

# **Contribution of the United Nations system to conservation and management of cultural and natural heritage in Asia and the Pacific**

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**Geneva**

**1983**

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## S U M M A R Y

The search for effective measures designed to arrest the degradation of environmental resources - air, water, soil, forest, wildlife resources and cultural heritage - has been the subject of many international conferences, conventions, strategies and resolutions of the United Nations system, particularly the UN General Assembly, over the last decade. These conferences and legislative directives, reviewed in Chapter I, have conferred upon organizations of the UN family a mandate to be actively involved in the protection and management of the human environment, including especially cultural and natural heritage, and to support the efforts of developing countries in this field. This report focusses on Asia and the Pacific region, which is endowed with an extremely rich and diverse heritage dating thousands of years back.

Chapter II highlights the multifaceted value of heritage to sustainable socio-economic development in the region. Besides its spiritual, social, educational, ecological, medical and other important aspects, cultural and natural heritage represents a major source of revenue, notably through tourism and the commercial exploitation of forest, wildlife and marine resources. For the rural communities in particular, heritage resources are a vital means of livelihood and income. However, the proper husbandry of these resources to ensure the continued welfare of generations is inhibited by population pressure in several countries, coupled with large-scale modernization schemes, urbanisation and intensive industrialization processes, leading in some cases to environmental degradation, rapid deforestation and desertification rates, as well as the near extinction of some wildlife species.

Governments of the region are conscious of these problems, and have adopted a series of measures to tackle them at the national and regional levels. These efforts and the supportive role of the UN system are the object of Chapter III. Though highly commendable, present dispositions in many countries may not prove adequate to ensure efficient and sustained management of heritage resources, and the optimal utilization of the contribution of the UN system. It would further be desirable for governments of the region to develop comprehensive and coherent long-term conservation strategies, and harmonize them with approaches at the regional and international levels; strengthen their central environmental co-ordinating agencies to foster an integrated and balanced approach to conservation issues; emphasize training and the systematic build-up of national expertise as an objective of development co-operation with the UN system; and ensure that conservation programmes involve the full participation of all segments of the population, especially at the local community level.

Chapter IV assesses the contribution and performance of five organizations of the system viz. UNDP, UNEP, ESCAP, FAO and UNESCO. Their financial inputs, listed in Annex 2, seem small compared to overall needs, but their advisory, catalytic and promotional role has led to some impressive results. These include, in particular, for ESCAP and UNEP, the adoption of subregional environmental action programmes by governments of the region; for FAO and UNDP, the establishment of many wildlife reserves and parks and formulation of relevant policies and laws; and for UNESCO and UNDP, restoration and improved preservation of architectural monuments, and significant strengthening of national technical capabilities for cultural conservation in several countries. No less appreciable have been the roles of other UN system organizations - especially the World Bank, the Asian Development Bank, bilateral donors and NGOs - notably the International Union for the Conservation of Nature and Natural Resources (IUCN) and the World Wildlife Fund (WWF).

In Chapter V the Inspectors summarize the strengths and weaknesses of UN system performance, and recommend inter alia that organizations concerned should assist governments to formulate long-term conservation strategies, establish four sub-regional training programmes in wildlife and parks management, and adhere to multi-lateral conservation treaties; FAO activities should be geared systematically to building national self-reliance and strengthening TCDC linkages; UNESCO should pay more attention to the administrative aspects of cultural conservation, and assist the development of a network system of co-operation among national conservation laboratories in the region.

## I. INTRODUCTION

1. The present study, which follows upon previous reports prepared by the Joint Inspection Unit on the same subject in Africa and Latin America 1/, should be seen in the context of growing international recognition of the need for more effective measures for the conservation and management of the cultural and natural heritage of mankind. This recognition has been fed over the years by multilateral treaties, international conferences, resolutions and strategies designed to promote environmentally sound and ecologically sustainable processes of development. These promotional efforts in which the United Nations system has played a foremost role include the following landmarks: the UNESCO Man and Biosphere Programme (MAB), launched in 1970 to focus scientific attention on the impact of man on the resources of the biosphere; the United Nations Conference on the Human Environment, held in Stockholm in 1972, which led to the establishment of the United Nations Environment Programme (UNEP); the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (1971); the World Heritage Convention (1972); the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973) and subsequent similar treaties (see Annex 3); the World Conservation Strategy (WCS) launched in 1980; and the World Charter for Nature adopted in 1982 by the United Nations General Assembly in resolution 37/7.

2. Other world conferences sponsored by the United Nations system over the past several years, which relate in varying degrees to the subject in hand, include inter alia: the United Nations Population Conference (Bucharest, 1974), World Conference on Human Settlements (Vancouver, 1976); the United Nations Conference on Desertification (Nairobi, 1977); the FAO World Conference on Agrarian Reform and Rural Development (WCARRD) (Rome, 1979); the United Nations Conference on New and Renewable Sources of Energy (Nairobi, 1981); and more recently the UNESCO World Conference on Cultural Policies (Paris, 1982), as well as the United Nations Law of the Sea Convention (Montego Bay, 1982) which aims at regulating the exploitation of ocean resources considered as part of the common heritage of mankind.

3. Additionally, the United Nations General Assembly has adopted in recent past a series of resolutions 2/ focussing international attention on environmental protection and conservation issues, and has reaffirmed this concern as one of the policy prescriptions of the International Development Strategy for the Third United Nations Development Decade 3/. In a closely related field of activity, General Assembly resolution 334(XXIX) of December 1974 called for co-ordinated and multidisciplinary research work aimed at synthesizing, integrating and advancing existing knowledge on the relationships between population, resources, environment and development in order to assist Member States, particularly the developing countries, and the organizations of the United Nations system in their efforts to cope with the complex and multidimensional problems related to this field in the context of social and economic development. This research project which seeks to investigate and define the causal interactions between population, resources and the environment in the development process is of particular relevance to the Asia and Pacific region in view of the critical population pressure on historical sites, wildlife lands and other natural resources in most of the region.

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1/ Documentation and Study for the History and Civilization of Ancient Egypt in Cairo (JIU/REP/72/8); Regional Training Centre for the Preservation of Cultural and Natural Heritage at Jos, Nigeria (JIU/REP/74/8); Regional Training Programmes in African Wildlife Management at Mweka and Garoua (JIU/REP/79/1) and Progress Report (JIU/REP/83/3); and Contribution of the United Nations System to the Conservation and Management of Latin American Cultural and Natural Heritage (JIU/REP/82/5)

2/ See, for example, General Assembly resolutions 34/74, 34/188, 35/5, 35/7, 35/127, 35/128, 36/7 and 36/64

3/ See General Assembly resolution 35/56, paragraph 41 of the annex.

4. Furthermore, a joint "Declaration of Environmental Policies and Procedures Relating to Economic Development" was signed in New York in February 1980 by the World Bank and the Regional Development Banks, the Commission of the European Communities, the Organization of American States, UNDP and UNEP. The joint declaration inter-alia reaffirms the support of the signatories for the principles and recommendations of the United Nations Conference on the Human Environment.

