with a national symposium for the finalisation of a Master Plan scheduled for March 1997.

The Bureau took note of the information provided and encouraged the Project Management Team (PMT) to provide the Centre with a copy of the Master Plan for Tubbataha Reef.

THAILAND

Thungyai-Huai Kha Khaeng Wildlife Sanctuaries

II.1 Introduction

Year of Inscription 1991

Organisation Responsible for the Report

 Royal Forest Department (RFD) 61 Phaholyothin Rd., Chatuchak, Bangkok, 10900, Thailand

II.2 Statement of Significance

Inscription Criteria N ii, iii, iv

Statement of Significance

Proposed as follows:

"Thung Yai – Hua Khaeng is the largest area of legally protected forest in mainland SE Asia today, and is the core of a conservation area covering over

12,000 km2 [an area] large enough, and sufficiently undisturbed, to support truly natural communities of herbivores and predator species within this dry tropical ecosystem."

The NP which largely incorporates two intact river systems and

watersheds, is also at the junction of four bio geographic zones. The sanctuary contains a third of all terrestrial vertebrates in mainland SE Asia. 28 animal species are internationally threatened.

Status of Site Boundaries

- The buffer zones on the northern and southern borders of the property are well protected and would be appropriate for an extension of the current World Heritage boundary.
- There is also a proposal to include a disused mining complex named 'Pu Jur' as a National Wild Animals Reservation on the edge of the WH Site.



II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- All major development projects such as dams and road constructions in the area are suspended. No changes are foreseen.
- A comprehensive list of 146 ecological and taxonomic studies carried out at the site are attached. Two projects have also examined Karen indigenous knowledge of the fauna and flora.

II.4 Management

"All major development projects

constructions in the area are

suspended [...] Two projects

have also examined Karen

indigenous knowledge of the

dams and

such as

fauna and flora."

Administrative and Management Arrangements

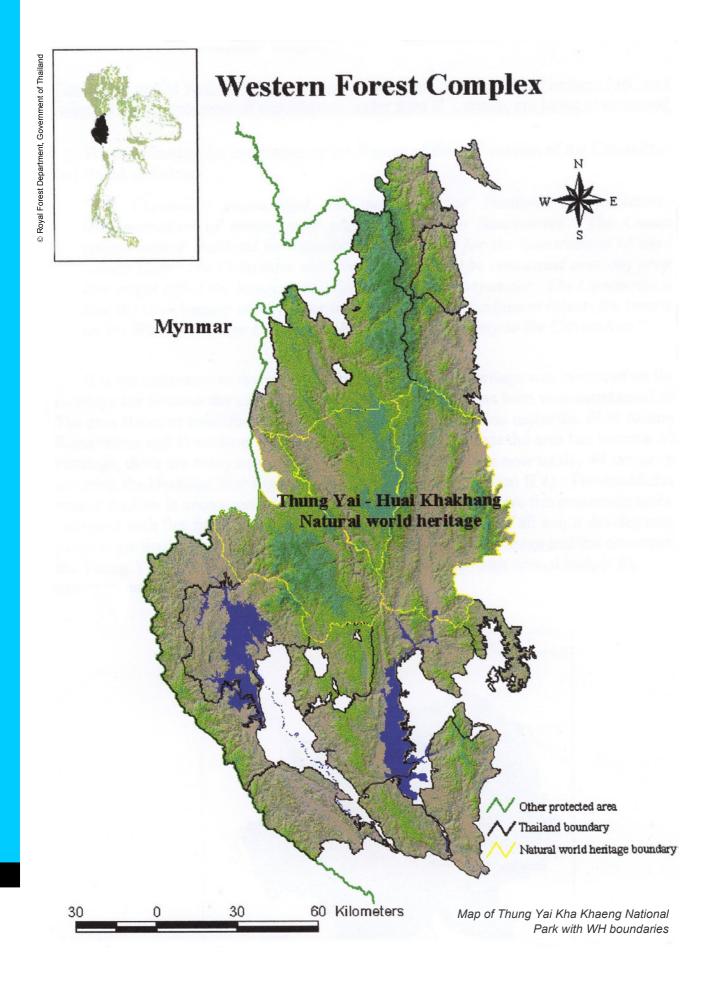
- The WH Site is made up of two wildlife sanctuaries (Thung Yai & Huai Kha Khaeng), the strongest level of protected area in Thailand.
- The 1960 Wild Animals Reservation & Protection Act (1992 Amendment) is the main legislative instrument used for protection of this WH Site.
- The Royal Forest Dept. has created a 'World Heritage Nature Education Centre' with its own budget near the

Huai Kha Khaeng in 2002.

