

# VIETNAM

## Ha Long Bay



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### 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

- 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).

### 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 pre-historic 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."**

- 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.

#### 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.

### 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.

#### 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.

### 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).

## 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

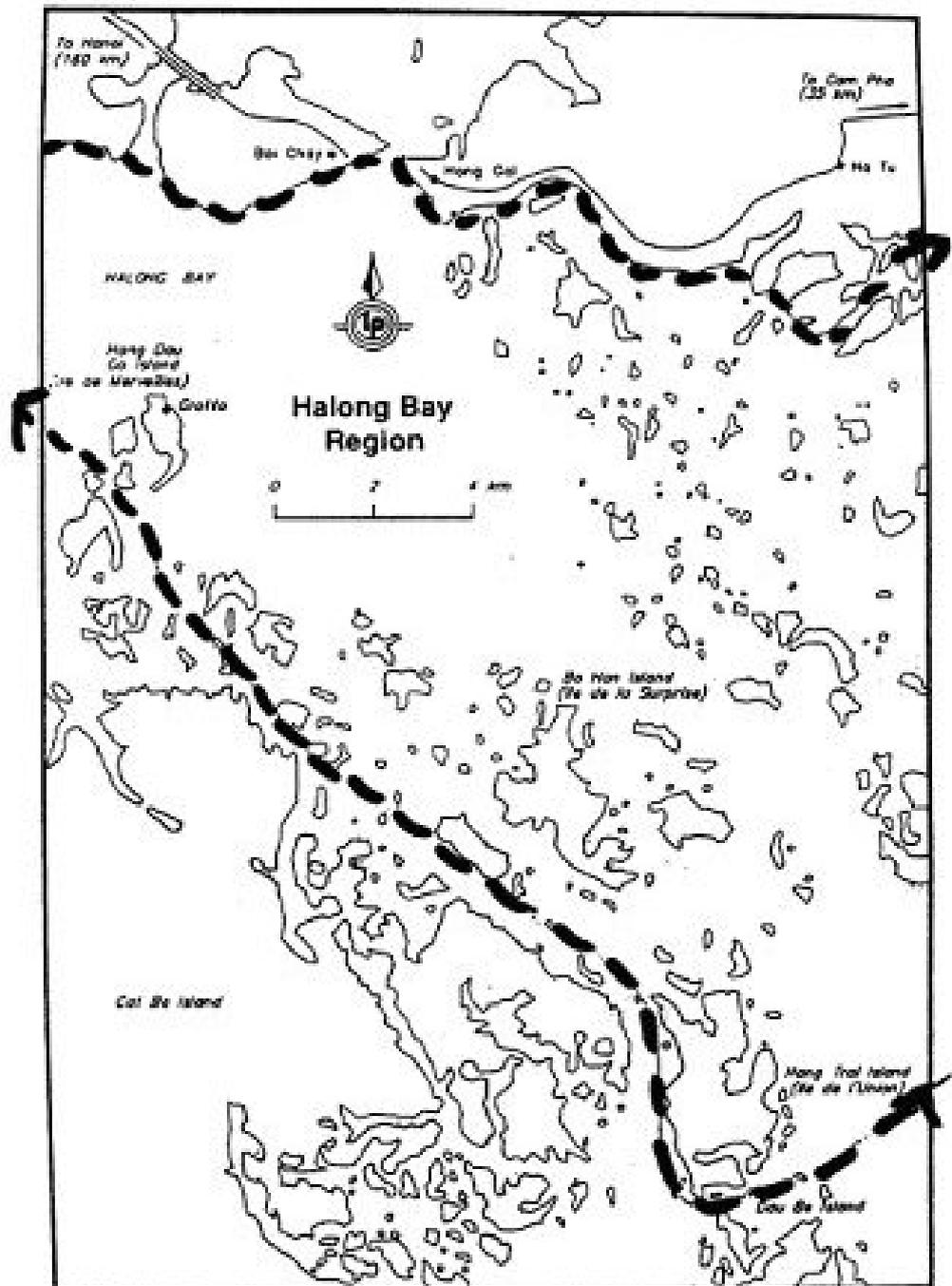
### Counteractive Plans

- 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 Quang Ninh Department of Science, Technology and Environment, and the Institute of Oceanography in Hai Phong.



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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 19<sup>th</sup> 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 19<sup>th</sup> 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 co-operation 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 re-nomination 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 Quang 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 quarrying 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 socio-economic development of the region. The Committee urged the Centre and IUCN to liaise 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 well-resourced 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.

## State of Conservation of the World Heritage Properties in the Asia-Pacific Region

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 6<sup>th</sup> 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.