5. In the last few years the Asia and Pacific region has hosted a number of international Conferences, i.e., the 8th World Forestry Congress (Jakarta 1978); the 15th and 16th Sessions of the General Assembly of the International Union for Conservation of Nature and Natural Resources (IUCN, see para. 126), Ashkhabad, 1978 and New Zealand, 1981, respectively; the Third Meeting of the Conference of the Parties to the CITES Convention (New Delhi, 1981) and the Third World National Parks Congress, Bali, 1982.

6. The above-mentioned conferences, conventions, resolutions and declarations have conferred upon organizations of the United Nations system, particularly FAO, UNEP and UNESCO, a mandate to be actively involved in promoting improved conservation and management of the natural and cultural heritage of mankind, and more specifically to support the efforts of developing countries in this field. Therefore, the present study seeks, in summary, to:

(a) highlight the value and contribution of heritage resources to social and economic development and the salient problems constraining the conservation and management of cultural and natural heritage and the environment in the Asia and Pacific region;

(b) review the conservation efforts of governments of the region, individually and collectively; and the support of United Nations system organizations to these efforts; and

(c) recommend measures for improving and strengthening the support of the United Nations system in this field of international co-operation.

7. In carrying out this study the Inspectors visited the Headquarters of FAO, UNESCO, UNDP, ESCAP, the Asian Development Bank (AsDB), the World Bank, the UNEP Regional Office for Asia and the Pacific in Bangkok and a number of countries in the region to obtain first-hand information on field activities concerned with the conservation of heritage. They also visited on-going projects supported by the United Nations system in several countries: in India, Indonesia, Nepal, Papua New Guinea, and Thailand. A number of countries including Australia, China, Japan and New Zealand, and international non-governmental organizations, including International Union for the Conservation of Nature and Natural Resources (IUCN), New York Zoological Society, Frankfurt Zoological Society and the World Wildlife Fund (WWF) provided valuable information on their activities relating to this subject. In addition, numerous documents and reports of field projects were consulted. The Inspectors wish to thank all who contributed to this study. They would in particular wish to express their gratitude to the governments of countries visited for their interest in the study and to UNDP resident representatives in Asia and the Pacific and the staff of the United Nations system for their valuable co-operation.

## II. HERITAGE AND DEVELOPMENT

### A. Setting

8. The Asia and Pacific region spreads over a large area of 31 million square kilometres, extending from the Western border of Iran to the Eastern border of Cook Islands, and from the extreme Northern border of China to areas of Antarctica under the jurisdiction of Australia and New Zealand in the South. The population of the region was estimated in 1982 at about 2.5 billion, or 56 per cent of the world's population.

9. Countries of the region display considerable diversity in terms of size, level of development and cultural heritage. For example, the heritage of countries on the Asian sub-continent and nearby islands, long characterized by a rich inter-play of cultural influences, differs in some significant respects from the heritage of the small South Pacific island countries and territories, historically remote from cross-cultural influences, and equally so from the predominantly European heritage of Australia and New Zealand.

10. Biogeographical classification developed and refined by IUCN and UNEP place the fauna and flora of the region into 5 broad geographical groupings (realms) each of which is further sub-divided into smaller distinct groups (provinces), with 52 biogeographical provinces in all, 13 of them in Australia alone. This diversity which includes climatic differences ranging from the hot and humid tropics to cold temperate zones has especially influenced the evolution of natural heritage, leading in some cases to a high degree of endemism. This is exemplified by the parallel evolution of the marsupials of Australia and nearby Irian Jaya/Papua New Guinea island.

11. Equally important are geological formations and volcanic activity which have further enriched the heritage of the region. For example, the Sagarmatha Park in Nepal encloses the southern approaches to Mt. Everest and was elected to the World Heritage List in 1979. Fuji Yama (volcanic origin) in the Fuji-Hakone-Izu National Park in Honshu Island, which is an important feature in the religious, social and artistic life of Japan, is reported to attract millions of visitors a year. Also, the Neemegetu Nasin in Mongolia contains the most important dinosaur graveyards in Central Asia yielding a wide variety of dinosaur species. However, volcanic activity and earthquakes such as are commonplace in Japan and Indonesia impose constraints and hardships requiring rapid adaptability for survival. A series of eruptions of Galunggung volcano in Java in April 1982 caused material loss of about Rp 50 billion (US\$73 million at April 1982 exchange rate).

### B. Heritage Resources

#### 1. Cultural heritage

12. The cultural heritage of the Asia-Pacific region is wide-ranging and includes in many countries magnificent architectural treasures and other historical monuments dating thousands of years back. The value and influence of this heritage is no longer limited to the region. As a major centre of attraction for visitors from all over the world, it makes a significant contribution to a flourishing tourist industry which is an important source of employment and foreign exchange for many countries. However, the intrinsic value of this heritage to peoples of the region is not primarily touristic or economic. It is deeply rooted in the spiritual and social values of the communities and reinforces their sense of cultural identity and spiritual harmony. Thus cultural heritage plays an important unifying role and provides a code of social conduct. Indeed, the great temples such as the Sheesh Mahal in Pakistan, or the spirit houses of the Abelam peoples of Papua New Guinea provide a focal point for most community activities including the exchange of political views. In communities where cultural erosion has not had marked impact, such as in many islands of the South Pacific, in parts of Malaysia and Indonesia and in Papua New Guinea, the communities continue to enjoy a degree of stability and harmonious interaction with nature.

13. It is not only the structural heritage which is the popular attraction; other associated cultural activities such as the annual Sanno Festival of the Hie Shrine originating in the Edo period (1603-1867) which is one of Tokyo's largest festivals, the Poson Festival in Sri Lanka marking the introduction of Buddhism in 247 B.C. which centres around Mihintale and Anuradhapura temples attract many from within and outside the country.

14. Of particular interest and value to mankind is the knowledge about the life-styles of past human communities gained from the reconstruction of materials and other evidence preserved in archaeological and anthropological sites. For example, the Arnhem Land sites in Kakadu National Park (elected World Heritage Site in 1981) comprises over 1,000 sites amongst them showing evidence, going back 20,000 years, of the earliest aboriginal settlements in Australia 4/. The Non-Madol village ruins in Ponape, Christmas Islands, built some 700 years ago provide insight into how Pacific man lived harmoniously with his marine environment, while the chief burial monument, Nan Douwas, is a unique example of pre-historic stone architecture in Oceania. The Niah Cave in Malaysia, which is also the site of the earliest dated (40,000 years) modern skull in Asia, preserves and provides a continuous record of human cultural evolution, stone tool manufacture and use in Southeast Asia. Lastly, one of the world's great civilizations, the Angkor Wat civilization, preserved in the complex of temples in the Angkor Wat National Park in Kampuchea, which also protects the now nearly extinct Kouprey, shows how this civilization developed and co-existed with wildlife. The value of knowledge gained from these heritage properties can contribute to the formulation of policies on the management and development of environmental resources so as to assure sustained socio-economic development.

## 2. Natural heritage

15. The natural heritage of the region ranges from the marsupials of Australia, the elephant and rhino, many species of primates, the panda, tigers, leopards and lions, birds of paradise and parrots, corals and associated wealth of colourful coral fishes, etc., and also includes various vegetation formations, such as almost pure Dipterocarp forests and other rainforests.