 With assistance from the Government of Denmark, the RFD has also launched a project called the Western Forest Complex Ecosystem Management (WEFCOM) to promote (i) "science-based" adaptive management; (ii) a provincial conservation forum; and (iii) a 'management-zoning map' for the area.

Present State of Conservation

- The northern and southern borders of the property are contiguous to well-managed buffer areas, while, on the western side, borders with Myanmar are still virtually intact.
- The only worrying border is on the Eastern side where a narrow forest area (< 5 kilometres) buffers the WHS from urban development.
- Three villages were resettled to the fringe of the sanctuary in 1991 following WH inscription.



Staffing and Training Needs

- 551 staff (with 16 forest officers) were employed on the site in 2002.
- Training courses required for the staff include: (i)
 protection and patrolling; (ii) nature education; (iii)
 research & monitoring; (iv) use of GPS; (v) use of
 GPS and maps; and (vi) technical assistance.

Financial Situation

Royal Forest Department, Government of Thailand

- The total annual budget for the WH Site in the last 5 years (1997-2002) ranged from US\$ 0.8-1.53 million.
- The wide budget range is due to the cost of constructing ranger stations and a Nature Education Centre in 1998.
- * International Assistance from WHF as follows: (i) 1998, US\$20,000 Technical Co-operation for reviewing fire arrangements at Thung Yai and Huay Kha Khaeng national parks.



Protection and patrolling: basic course training

Access to IT

No information supplied.

Visitor Management

- 'World Heritage Day' is celebrated yearly on 9 December.
- There exists the Huai Kha Khaeng Nature Education centre as well as the 'Seub Kakhasathien Memorial' (named after the late architect of the WH nomination) for information distribution on world heritage matters.

- There are four nature trails in the protected area zone, but none in the core wildlife sanctuaries which do not allow entrance to tourists.
- No visitor management plan or visitor statistics were provided.

II.5 Factors Affecting the Property

Threats and Risks

- Increased poaching,
- Fires,
- Increased number of Karen villages in the area,
- Livestock raising,
- Illegal logging & forest product collection,
- Mining.

Counteractive Plans

- No emergency plan has been developed, but the "immediate goals are to reduce poaching, illegal logging and forest fires".
- If Karen villages inside the WH zone exert increasing demands on natural resources in the park, relocation will be conducted.
- The 44 established ranger stations also include 5 forest fire protection units (one with a helicopter and crew). In 1998, with only one fire unit, 75,788 ha of forest were burned, compared with some 6,639-32,496 ha between 2000-02 with 5 protection units.
- A proposal also exists to revoke a mining concession near the Thung Yai Wildlife Sanctuary in order to enhance the protection of the WH property.

II.6 Monitoring

Monitoring Arrangements

- Monitoring is divided into a 'coarse scale' of satellite interpretation on forest area changes (RFD and Kasetsart University), and a 'fine scale' including field surveys of wildlife inside Huai Kha Khaeng.
- In Thung Yai, the same research team has monitored the dynamics of ecosystem "resilience" following the relocation of Hmong villages.

Monitoring Indicators

- Indicators identified include: (i) large mammals such as gaurs, bantengs and tigers; (ii) forest area around Karen villages; (iii) baseline household survey information.
- A more systematic monitoring system would ideally incorporate habitat suitability mapping; abundance of key species; and further land use change detection by satellite.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- World Heritage status has been used "for defending the area from some development projects such as road construction proposals."
- Planning and ecosystem management should in the future be directly based on monitoring results.

* State of Conservation Reports

1998 Ext Bureau CONF.202/4 The Bureau was informed that IUCN had reported severe damage to the site by fires of anthropogenic origin that had affected Thailand and other countries in South-East Asia. It was pointed out that local people started fires to clear farmland and fields adjacent to protected areas to enhance pasture and mushroom production. Forest fire prevention and the greater involvement of local people in the management of the site was therefore identified to be a major management issue by experts who visited Thungyai-Huai Kha Khaeng as part of a WH workshop hosted by Thailand in January 1998.

The Bureau was informed that the Chairperson had approved a sum of US\$ 20,000 for a project submitted by the National Committee for the Protection of the World Heritage of Thailand, for research, training and raising awareness of local people on forest fires. The project foresaw the implementation of joint activities by site staff and representatives of local communities in forest fire prevention and control during the dry season. A representative of IUCN pointed out that it's Forestry Programme initiative in Asia would explore possibilities to assist the site.

