

INDONESIA

Komodo National Park



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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.

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.

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 - (v) alternative livelihood creation."**
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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

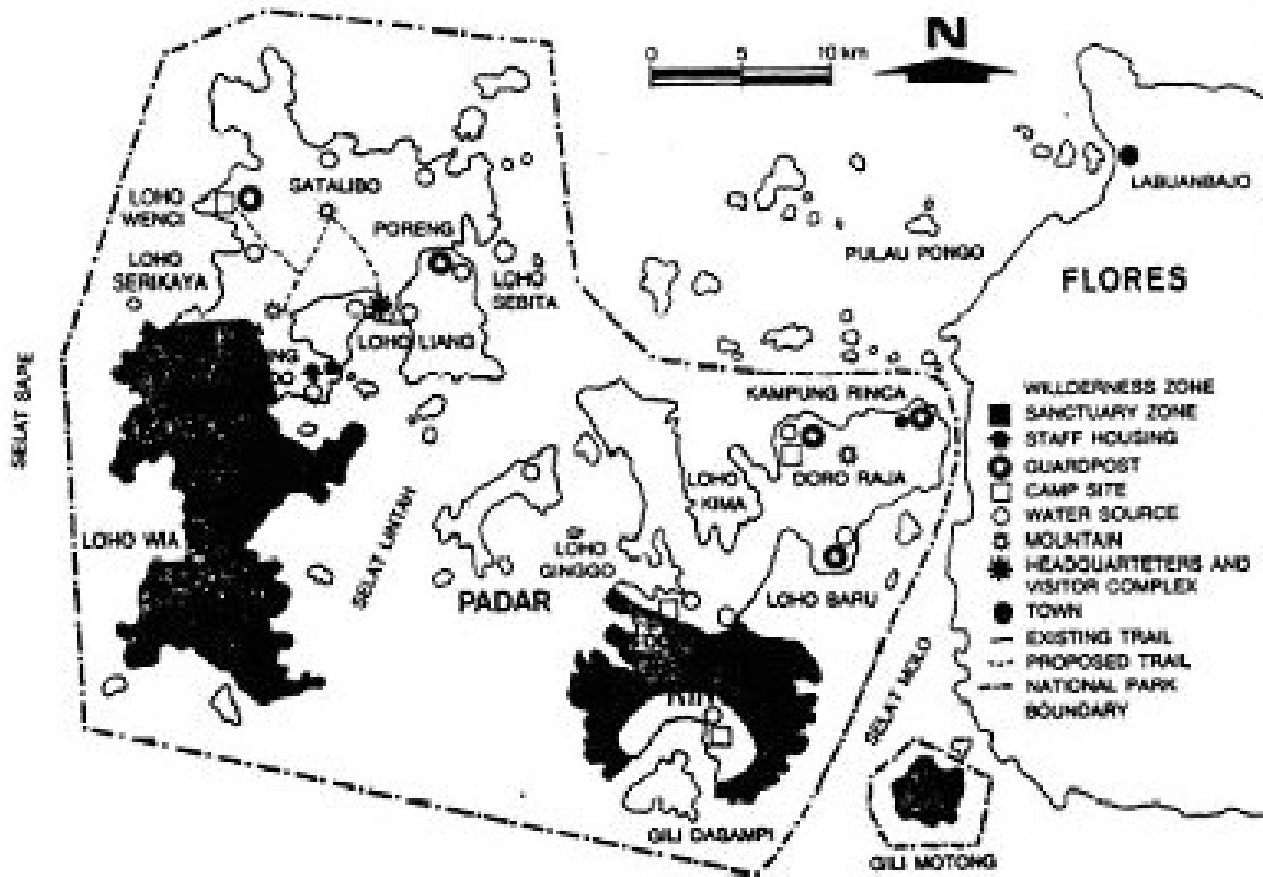
1995 under the leadership of the Chair of the Indonesian WH Committee, accompanied by representatives from the Directorate General for Forest Protection and Natural Conservation (PHPA), the Komodo Chief of Police, and staff from UNESCO Jakarta. The party left for Komodo Island on a small boat provided 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 1996.

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).

© Komodo National Park



Map of 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 co-operation 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 co-operation 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.

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 co-operation 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.