16. The economic benefits that flow from this natural heritage range from daily agricultural activities for the production of food, fuelwood, and trade commodities such as spices, vegetable oil, fibres, etc., to large-scale commercial extraction of timber. For example, ESCAP estimates that the region provides about 70 per cent of the world's tropical wood exports. While the exploitation of forest resources is indispensable for the satisfaction of vital daily needs of the population and for generating development income through the export of timber and other forest products, the attendant problem of deforestation is becoming increasingly acute as discussed in section C below.

17. The fauna of the region is among other things a major source of daily sustenance especially for the rural population. FAO estimates that most of the animal protein consumed by rural people living in tropical areas derives from wildlife 5/. Accordingly, the development of this resource is a major objective of several projects assisted by FAO and UNDP in Bhutan, Burma, India, Indonesia, Papua New Guinea, etc. (see annex 2), where the local communities are heavily dependent on wildlife resources, especially crocodiles, as a means of livelihood and income. FAO's 1982-83 programme objective in this area aims at the "formulation of wildlife and national park policies within the renewable natural resources, with emphasis on the possibilities of wildlife utilization by rural people as a source of protein and income".

18. The significant value of wildlife is further exemplified by the traditional use of water buffalows and Banteng cattle (in Bali, wild elsewhere in the world) as draught animals, and of the Asian elephant for forest logging operations in countries like Burma, India, Indonesia, Pakistan, Sri Lanka, Thailand, etc. In Burma,

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4/ Australian Heritage Commission Annual Report 1980-81

5/ FAO 1981 Doc. C 81/3 p.

pressure capture from operations and removal may be affecting wild elephant populations adversely, and according to FAO officials there appears to be a need to study this impact in order to evolve better conservation-oriented management practices. Other species such as the tiger, elephant, rhino and musk deer not only provide sport but also valuable products (skins, ivory, musk, rhino horn and skin) which find their way into regional and international markets and thus contribute hard currency to national economies. Also worthy of note is the common use of primates for bio-medical purposes vital to human welfare (e.g. rhesus monkey). The Inspectors welcome the joint WHO/Ecosystem Conservation Group (ECG) policy statement of November 1981 6/ on the need to rationalize the exploitation and management of primate species for medical experimentation.

19. A closely related aspect is the use to which various species of plants have served the peoples of this region in traditional medicines and other related uses. A number of countries have research programmes to develop this important aspect and some are utilizing part of their UNDP country Indicative Planning Figure (IPF) for the purpose. Examples include China (UNDP/WHO Project CPR-80-031: Establishment of Research Center in Traditional Medicine), Nepal (NEP-79-007: Cultivation of Medicinal and Aromatic Plants), and at the regional level, UNDP/WHO RAS-79-128: Pharmaceutical Productions, medicinal herbs and Ayurvedic and RAS-81-021: Traditional Medicine.

20. Lastly, freshwater and marine resources are also a daily source of food and revenue for individuals and governments of the Asia-Pacific region. Indeed, the island nature of many of the countries and their limited surface area compel them to be heavily dependent on marine resources for food; the numerous urban and semi-urban settlements scattered along the coasts of Indonesia, Maldives, Philippines, Sri Lanka, etc., are evidence of this dependence. Small and large scale fisheries, including industries based on this resource, can be considered as important as agriculture-based activities in providing employment to the population. However, the exploitation of heritage resources for development and daily purposes also presents some problems. These are examined below.

### C. Salient Problems

#### 1. Population

21. With its more than half of the world's population, the Asia and Pacific region faces the critical problem of severe pressure on land to produce more food, commercial products such as timber, rubber, palm oil, etc. and space for human settlements and development projects. In many countries, the large and increasing population size has had the double-edged effect of raising demands and reducing the stock of natural resources at the same time, thus leading to ever increasing stress on land and marine resources and other ecological pressures.

22. Inevitable expansion of agricultural activities to meet daily and broad development needs has claimed lowland and mountain forests and probably contributed to amplifying the desertification process in some countries (Bangladesh, China, India, Indonesia, Iran and Pakistan), with consequent degradation of productive land, loss of top soil and water holding capacities of catchment areas. Similarly, pressure on wildlife habitats and resources to meet rising population demands has had an adverse impact on some wildlife species. As far back as 1934 the Orang Utan in Indonesia had been subjected to so much intensive hunting for food, sport and other uses that it was almost extinct and had to be declared a protected species. In Malaysia, expanding development schemes and other human activities have tended to dislodge the Orang Utan and the tiger from their natural habitats and both species are estimated to number only about 300 each at present in Malaysia. The exploitation of crocodiles for daily and commercial purposes is widespread in several countries and some species such as the gharial in India have had to be saved from extinction.

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6/ WHO document BLG/PRI/81.1.



23. A 1981 CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) meeting in New Delhi reported that international trade in musk from the Himalayan musk deer amounted to about 200 kg/year which is equivalent to the slaughter of between 20,000 to 32,000 musk deer. This indiscriminate slaughter evoked bans on this trade by India (1972) and Nepal (1973). In Southeast Asia especially, the rhino was so much hunted for its horn, used in pharmaceuticals, that by 1960 it was estimated there were about 28 Javan and probably under 150 Sumatran rhinos surviving in the wild. Efforts by Governments and non-governmental organizations to save these species from extinction started as early as the 1960's and some UNDP/FAO-assisted Projects in India, Indonesia, and Nepal, for example, had as one of their primary objectives the protection of endangered species.

24. Increasing population pressure on the carrying capacity of land and on the environment in general has also produced some negative side-effects on cultural heritage. In Nepal, for example, population density is highest in the Kathmandu Valley where the country's cultural heritage is frequently subjected to erosions and floods induced by human activities.

25. Countries of the region have been concerned about the population problem for quite some time. A regional seminar under the auspices of ESCAP (then ECAFE), convened in Bangkok in 1961 <sup>7/</sup> specifically to review environmental implications of rural and urban population growth recommended, amongst other things, that "attention to the interaction between population and environment receive the highest priority at all stages of development planning and at all levels - local, regional, national and international" - a position reflected later in the World Conservation Strategy and in the Third United Nations Development Decade.

## 2. Deforestation

26. Deforestation is an environmental problem with global dimensions. It affects not only socio-economic aspects but also climatic patterns, oxygen and carbon dioxide balance, radiation and the functioning of natural ecosystems which depend on ecological processes sustained by a healthy forest.

27. For many years the economies of the region have depended on the exploitation of forests for their valuable timber. However, the needs of a growing population for food, firewood and employment, and the ever present urge to attain a measurable degree of development especially through industrialization, have placed further pressures on lowland, mountain and mangrove forests. The area of tropical forest in the region is estimated at 300 million hectares but at the present 2% annual rate of deforestation this may be reduced by 70% by the end of the century <sup>8/</sup>. In some countries the forest area is decreasing at an alarming annual rate. For example, in Indonesia and Thailand (each about 1 million hectares or 2% and 5% respectively), Philippines (0.5 million hectares or 7%), Malaysia (0.4 million hectares or 8%); in some extreme cases the entire forest area may be denuded within a period of 12 to 50 years <sup>9/</sup>. Nepal, for example, is now facing a dramatic problem of deforestation and resulting erosion caused by the clearing of forests for firewood and other purposes. In the ASEAN sub-region alone, closed broad-leaved forests decreased at the rate of 1.2 million hectares per year, which is the highest rate in the region followed by the South Asian countries at 339,400 hectares per year. It is estimated that the ASEAN forest will decrease from 152 million hectares in 1980 to 146 million hectares in 1985 <sup>10/</sup>.