1998 Committee CONF.203/8rev The Committee requested the Centre, IUCN and the State Party to co-operate to ensure the timely implementation of a forest fire management project in the site, and to elaborate a policy to solicit the co-operation of local people. The Committee invited the State Party to submit a report on the outcome of fire management practices to be tested out during the dry season.

1999 Bureau CONF.204/5 The Bureau was informed that the Delegate of Thailand had submitted a report to the 1998 Committee session which noted that the fires had only damaged a small part of the site, and were integral to the ecology of the dry dipterocarp forests.

1999 Committee CONF.209/14 The Delegate of Thailand and IUCN indicated that they would report on the fire-management policy of the site at the time of the 23rd extraordinary session of the Bureau.

2000 Committee CONF.204/10 The Committee was informed that the State Party had submitted its final report on the fire-management project in August 2000, which had been transmitted to IUCN for comments.

VIETNAM Ha Long Bay

II.1 Introduction

Year of Inscription 1994, 2000

Organisation Responsible for the Report

 Ha Long Bay Management Department 166 Le Thanh Tong Rd Ha Long City, Quang Ninh Province Vietnam

II.2 Statement of Significance

Inscription Criteria N i, iii

Statement of Significance

Proposed as follows:

"The aesthetic of Ha Long Bay does not only lie in the shape of the mountains and the color of the sky, but also hidden in its grottoes... Ha Long Bay was the site of three famous battles involving the people of Vietnam in the Bach Dang River... [and] has also been home to prehistoric Vietnamese dating from 25,000 to 3,000 years ago."

"Vietnam is considering:

- (i) re-submission of additional biodiversity criteria of outstanding universal value;
- (ii) extension of the 'Absolute Protection Zone' and corresponding buffer zone."

- Government decrees relating to marine resources; shipping traffic; penalties for environmental pollution; and peoples' socio-economic development.
- Development Plan (1998-2003); Tourism Plan (1995-2010); and Master Plan (2000-2020).
- To further reinforce co-ordination, the establishment of the 'HLB Heritage Management Centre' is proposed.

Present State of Conservation

- Prior to WH listing, the main threats included limestone exploitation, explosives, coral exploitation, and unregulated tourism.
- At present, the quality of tourism has been much improved, and "construction projects have obtained good results". Pollution is, however, still a problem.

Status of Site Boundaries

 The State Party is considering: (i) re-submission of additional biodiversity criteria of outstanding value;
 (ii) extension of the 'Absolute Protection Zone' and corresponding Buffer Zone.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- Population growth, increasing construction, and added pressure on aquatic resources are foreseen.

II.4 Management

Administrative and Management Arrangements

- Following WH inscription, the Ha Long Bay Management Dept. was set up in a coordinating role.
- Environmental Protection Law (1993).
- Cultural Protection Law (2001).

Staffing and Training Needs

- Some 226 staff are employed including an inspection team, accounting services, and tourist guides.
- Staffing level is considered inadequate. There is a desire to increase staff with professional degrees.
- Training needs are identified in management, tourism services, and knowledge of foreign languages.

Financial Situation

- Following the introduction of visiting fees in 1997, the dept. achieved financial self-sufficiency in 1999 with some US \$1.52 million in revenue in 2001.
- Funding is considered inadequate for capital intensive projects and scientific research.
- Bilateral assistance from China, Australia and Thailand is acknowledged.
- * International Assistance from WHF as follows: (i) 1997, US\$24,250 Training of HLB staff; (ii) 1998, US\$8,857 Technical Co-operation for geomorphology study of HLB; (iii) 2000, US\$14,058 Technical Co-operation for capacity-building workshop.

Access to IT

- 12 PCs (2 with internet).
- No GIS capacity.

Visitor Management

- Increase in visitors from 200,000 in 1995 to US\$1.7 million in 2002 (30-45% annual increase).
- Community Education project sponsored by Fauna and Flora International (FFI).
- Ha Long Eco-Museum Pre-Feasibility project sponsored by UNDP.

 The Government is considering the construction of a 24-hour permanent sea-monitoring station at Bai Chay with an initial investment of US\$1 million.

Monitoring Indicators

 Future indicators identified include the: (i) health of coral reefs; (ii) management and use of mangroves; and (iii) zonation pattern of land use.