28. The two principal causes for rapid deforestation are agricultural activities especially shifting cultivation and the search for firewood as mentioned above, coupled with large-scale commercial extraction of timber and the virtual absence of planned reforestation measures. Some of the environmental consequences are widespread cases of flooding and soil erosion as well as accelerated desertification, all of which have a negative impact on natural and cultural heritage.

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<sup>7/</sup> ESCAP (1971) Asian Population Studies Series No. 10, page 25

<sup>8/</sup> ESCAP (1982) Review and Appraisal of Environmental Situation in the ESCAP Region, Bangkok

<sup>9/</sup> UNEP Report No. 2 (1980), Mountain Ecosystem, pp. 17-20

<sup>10/</sup> UNEP Regional Office (1982), The Resources of Development, Bangkok, pp.40-41.

### 3. Other Problems

29. Earthquakes, typhoons, hurricanes, monsoons and man-made disasters such as armed conflict also constitute a serious problem that disrupts the proper conservation and management of heritage and the environment in many countries of the region. These factors are for the most part responsible for the near destruction of Intramuros, a Spanish legacy in the Philippines, the restoration of which has been given a special priority by the government. Earthquakes in Burma have had a severe impact on Pagan monuments, considered to be the greatest concentration of Buddhist temples in the world. Similarly in Bangladesh and India, floods and other climatic disasters have, not infrequently, resulted in considerable loss of life and damage to the environment. These factors escalate the financial costs of heritage conservation and environmental management, and emphasize the need for international support to heritage conservation measures in the region. Indeed, the financial limitations of many governments which are faced with more urgent development priorities such as the satisfaction of the basic needs of the population, also present an obstacle to the proper conservation and management of cultural and natural heritage.

30. Lastly, chronic largescale poverty in several countries not only poses a tremendous development challenge to governments but also represents an intractable environmental problem in severe concrete manifestations (extensive slums, sub-human settlements, health hazards, etc.). According to ESCAP, the number of people in the region living under the poverty line - US\$70 annual income per capita - that is in extreme material poverty, is about 500 million. It therefore goes without saying that there is an imperative need in the poverty-afflicted countries to tackle - through the allocation of development resources and reduction of income disparities - this immense problem of poverty, the solution or mitigation of which should also alleviate its environmental effects mentioned above, particularly in the urban areas.

31. It should be stressed, however, that deterioration of heritage resources and the environment is not only caused by poverty but even more so by the application of rapid economic growth models designed in many cases to overcome poverty but which almost inevitably induce intensive production patterns that contribute to environmental disequilibria, such as energy shortages, reduced mineral diversity, atmospheric, land and marine pollution, deforestation, etc. The resultant degradation of heritage resources and the environment in turn aggravates poverty, especially among the rural population. Therefore, breaking this vicious circle of causality should engage the utmost attention of development planners in the region.

32. Admittedly, the multifaceted magnitude of the national development challenge in many countries coupled with the relative shortage of financial resources, as noted earlier, tends to constrain government planners to immediate and short-term approaches to environmental problems. Yet, the current critical situation outlined in preceding paragraphs calls for medium and long-range policy measures and their sustained translation into action programmes at all levels, particularly at the grassroots. This aspect is examined in the next chapter.

### III. HERITAGE CONSERVATION AND MANAGEMENT

#### A. Policy and Legislative Framework

33. Policy and legislative measures are basic preconditions for effective conservation and management of natural and cultural heritage. Annex 1 to this report gives a panoramic picture of environmental policies and laws enacted by some countries of Asia and the Pacific region. The Annex shows that only in a few cases (India, Indonesia, Malaysia, Papua New Guinea, and Trust Territory of the Pacific Islands) do national constitutions explicitly include heritage conservation as a long-term policy directive. However, most countries have policy and legal instruments governing environmental impact assessment of projects, coastal zone management, forest conservation, parks and wildlife protection and cultural heritage preservation.

34. These various aspects of conservation are covered by specific pieces of legislation adopted at successive stages over the years. In some cases, laws enacted many years ago, such as the Indian and Pakistani Forest Acts of 1927, might need to be brought up to date in the light of the current situation. More important still is the need to embody the various policy and legal provisions in a comprehensive national policy strategy for the conservation and management of heritage resources and the environment. Several countries have already made significant progress in this direction.

35. ESCAP and UNEP advisory services to governments of the region (see Chapter IV) have often included support in the formulation of national environmental management policies and plans. Other United Nations agencies, particularly FAO, have sought to strengthen policy and legislative elements in the context of their sector-specific activities. The World Bank, the Asian Development Bank and some bilateral aid programmes usually emphasize the environmental impact assessment of projects financed by them, while some non-governmental organizations (IUCN, World Wildlife Fund, Frankfurt and New York Zoological Societies) focus on conservation policies regarding rare and endangered species.

36. These different approaches seem inevitable, first because environmental conservation and management is a multi-varied field, and second because co-operating organizations of the United Nations system have distinct sectoral mandates, while bilateral and non-governmental modes of funding respond to special donor policies and interests. At the same time, heritage conservation problems are cross-sectoral in nature and scope, and can only be effectively tackled through a comprehensive integrated approach encompassing all the areas of emphasis noted above, if only to achieve balanced planning and allocation of resources to the various aspects of natural and cultural heritage conservation.

37. The central responsibility for evolving, at the national level, a concerted and co-ordinated approach by international funding and co-operating organizations lies with the host government. That responsibility could be exercised more effectively on the basis of an integrated and coherent national policy of conservation in the medium and long term, as suggested in paragraph 34.

38. The subregional environment action programmes adopted in recent past by countries of the region (see paragraph 69) underscore the importance of policy coordination and consistency among Member States, and suggest the need to harmonize national conservation policy objectives with subregional programme objectives, as well as with the provisions of other multilateral conservation treaties listed in Annex 3. Only a few countries of the region have thus far adhered to these international treaties or conventions. For example, by February 1983, seven (20%) had ratified the Convention on the Protection of the World Cultural and Natural Heritage (Paris, 1972), and thirteen (35%) in the case of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973). These treaties represent an internationally accepted framework for designing and implementing national and subregional conservation measures, and fostering co-operation among Member States. It would, therefore, be desirable for ESCAP, FAO, UNEP and UNESCO to advise governments of the region on the advantages of acceding to those international treaties relevant to their conservation efforts.

39. The foregoing paragraphs have focussed on the framing of conservation policy and legislation. However, policies and laws without effective implementation and enforcement measures are not likely to have an impact on heritage conservation and management practices. Some of the environmental problems noted in the preceding chapter may be attributed in some cases to weak enforcement of existing environmental protection laws. For example, Forestry Acts adopted in some countries are yet to prove effective against indiscriminate logging operations and rapid deforestation. Similarly, wildlife protection laws have hardly curbed the hunting, poaching or commercial exploitation of some threatened wildlife populations. Governments increasingly recognize the need to broaden and improve enforcement techniques. But to do so requires adequate resources, particularly trained personnel vested with sufficient authority to enforce protective measures, field equipment such as vehicles, firearms, etc. and, above all, an agency with responsibility to co-ordinate the activities of other government conservation departments.