II.5 Factors Affecting the Property

Threats and Risks

- Shipping Traffic
- Coal exploitation in Hon Gai & Cam Pha
- Seafood cultivation
- Climate Change
- Urban growth

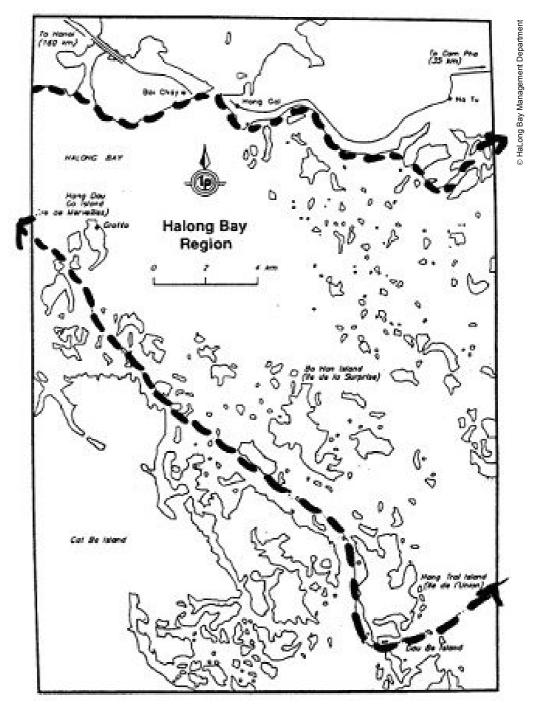
Counteractive Plans

- A 'Sea-Rescue Centre' has been set up to address dangers that threaten the bay.
- Drainage water project in Ha Long & Cam Pha.
- Sewerage treatment in Ha Long City.
- Regulation for ships' waste to be treated on land.

II.6 Monitoring

Monitoring Arrangements

A formal monitoring system is planned for assessing water quality and biodiversity with the Ninh Quang Department of Science, Technology and Environment, and the Institute Oceanography Hai Phong.



Map of Halong Bay Protected Area (Detail)

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The coral reefs, mangroves and fauna are in a good state. Limestone exploitation and explosives have been banned. Visitor numbers in the caves are controlled.
- The intangible cultural value of archaeological relics, as well as fishing communities need to be further researched and developed.
- A Proposed Action Plan for the period 2002-05 is presented including: (i) the construction of a Ha Long Eco-Museum; (ii) diversification of new tourist centres; (iii) estimation of the biodiversity of HLB for possible natural criterion (iv) re-submission.
- Continue collaboration with domestic and international partners such as the Relics Conservation Centre in Hue; the Que Lam Centre (China); the Great Barrier Reef Marine Authority (Australia); the Asian Institute of Technology (Thailand).

*State of Conservation Reports

1996 Bureau CONF.202/2 At its 19th session, the Committee was notified of potential threats to the property including a license for a large floating hotel, and the development of a new port. The Centre informed the Bureau that no response had yet been received on this matter. The Bureau reiterated the request issued by the Committee for information on the potential threats and mitigation measures.

1996 Ext Bureau CONF.203/3 At its 19th session, the Committee learnt that Japanese aid agencies were considering support to a development project up to US\$ 100 million. While noting that Japan was still studying the proposal, the Committee had recalled Article 6.3 of the Convention which commits States Parties "not to undertake any deliberate measures which might damage directly or indirectly the cultural and natural heritage (...) situated on the territory of other States Parties to the Convention". In September 1996, the Japan International Co-operation Agency (JICA) informed the Centre that on the basis of a request submitted by Vietnam, JICA was planning to draft an environmental management programme for Ha Long Bay, and a study team was expected to be visit Vietnam in November 1996. In cooperation with IUCN's field office in Hanoi, the Centre confirmed that it would contact JICA concerning the findings of the study, and present up-to-date information on the state of conservation of Ha Long Bay at its next session

1996 Committee CONF.201/7B The Committee invited the State Party to make recommendations for the conservation of Ha Long Bay for implementation in 1997.

1997 Bureau CONF.204/2B At its last session, the Committee learned that JICA had completed its project formulation study to clarify the request for aid from Vietnam. The Permanent delegate of Japan to UNESCO informed the Centre in April 1997 that JICA's project formulation report was for "internal use" and expressed his regrets for not being able to make it available to the Centre. The Vietnamese authorities had not yet responded to the Committee's request for information, but had informed the Centre of a workshop scheduled for June 1997 to develop a strategic plan for Ha Long Bay (using US\$ 24,250 approved by the Committee) and invited both the Centre and the IUCN to participate.

The Bureau requested the Japanese authorities to assure the Committee, in writing, that the development projects they intended to finance in the Ha Long Bay area would not adversely impact the WH property.

1997 Ext Bureau CONF.207/2 The Bureau was informed that the Vietnamese authorities had withdrawn plans to issue a license for the establishment of a floating hotel. The Bureau encouraged the Vietnamese and Japanese authorities to co-operate in carrying out JICA's environmental study of the coastal and marine environment of Ha Long Bay, and urged the Vietnamese authorities to search for ways to redirect large ships expected to pass through the WH area, after the completion of the Cailan port construction project. The Centre requested the Vietnamese authorities to provide, by October 1997, information on the terms of reference of JICA's environmental study which was expected to begin in early 1998.

1997 Committee CONF.208/8BRev IUCN informed the Committee that its Hanoi Office had developed a project concept for the conservation and environmental monitoring of Ha Long Bay which could assist the Vietnamese authorities to mitigate expected environmental impacts of the Cailan Port construction project.

The Committee requested the Vietnamese authorities to provide to the Centre, before May 1998, the terms of reference of the JICA-financed environmental study; and encouraged the Centre and IUCN to work together with the State Party to further develop the IUCN proposal, and seek possible donors to finance the project.

1998 Bureau CONF.201/3B The Bureau was informed that a draft of the scope of work for the environmental study for Ha Long Bay was provided to the Centre by the Head of the Ha Long Bay Management Dept during an Asia-Pacific Site Managers workshop held in Thailand in January 1998. The draft was transmitted to IUCN for information and review. UNDP/Vietnam further provided the Centre with the minutes of 2 donor meetings concerning Ha Long Bay: in the first held in October 1997, a representative from the Japanese Embassy in Hanoi pointed out that the environmental study was expected to run parallel to the EIA of the Cailan Port

construction project; at a second meeting held at the UNDP Resident Representative's Office in February 1997, information concerning the construction of the Bai Chay Bridge, expected to link Bai Chay beach to Ha Long City across the Bai Chay Bay, had been made available. A note covering the entire loan portfolio for the construction of this bridge was signed in March 1998 by OECF, Japan and the Government of Vietnam and included a feasibility study and EIA of the project.

The Bureau requested the Centre and IUCN to maintain contact with the Vietnam authorities in order to monitor progress of the Japan/Vietnam environmental study and the EIA of the Cailan Port and Bai Chay Bridge construction projects, and provide a report to the next session of the Committee.

1998 Ext Bureau CONF.202/4 The Bureau was informed that the study on environmental management for Ha Long Bay, designed and implemented by Vietnam and JICA, had commenced in February 1998, and was expected to run until October 1999. In response to the 1998 Bureau's request for information, the Vietnamese authorities provided: (i) an "explanation report" of the Bai Chay bridge construction project; (ii) a detailed technical study outline on environmental management for Ha Long Bay; (iii) a report on engineering services and EIA for the Bai Chay bridge; and (iv) a feasibility study on the Bai Chay bridge. All these reports have been transmitted to IUCN for review. The Bureau was informed that the UNESCO National Commission and IUCN-Vietnam were jointly implementing a project, approved by the Chairperson. to study the karst and other geomorphologic features of Ha Long Bay for possible renomination under natural heritage criterion i. The World Bank Office in Hanoi also transmitted information to the Centre concerning an expert mission and plans for a donor conference in December 1998 on the environmental aspects of the regional development of Quanh Ninh-Hai Phong, including the conservation of Ha Long Bay.

1998 Committee CONF.203/8 rev The Committee noted that an East Asian meeting had been held in January 1998 on the impacts of limestone guarrying on biodiversity and cultural heritage; and a national conference on the development of the Quang Ninh-Hai Phong region was planned for April 1999. Preliminary results of the JICA Vietnam Environmental Study on Ha Long Bay were also expected by late 1998. The Observer of Vietnam informed the Committee that his Government considered that the conservation of the WH property should proceed in harmony with the socioeconomic development of the region. The Committee urged the Centre and IUCN to liase with donors and international agencies in order to obtain all information resulting from on-going studies and proposed conferences and meetings scheduled for 1999, and undertake a thorough review of the large volume of data contained in the reports submitted by the Government of Vietnam.

The Committee requested the Centre and IUCN to provide a state of conservation report on Ha Long Bay to its next session in 1999.