#### B. Administrative Organization and Co-ordination

40. Nearly all the countries listed in Annex 1 have an environment agency and half of those listed in Annex 3 have established Man and Biosphere National Committees. In addition, many countries have Departments or Divisions specifically responsible for National Parks and wildlife matters, usually lodged in the Ministry of Forests, and for cultural heritage (archaeology, archives, museums, monuments, etc) sometimes attached to the Ministry of Education and Culture. Thus natural and cultural heritage matters are overseen in most cases by a rather complex organizational network involving many government institutions and decision-making levels. To function efficiently, such a network requires a strong central co-ordinating mechanism.

41. There is no magic formula for achieving effective co-ordination among government agencies with different responsibilities for heritage conservation and management. Co-ordination may be more difficult when it covers both natural and cultural heritage, but the experience of some of the countries visited by the Inspectors suggests that this is quite feasible. The Australian Heritage Commission, for example, is a central co-ordinating and advisory body regarding policies affecting the natural and cultural environment of Australia. Likewise, the Department of Environment in India has a broad mandate that encompasses both natural and cultural components of heritage. The Department plays a central co-ordinating role and emphasizes, as a matter of policy, a multidisciplinary and integrated approach to environmental management.

42. In many countries, however, the co-ordination responsibility of national environment agencies does not include cultural heritage, and in some cases such as in Malaysia and Nepal, Wildlife and National Parks Departments enjoy a high degree of autonomy in administration and decision-making. More significantly, central environment agencies do not often appear to constitute a strong focal point for coordinating the different sectoral conservation activities of international organizations, bilateral programmes and non-governmental organizations with a view to achieving balanced and efficient allocation and utilization of conservation resources. Where environment agencies are located outside national planning ministries, which is the case in many countries of the region, they tend to play a marginal role in the programming and co-ordination of externally-financed conservation activities.

43. Some UNDP-financed wildlife and national parks projects implemented by FAO in Indonesia and Nepal, discussed in the following chapter, achieved optimum results thanks in part to effective government co-ordination and support, which resulted in cross-fertilization among conservation projects funded from different sources. The reverse held true in the case of some similar UNDP/FAO-assisted projects in Bangladesh and Thailand, where wildlife and national parks fall under several government departments without a clearly recognized central co-ordinating authority.

44. In general, environmental protection and other conservation activities supported by organizations of the United Nations system (see Annex) have inter alia been directed to the strengthening of governments' institutional machinery for heritage conservation and management. ESCAP and UNEP have promoted the setting up of

central environment agencies; UNDP/FAO-assisted projects in natural heritage have significantly contributed to upgrading wildlife and national parks departments; UNESCO has supported the establishment of Man and Biosphere National committees, although it has not systematically promoted the administrative and organizational aspects of cultural conservation.

45. While these separate achievements are commendable, the Inspectors believe that more efforts are required on the part of United Nations system organizations to promote whenever feasible an intersectoral and cohesive approach in the planning and execution of cultural and natural heritage projects. This can be achieved within the framework of the UNDP country programming process. More importantly, it should be supported on a continuing basis by United Nations Resident Co-ordinators, whose responsibilities include co-ordination of operational activities for development carried out by the United Nations system at the country level, the exercise of team leadership, and evolving a multidisciplinary dimension in sectoral development assistance programmes 11/. Effective co-ordination and integration of UN system activities, as suggested above, would reduce inter-agency co-ordination demands on governments, compensate for weak institutional infrastructures in host countries, and facilitate government implementation of comprehensive and integrated national conservation strategies. Not least, such an approach would ensure that the combined UN system contribution achieves a catalytic and multiplier impact on heritage conservation and management.

46. The UN system contribution, however well designed, co-ordinated and implemented is not likely to have a durable effect on the state of heritage conservation and management if host governments cannot derive optimum mileage from that contribution. The ability of governments to do so hinges on their institutional and technical capabilities, determined in the first place by the availability of trained administrative and specialist cadres able to plan, implement and manage projects and programmes, administer policies and legislation, and conduct research on the state of conservation.

### C. Training and Research

47. Training and research are amongst the priorities identified for national action in the World Conservation Strategy (chapters 8 and 12) as a means to achieving sustainable management of environmental resources. The same theme was emphasized at the Third World National Parks Congress, held in 1982 in Bali (Indonesia). Indeed, the recent growth in environmental conservation programmes and awareness in many countries has revealed the paucity of trained manpower in natural heritage conservation and management, a fact confirmed by the Inspectors in the course of their visit to the region. National training institutions are few and not fully developed and equipped to satisfy the increasing need for conservation specialists. Besides, no regional or subregional training programme exists as yet in wildlife and national parks management, as discussed in Section E below.

48. In Malaysia, for example, a training centre for wildlife management in Patrang offers a range of junior-level courses (game rangers and assistant game wardens). Plans to provide middle-level training have been constrained by the lack of qualified instructors. Government officials considered that a high-level regional or subregional training centre would be desirable, especially for training instructors. Similarly in Nepal, a training programme at Hetauda runs junior-level courses, and officials likewise expressed the need for a regional training institution comparable to the College of African Wildlife Management at Mweka (Tanzania), which has provided short courses to a number of Nepalese wildlife officers. In Indonesia, the recently established School of Environmental Conservation Management at Ciawi, Bogor, is operating a ten-month course for middle-level wildlife management personnel, as well as refresher courses and workshops. The school should contribute to building up a strong middle-level management cadre, although more effective results will be

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11/ General Assembly resolution 32/197 of 17 December 1977 on the Restructuring of the Economic and Social Sectors of the United Nations System, Section V, paragraph 34 of the Annex.

assured only when the government takes appropriate follow-up measures as recommended in the terminal report on Project INS/73/013, particularly as regards the need to provide incentives.

49. A few universities in India offer theoretical courses in wildlife. Middle and junior-level training is part of a forestry training programme. An encouraging development is the recent establishment of "The Wildlife Institute of India" with UNDP/FAO support under IND/81/003, located temporarily at Dhera Dun. This is a large-scale training project which is expected to serve as a national focal point for training in wildlife and parks management.

50. Wildlife and national parks projects financed by UNDP and implemented by FAO over the last decade in several countries of the region have usually included training and research as appurtenant objectives. But, as will be seen in the next chapter, these were only partially achieved in most cases. Besides, as a percentage of project budgets, training and research components were relatively small to start with. Consequently, on the completion of these projects, some of which lasted nine years, trained wildlife management and research staff was still acutely in short supply.