1999 Bureau CONF.204/5 The Bureau was informed that IUCN Vietnam and the Centre had participated in a seminar, hosted by the Ministry of Planning and Investment (MPI), the World Bank Office of Vietnam, Ha Long City, and the Hai Phong and Quang Ninh provincial governments in April 1999. The seminar reviewed options for the comprehensive development of the Haiphong-Quang Ninh coastal zone which included the HLB WH Area. A field visit for all participants, including representatives of bi/multilateral donor agencies, helped raise awareness of the international conservation significance of the site, as well as the range of potential threats to the site influenced by the growing number of tourists from Southern China. Representatives of the Government voiced their intent to protect the environment of the HLB WH Area in accordance with international norms.

Key development issues in the HLB WH Area included: (i) coal loading & transport operations; (ii) fishing communities living in 'floating villages' within the WH property who could be involved in patrolling operations; (iii) limestone, clay and other construction materials extracted for cement & brick manufacturing; (iv) airborne pollution, run off and sedimentation; (v) industrial activities along the Quang Ninh-Hai Phong coastal zone; (vi) urban development in the Ha Long City area through sewerage discharge, litter, and land reclamation; (vii) deepwater ports planned for Cai Lan and Cua Ong which would increase shipping traffic. It was stressed that dredging operations to increase the volume of vessels entering the ports should be strictly prohibited within the WH area.

It was further observed that tourism within the WH area must be co-ordinated within the overall development strategy for the Quang Ninh-Hai Phong coastal zone. Coloured lighting and walkways in one of the caves within the WH area may be justifiable given the increasing numbers of national as well as Chinese visitors to the area. However, it was felt that the management needed to guard against adopting the same strategy for all caves as some international visitors might prefer the caves to remain more "natural". The WH area was estimated to have as many as 100 caves, and the development of a strategy to guide their use as scientific as well as tourism resources appeared to be an urgent priority. The key to effective mitigation of all potential threats posed by rapid economic development in the HLB WH area was seen to be a fully professional and wellresourced management agency.

The Vietnam Government/JICA environmental study regarding the coastal area and adjacent Ha Long town reported its preliminary findings on pollution sources and indicators at a seminar in April 1999. It was suggested that a second phase to the study could focus on

international norms and standards for the HLB WH Area. The project "Capacity building for Environmental Management in Vietnam" was also developing a GIS database for Quang Ninh province, including the WH site. Further research would be needed in biodiversity, cave morphology, visitor rates and destinations, and the role of fishing "villagers" resident within the Bay. In this respect, IUCN Vietnam had received funding from the Netherlands to develop a checklist of selected plants for inclusion in a visitor brochure on the WH site.

1999 Committee CONF.209/14 In August 1999, the Vietnam authorities transmitted to the Centre: (a) 2 volumes of the EIA of the Bai Chay Bridge Construction Project approved by the Ministry of Science, Technology and Environment (MOSTE); and (b) a draft report on the study on 'The Environmental Management for Ha Long Bay Project' prepared jointly by JICA, MOSTE and the Quang Ninh Province Government. The voluminous reports were transmitted to IUCN for review. In addition, the Government of Vietnam re-nominated Ha Long Bay under natural heritage criterion (i) for evaluation by IUCN in 2000.

The World Bank Office in Vietnam also indicated that it intended to augment lending to Hai Phong-Ha Long in accordance with the Bank's Country Assistance Strategy. In this regard, IUCN Vietnam recruited a marine officer to assist with the development of a GEF Block B grant proposal to develop a marine management programme for the North Tonkin Archipelago, which includes Ha Long Bay, and lay the foundation for a model Integrated Coastal Management (ICM) programme for the region. According to the World Bank, the project would provide for pilot scale development of methods to reduce pollutants carried into the archipelago from agriculture, forestry, industrial and urban development activities. IUCN informed the Centre that Environment Australia and the Embassy of the Netherlands in Hanoi had also been approached to support the project. It was noted that the opening of a new UNESCO Office in Hanoi, Vietnam, in September 1999 would help co-ordinate activities in the HLB WH area.

The Committee expressed its satisfaction with the commitment of the World Bank Office in Hanoi, Vietnam, to co-ordinate conservation and development activities in the HLB WH area. The Committee invited the State Party to use the rising donor interest to implement measures to upgrade the profile, authority and capacity of the Ha Long Bay Management Dept. (HLBMD) with the principal responsibility to manage the WH area as a coastal and marine protected area located in an area of intensive economic development. The Committee further invited the State Party to submit annual reports to the Committee, highlighting measures undertaken to build the management and monitoring capacity of HLB in accordance with internationally acceptable standards and norms.

2000 Bureau CONF.202/5 IUCN submitted a detailed State of Conservation report on this site following a field mission to the site in February 2000. The report observed that the quality of the management had improved since inscription on the WH List. However, a number of threats remained, including (i) littering of visitor paths; (ii) a diminishing fishing catch; (iii) poaching of coral and speleothems for the souvenir industry; (iv) removal of plants for the gardening industry; (v) discharge of human waste from rapidly growing urban areas; (vi) nitrates, phosphates and other nutrients from agricultural and industrial practices in the watershed area; and (vii) discharge of water ballast or sediment from shipping.

IUCN urged HLB Management Dept. to review and improve its policy and practice in litter control, and invited the Central Government to strengthen legislation and enforcement to control water ballast quality and discharge at all ports. In conjunction with the Management dept., IUCN also invited the Provincial Government to (i) foster the development of a locally-owned and controlled aquaculture industry; (ii) continue efforts to reduce the poaching of coral, speleothems and plants; (iii) strengthen control of ballast discharges; (iv) ensure that adequate equipment and trained personnel contain major water spillage; and (v) institute a marine environment monitoring programme with particular attention to the deposits of silt, solid wastes, organic and nutrient water pollution.

In February 2000, the Chairperson approved a sum of US\$ 14,508 to organise a donor roundtable for developing projects to strengthen the capacity of the HLBMD. During his visit to Vietnam, the Director of the Centre was also informed of several donors, including UNDP and the World Bank, co-operating with the UNESCO and IUCN Offices in Hanoi to strengthen conservation of the HLB WH area.

The Bureau commended the State Party's efforts to continuously improve the WH area, and invited it to consider implementing the recommendations of IUCN.

2000 Committee CONF.204/10 In September 2000, the Vietnam National Commission for UNESCO submitted an annual report on the Management and Preservation of HLB natural WH Area (1999-2000). IUCN reviewed the report and noted a number of positive developments including: (i) increasing staff numbers; (ii) a completed 'Master Plan for the Development and Conservation of HLB to the Year 2020' awaiting ratification by the Prime Minister; (iii) a seminar of national and international experts to celebrate the 5th anniversary of the inscription of the site supported by a public festival organised by the Quang Ninh Tourism Dept.; (iv) a workshop on WH Management for managers and administrative staff of proposed and designated WH sites in Vietnam held in Ha Long City in July 2000; and (v) a workshop on WH conservation through community-based education.

The Committee was informed that TV documentaries were also being used on a regular basis to raise public awareness of the global importance of the site.

The Ha Long Bay Eco-museum Feasibility Study, financed by UNDP, and jointly executed by the UNESCO Office in Vietnam and the HLBMD, was also launched in July 2000. Initial activities included a team-building workshop, and the production of an interpretive WH area management plan and map of cultural and natural assets aimed at generating local employment, sustaining local cultural arts & crafts traditions, and raising environmental awareness. An EU Project in Vietnam, executed by Belgian Institutions to use GIS techniques for resource use mapping was also interested in launching a new phase of the project focusing on the WH area and its environs. A seminar on the project's Vietnam based activities, including discussions on potential future projects in the HLB WH area, was scheduled for November 2000 with participation of staff from the Cabinet for Development Co-operation of Belgium.

The annual report submitted by the State Party also identified the following additional actions: (i) a water services project to bring full wastewater treatment facilities to the whole of Ha Long Bay and Cam Pha Town; (ii) the closure and redevelopment of the coal port area of Hong Gai area for tourism and commercial purposes; (iii) a reduction of pollution by ferries on completion of the Bai Chay Bridge; (iv) a policy to allow local fishermen to sell souvenirs and refreshments in the WH area in exchange for collecting rubbish and floating waste; and (v) planned proposals to tighten visitor regulations. In July 2000, the Chair of the People's Committee of the Quang Ninh Province requested UNESCO's views on the Bai Chay Bridge construction project, outside the WH area, with regard to negotiations with potential donors to finance the bridge. In late 1999, IUCN provided written comments to the Centre on documents submitted by the State Party on the engineering design of the bridge; the EIA of the construction project; and the HLB Environmental Study.