51. Much of the wildlife research currently under way in the region is the work of foreign individual investigators and non-governmental organizations, particularly IUCN/WWF, Frankfurt and New York Zoological Societies. While their research efforts are laudable and have proved especially useful in the timely identification of endangered species in need of priority attention, these private researchers cannot substitute for direct government involvement in the preparation of inventories of national heritage resources and the systematic collection of scientific data on the status of conservation and ecological processes. Such baseline information appears indispensable to the formulation of sound conservation strategies and to effective environmental resource management. It therefore seems important that governments of the region, in their co-operation with international organizations, especially those of the UN family, should assign priority to the training of national managerial and research staff as an indispensable step towards self-reliance in the management of their heritage resources. Special material, career and other incentives are also required to attract and motivate nationals in heritage conservation disciplines - not the most glamorous in an age committed to modernization.

52. The foregoing bears directly on the role of co-operating organizations of the UN system. General Assembly resolution 3405(XXX) of 28 November 1975 on New Dimensions in Technical Co-operation provided, amongst other things, that "the basic purpose of technical co-operation should be the promotion of self-reliance in developing countries by building up inter alia their productive capability and their indigenous resources and by increasing the availability of the managerial, technical, administrative and research capabilities required in the development process". This policy guideline needs to be emphasized in the design and implementation of the UN system's contribution. In this respect, UNESCO's approach, summarized in the following paragraphs, is worth emulating.

53. In cultural heritage the picture is much brighter, thanks in large measure to UNESCO's systematic emphasis on the training of nationals and the building up of technical and research staff in several countries of the region. In Nepal, UNESCO's support under its regular programme and three projects implemented by it with UNDP funds in the early seventies led in particular to the establishment of a Central Conservation Laboratory. As a result of the training and research functions of this Laboratory a national expert corps was formed to serve as a catalyst in the revival of traditional Nepalese craftsmanship. Similarly, the restoration of the Borobudur Temple in Indonesia, considered the largest Buddhist Temple in the world, towards which UNESCO mobilized large-scale international support valued at US\$6.5 million in addition to the government's expenditure of about US\$25 million over a ten-year period, led to the development of a competent team of national experts who are currently planning to extend restoration work to other monuments in the country. The Borobudur project in addition enhanced the capacity of the National Research Centre of Archaeology in Indonesia, and also served as one of the sub-centres for

training in restoration techniques under the SEAMEO Project in Archaeology and Fine Arts (SPAFA) (see paras. 64-66).

54. The National Research Laboratory for the Conservation of Cultural Property (NRLC) at Lucknow (India), which is also supported by UNESCO under a UNDP-financed project, is geared to training and research and constitutes a seminal experiment in the building of national self-reliance in cultural conservation, as discussed in paragraph 107. The Laboratory collaborates closely with the National Museum of India in organizing periodic practical courses for University students with theoretical background in museology. The two institutions also undertake extension work and provide technical back-up services to about 360 museums throughout the country. A training programme also exists for National Archives but an Indian official expressed the need for UNESCO support in developing expertise required for the proper preservation of some 3 million valuable manuscripts on Indian history.

55. In Thailand, where the Government is strongly committed to the preservation of cultural heritage, training has received emphasis at both vocational and professional levels. The Pok Cheng School of Arts concentrates on fine arts and crafts as a vocation while the College of Arts and Crafts emphasizes preservation work and the University of Fine Arts offers professional training in archaeology up to Master of Arts (M.A.) level. In Australia, the Canberra College of Advanced Education offers a 2-year associate diploma and a 4-year masters training course in conservation techniques of cultural materials. The College was recognized as a UNESCO centre by the General Conference of UNESCO in 1982. Thus, there is a network of high level cultural conservation training institutions which could serve the region as a whole.

56. The build-up of national expertise in heritage conservation and management is a necessary but not a sufficient condition for the successful implementation of conservation programmes. Broad popular education and awareness about the value of heritage and the direct involvement and support of the local communities in the planning and implementation of projects are also of critical importance.

#### D. Education and Public Awareness

57. In several countries such as India, Indonesia, Malaysia, Nepal, Papua New Guinea, Philippines and Thailand, environmental protection and heritage conservation enjoy strong political support at the highest level of government. Such political backing is necessary to ensure continuous government attention to conservation issues and to heighten public awareness about the value of heritage in the development process.

58. Equally important is the educational role of a number of national non-governmental organizations in the region. These organizations actively promote public understanding and concern for conservation issues. Several exist in Australia covering both cultural and natural heritage. Some of them are members of International bodies like IUCN and WWF. The "World Wildlife Fund - Indonesia" has been involved in the co-ordination of the country's long-term conservation programme. This NGO has been particularly active in promoting conservation awareness and in educating the public about conservation activities and problems through a newsletter and other means. It is important to add that practically all of the WWF/IUCN projects include, as a requirement, a component in conservation education covering either the production of materials, dissemination of information in schools and through public media. NGOs in Australia, India, Japan, Nepal, Pakistan are also active in this field and work closely with WWF and IUCN on national and international conservation issues. Governments should encourage the growth of these organizations and their full involvement in the formulation and implementation of conservation programmes.

59. Furthermore, conservation programmes are likely to secure the full support and involvement of rural communities if they are built on indigenous conservation knowledge and value systems, a fact that has not often been adequately reflected in international conservation treaties and strategies. Programmes cast in local cultural styles and tastes and the use of local idioms in disseminating conservation

ideas can greatly enhance community response and participation.

60. Several UNDP, FAO and UNESCO supported projects directly or indirectly include conservation awareness. Projects aimed at developing natural heritage resources for the benefit of local peoples, such as the crocodile projects in India and Papua New Guinea or the management of rusa deer in Papua New Guinea, and musk deer in Bhutan, India and Nepal depend for their success on public support and participation, which call for an informed public. In some cases, initiation of conservation programmes has had to be preceded by an educational project aimed at raising the awareness of Governments and communities about conservation needs, and building initial community support. Examples are some FAO-assisted projects in Bhutan, Fiji, Laos and Western Samoa.

61. Cultural restoration activities in Indonesia (Borobudur Temple), Nepal (the Royal Palace and Kathmandu Valley Temples), the Intramuros in the Philippines, the ceremonial house, "haus tambaran", in Papua New Guinea, and related activities in Afghanistan, Iran, Pakistan, Thailand as well as the collection of oral traditions and search for archaeological sites in Solomon Islands generally involved public participation. According to recent legislation in China, the restoration of monuments should also include the revival of their original cultural and social atmosphere. A similar approach is being applied in Papua New Guinea where, instead of building a new cultural museum, the Government has preferred to restore the ceremonial house in order to retain its spiritual value to the inhabitants. Generally, therefore, United Nations system supported activities in the conservation of cultural heritage have had, by their very nature, a built-in education and awareness element.

#### E. Regional Co-operation

62. An important feature of co-operative links and exchanges in cultural and natural heritage among countries of Asia and the Pacific consists of regional meetings, consultations, seminars, study tours and workshops and other ad hoc activities sponsored mostly by United Nations system organizations (ESCAP, UNEP, FAO and UNESCO). Regional organizations and training institutions devoted to this subject area are extremely few and intercountry co-operation is heavily concentrated at the subregional level.