Based on IUCN observations, the Director of the Centre sent a letter to the Chairperson of the People's Committee of Quang Ninh emphasising that: (i) the EIA of the Bai Chay Bridge Construction provided a good framework for mitigation measures; (ii) predicted landscape and visual impacts of the road construction were still of concern; (iii) in relation to water quality and access roads, mitigation measures identified in the EIA needed to be implemented; (iv) the impacts associated with the Bai Chay Bridge were relatively small within the context of the Master Plan for the overall development of Ha Long City. IUCN further noted that the EIA report recognised that there was a large degree of uncertainty as to whether mitigation measures could be effectively enforced and correctly implemented. In addition to the EIA report for the Bai Chay Bridge, IUCN took the view that the implementation of a broader Environmental Monitoring and Audit Programme for the environs of the

HLB WH area, as proposed in the 'Study on Environmental Management for Ha Long Bay' (JICA, 1999), was particularly urgent and important.

The Committee commended the commitment of the State Party to improve infrastructure and capacity for the protection of the site. The Committee, however, drew the attention of the State Party to risks linked to addressing environmental impacts of individual projects to the neglect of monitoring cumulative impacts of the overall development of Ha Long City and the surrounding region. The Committee urged the Government of Vietnam and the Provincial Government of Quang Ninh, to seek donor support, including from JICA and other Japanese Institutions that co-operated in the 'Study on Environmental Management of Ha Long Bay', to initiate implementation of the Study's recommendations with minimum possible delay. The Committee recommended that the State Party amend the environmental legislation as appropriate to ensure the full implementation of the Environmental Management and Audit Programme recommended by the EIA of the Bai Chay Bridge Construction Project, during the construction phase as well as beyond. The Committee invited the State Party to submit a progress report on the outcome of its efforts to implement the above recommendations.

2001 Committee CONF.208/10 As requested by the Bureau in November 2000, the HLBMD provided the 6th annual progress report on the conservation, management and promotion of the HLB WH Area. IUCN reviewed the report and expressed broad support for the efforts of the HLBMD to manage this extremely complex WH site. IUCN had been informed that the project proposal for the Institutional Capacity Building of the HLBMD, had been finalised in close collaboration with relevant institutions and the province for examination by potential donors. Components included: (i) a comprehensive survey of all significant caves in the HLB WH area; (ii) an assessment of biodiversity values (both terrestrial and marine) of Halong Bay and surrounding hinterland; and (iii) an evaluation of the cultural values of the site. These could provide the basis for the possible re-nomination of the site under biodiversity value criteria and, perhaps, as a mixed WH site.

The UNESCO Ha Long Bay Eco-Museum Feasibility Project was completed and a final 135-page report and video were transmitted to the Centre by the UNESCO Office in Vietnam in October 2001. IUCN served as a member of the Steering Committee of the project, which proposed the development of an "Ecomuseum Hub" in the vicinity of Ha Long Bay, and a variety of interpretation packages. The follow up to the study emphasised the establishment of a project team of Vietnamese staff in the HLBMD supported by 2 international facilitators in the fields of planning, data collection and integrated interpretative management. An outline for an Interpretative Management Plan by HLBMD would include a number of interpretative themes, at least two of which are targeting the fishing industry by involving

floating villages, terrestrial fishing communities, boat builders, and major institutions such as the Viet Nam Institute of Oceanography, the Institute of Marine Products, and local authority agencies such as the provincial Fisheries Dept. IUCN noted that the HLBMD report stated that tourism had increased by 135% between 1997 and 2000, and expressed satisfaction that the control of the caves had been brought under the authority of HLBMD.

The Feasibility Study's effort to propose an "Ecomuseum" Hub" and an Interpretative Management Plan aimed to spread the visitor resources in and outside of Ha Long Bay, thereby supporting the intensity of visitation to the WH site without reducing the number of tourists to the region. The study estimated that the total cost of the "Ecomuseum Hub" and other interpretation theme products was likely to be US\$ 17 million over a 4-year period. The Quang Ninh Province committed US\$ 3 million and intended to seek other funds. Given the considerable international interest in the site, the Committee urged the HLBMD to continue and strengthen its efforts to co-ordinate projects in order to ensure optimal use of resources and skills available via HLBMD's association with IUCN and UNESCO Offices in Vietnam and other partners.

The Committee reiterated its recommendation for the early implementation of the JICA/Government of Vietnam Environmental Management Plan for Ha Long Bay and invited the State Party to submit a progress report for consideration at its next session.

2002 Bureau CONF.201/11Rev The Bureau was informed that an international expert meeting on the application of the WH Convention in tropical coastal, marine and small-island ecosystems, jointly organized by the Centre and IUCN, would be convened in Hanoi and Ha Long Bay in February 2002.