63. One of the most active subregional bodies is the Association of Southeast Asian Nations (ASEAN), which includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand. One of ASEAN's objectives is to accelerate the economic growth, social progress and cultural development in the region through joint endeavours in the spirit of equality and partnership and peaceful community of Southeast Asian Nations. ASEAN has a standing Committee on Culture and Information as well as a Cultural Fund established in 1978 and supported by a Japanese Government contribution of five billion yen. The Fund finances intra-ASEAN cultural projects drawn up by the ASEAN Committee on Culture and Information and covering a wide range of activities in film, radio and television, music, Southeast Asian studies, exhibitions, performances, publications and other exchanges. These activities are designed to preserve the cultural heritage of ASEAN member countries and to foster among their peoples greater interaction and awareness of their cultures.

64. Another subregional body with a highly visible role in inter-state cultural co-operation is the Southeast Asian Ministers of Education Organization (SEAMEO), which includes Indonesia, Malaysia, the Philippines, Singapore and Thailand. SEAMEO has launched several co-operative ventures since the mid-seventies. One of these initiatives, which is of particular interest to the subject of the present report, is the SEAMEO Project in Archaeology and Fine Arts (SPAFA). SPAFA grew out of several years of preparatory meetings leading to the establishment in 1975 of the Applied Research Centre for Archaeology and Fine Arts (ARCAFA), located in Phnom Penh, which never got off the ground because of subsequent political developments. SPAFA was established in 1978 for a three-year initial period within the same broad guidelines for action originally laid down for ARCAFA to help strengthen cooperation among SEAMEO member countries as well as promote the preservation of traditional



values, creative activities, archaeology and fine arts in the region. Its specific objectives include:

(a) to promote awareness and appreciation of the cultural heritage of the Southeast Asian countries through the preservation of archaeological and historical artifacts as well as the traditional arts;

(b) to help enrich cultural activities in the region;

(c) to strengthen professional competence in the fields of archaeology and fine arts through sharing of resources and experiences through regional activities; and

(d) to promote better understanding among the countries of Southeast Asia through joint programmes in archaeology and fine arts.

65. SPAFA operates through a Co-ordinating Unit based in Bangkok and a network of sub-centres guided by national steering committees in the participating member countries of Indonesia, the Philippines and Thailand. The subcentres which are responsible for implementing programmes approved by the SPAFA Governing Board were as follows during the first phase of operation: restoration and preservation of ancient monuments in Indonesia; prehistory in the Philippines; and underwater archaeology in Thailand. The SPAFA Second Development Plan (1981-1986) foresees two additional subcentres in fine arts, each in Indonesia and the Philippines.

66. Since its inception SPAFA has accomplished an impressive range of activities implemented by its subcentres and centred on training programmes; workshops; research, publications and personnel exchanges. Some of these activities were sponsored by UNESCO. SPAFA has emerged as an original and most rewarding experiment in technical co-operation among developing countries (TCDC) in the pursuit of common objectives. The Inspectors believe that other countries in the region and elsewhere can benefit from similar initiatives with the advisory support of UNESCO.

67. The development of Lumbini is another regional endeavour that grew out of a suggestion made in 1967 by former United Nations Secretary-General U Thant, that Lumbini, the birthplace of Lord Buddah, be developed into a Centre for peace, culture and tourism. An international committee for the development of Lumbini was formed in 1970 to mobilize resources for a 3 square mile garden around the exact spot where Lord Buddha is said to have been born 2,606 years ago. The current members of the Committee are Afghanistan, Bangladesh, Bhutan, Burma, India, Indonesia, Kampuchea, Laos, Malaysia, Nepal, Republic of Korea, Singapore and Sri Lanka. Japan has the status of observer. With UNDP funding close to \$1 million from its inter-country programme, a master plan has been prepared. The reconstruction of the area will not consist of monuments or lavish places of worship but rather of a cultural centre connected to the sacred garden by carefully planned waterways. The Government of Nepal has also participated substantially in the project by constructing roads, extending the Siddhartha Airport, and providing water supply, electricity and other infrastructure. The UNDP field office in Nepal and the UN Department of Technical Co-operation for Development (DTCD) have been actively assisting the Government on this project.

68. Regional co-operation has been equally pronounced in the broad field of environmental protection and management. The Economic and Social Commission for Asia and the Pacific (ESCAP), whose mandate includes the promotion of subregional and regional co-operation among its Member States, has sought since the early seventies, through regional seminars and meetings, to foster inter-state collective measures for tackling environmental problems in the region: an Asian Plan of Action for the Human Environment was adopted in Bangkok in 1973.

69. Effective implementation of this broad regional plan of action seems to have been inhibited by the marked diversity of country and subregional situations, and this has led to the adoption in recent past of subregional environment action programmes thanks to the consultative and promotional efforts of ESCAP and UNEP. These programmes are the following:

(a) the ASEAN Environment Programme (ASEP), established in 1978 and comprising Indonesia, Malaysia, the Philippines, Singapore and Thailand;

(b) the South Pacific Regional Environment Programme (SPREP), launched in 1980 and including American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Nauru, New Caledonia, Niue, Norfolk Islands, Papua New Guinea, Pitcairn, Samoa, Solomon Islands, Tokelau, Tonga, Trust Territory of the Pacific Islands, Tuvalu, Vanuatu and Wallis and Futuna. These islands are spread over a vast area representing about 6 per cent of the earth's surface; and

(c) the South Asia Co-operative Environment Programme (SACEP) established in 1981 and involving Afghanistan, Bangladesh, Bhutan, Burma, India, Iran, Nepal, Maldives, Pakistan and Sri Lanka.

70. The priority areas identified for action under the three subregional programmes share broad characteristics and objectives while being adapted to respective subregional situations. Thus, ASEP, with its East Asian Seas Plan, and SPREP in particular have placed emphasis on the marine and coastal environment. The priority areas that relate directly to the subject of this study include conservation of endangered species (SPREP); conservation and protection of terrestrial ecosystems, especially tropical forests, and implementation of a regional instrument for regulating international trade in endangered species of flora and fauna (ASEP); and conservation of wildlife and genetic resources, and training in wildlife management (SACEP). This priority area of the SACEP environment programme is particularly welcome and timely in view of the shortage of wildlife and parks management officers in many countries of the region. The Inspectors believe that regional or subregional wildlife training institutions would be desirable especially for the training of instructors to perform training activities at the national level.

71. In this connection, the International Consultation on Wildlife Resources for Rural Development (Hyderabad, 1980), organized by FAO, recommended that middle level training facilities be strengthened where existing or established, and be located in different subregions; one in India for South Asia, one in Indonesia for South East Asia, one in China for East Asia and one in Papua New Guinea for the Pacific. It would therefore seem appropriate for the organizations of the United Nations system, particularly ESCAP, FAO, UNEP and UNDP to explore with governments of the region the possibilities of (a) assisting the national wildlife training institutes in Dhera Dun (India) and Ciawi (Indonesia) to develop regional training programmes; (b) establishing two new institutes in suitable locations in the region with a view to extending co-operation, and (c) including wildlife and national parks management training as one of the priority areas for action in the ASEAN Environment Programme (ASEP).

72. Furthermore, in view of the fact that regional co-operation in Asia and the Pacific is centred on ESCAP and that there is at present no forum for systematic regional consultations and harmonization of approaches to wildlife and national parks management and training issues, the ESCAP Member States may wish to devote more attention to these issues in their meetings.

73. Besides ESCAP, another regional inter-governmental body which is supporting environmental conservation activities in the region is the Asian Development Bank. It has an environmental unit to appraise project designs from an environmental viewpoint. The Unit also keeps in touch with Member States regarding legislation on environmental protection and management. The Bank is beginning to take an interest in environmental projects per se, such as some forestry projects aimed at arresting the degradation of forest land and the environment. It partially assists the development of the Han River in South Korea, a big programme with an estimated cost of more than US\$2 billion. Other projects which are being supported or considered for support include the Agro-waste recycling and integrated rural development planning in the Philippines, the Regional Development Plan for Songkla Area in Thailand, and an environmental study (resource based) in Nepal. The Inspectors believe that the Bank's operations which are mostly country-specific, should complement ESCAP and UNEP-supported environmental activities which are essentially advisory and promote subregional and regional inter-country perspectives. In order to achieve such complementarity, increased information exchange and co-ordination links among the three organizations (the Bank, ESCAP and UNEP) would be desirable.

#### IV. INTERNATIONAL CO-OPERATION

##### A. United Nations Development Programme (UNDP)

74. In its role as the central funding organization for the technical co-operation and pre-investment activities of the United Nations system, UNDP has provided the funds for most of the projects executed by FAO and UNESCO in the area of natural and cultural heritage in the region. Thus, between 1970 and 1982, UNDP financed about 60 projects in this field, totalling approximately US\$16 million and benefitting some 20 countries and territories in Asia and the Pacific region (see Annex 2).

75. Under the natural heritage component UNDP contributed some US\$12 million to projects concerned with wildlife and national parks management. Although several of the projects experienced operational difficulties (section D), UNDP support has by and large contributed to some significant results in several countries. For example, in Afghanistan, Burma, India, Indonesia, Iran and Nepal, UNDP funds have contributed to the establishment and strengthening of many wildlife reserves and national parks, including the formulation in some cases of protective legislation. In several instances, UNDP funds have led to substantial investments, such as in Indonesia where the project on national parks development (INS/78/061) paved the way for a World Bank loan for the development and expansion of national parks and related training schools. In addition, UNDP has undertaken a number of joint ventures with other financial sources, especially the World Bank, in support of environment-related projects, such as project INS/78/006 on training and education in environment and resources in Indonesia, which is geared to middle-level training, education and research in environmental institutions. A major forest fire-control project assisted by the Canadian bilateral aid programme in India has also received UNDP inputs in the form of equipment.

76. Thus, overall, the UNDP funding effort under the natural heritage rubric has had a distinct impact in most cases in complementing other sources of assistance and filling critical gaps in governments' conservation efforts. However, it is likely that the impact of UNDP support might have been greater if the training component of the projects had been adequately implemented. Partly as a result, some of the countries that benefited from UNDP co-operation continue to see the need for high-level trained officers to ensure the proper management of wildlife parks and more rigorous enforcement of protective laws. Indeed, while the Asia and Pacific region has an impressive store of highly educated and capable manpower, it appears to be critically short of specialists in the management of wildlife resources and national parks, and no regional or subregional training institution in wildlife management - comparable to the wildlife colleges at Mweka (Tanzania) and Garoua (Cameroon) in Africa - exists to fill that need.

77. The Inspectors note in this connection that only one small-scale project executed by FAO: regional wildlife and national parks management adviser (RAS-72-029), amounting to some US\$30,000, has been financed to date from the UNDP regional IPF for Asia. A regional project proposed in the early 70s by UNDP and FAO: "Regional Wildlife and National Parks School for Asia and the Pacific (RAS/72/036)" never became operational for reasons beyond their control.

78. Under cultural heritage, UNDP has assisted about 25 mostly small-scale projects totalling US\$4 million executed by UNESCO. These projects have been concerned essentially with the preservation and restoration of national monuments, archaeological sites, cultural property, and a few projects in museology. The countries covered include principally Afghanistan, Bangladesh, Burma, Cook Islands, India, Indonesia, Iran, Khmer Republic, Mongolia, Nepal, Solomon Islands, Sri Lanka. Two small scale regional projects have also been carried out.

79. In several of these countries UNDP support to cultural conservation and restoration activities appears modest compared to overall needs and the much larger funding efforts of the host governments themselves, bilateral sources, and UNESCO under its regular and other programmes of technical co-operation (section E below). In Indonesia, for example, UNDP's contribution to the restoration of the temple of Boro-

budur amounted to some US\$350,000 compared to the US\$25 million provided for that purpose by the Indonesian Government and other external sources of funds. Because of the generally limited scope of UNDP contributions to large-scale conservation projects assisted from other sources, it has proved difficult to assess separately the impact of UNDP's contribution to the conservation of cultural heritage in the region.

80. The contents of UNDP country programmes for the third cycle (1982-86) suggest that many countries in the Asia region prefer to devote UNDP resources to other than cultural conservation activities. For example, in Malaysia, the Philippines and Thailand where significant cultural conservation and restoration projects are under way, UNDP co-operation is not envisaged in this area in the next five years. There is every indication that while some of these projects such as the restoration of Intramuros in the Philippines or of Sukhothai in Thailand rank high on the scale of government priorities, the governments of the region do not in most cases consider cultural conservation as a priority area for UNDP funding.

81. Nevertheless, in some cases, UNDP inputs have resulted in strengthening governments' capabilities for the preservation of their cultural heritage. One such case is Nepal where three UNDP-assisted projects together costing about US\$600,000, and executed by UNESCO, helped strengthen the Department of Archaeology, prepared a Master Plan for the conservation of the cultural heritage in the Kathmandu Valley, and assisted in the restoration of the Hanuman Dhoka Royal Palace which served as training ground for Nepalese craftsmen in restoration techniques. The projects also inspired bilateral co-operation, notably from the Federal Republic of Germany, in similar restoration activities in the country. In another case, the UNDP contribution to the National Research Laboratory for the Conservation of Cultural Property, located in Lucknow (India), under a UNESCO-executed project (IND/75/009), was highly successful in strengthening the technical research and training capabilities of the laboratory (section E).

#### B. United Nations Environment Programme (UNEP)

82. Since its inception in 1972 UNEP has played a catalytic role, in close collaboration with other United Nations system and non-governmental organizations, particularly the regional economic commissions, FAO, UNESCO, IUCN and WWF, in generating world-wide interest and actions in environmental protection and conservation, coupled with identification and implementation of relevant projects at the global, regional and national levels.

83. Many of the programmes and activities supported by UNEP at the global level also contribute in varying degrees to natural and cultural conservation in Asia and the Pacific. Mention should be made in particular of the following global activities:

(a) the computer-based animal and plant species data bank of the IUCN Conservation Monitoring Centre, supported by UNEP, compiles data on known threatened species of animals and plants included in the Red Data Base, now listing over 10,000 different plants as threatened;

(b) the IUCN computerized Data Unit which continues to receive UNEP's support. The Unit updates regularly the United Nations List of National Parks and Equivalent Reserves and the World Directory of National Parks and other Protected Areas;

(c) the World Conservation Strategy launched in 1980 following five years of international co-ordinated teamwork by UNEP, IUCN and WWF, with the assistance of FAO and UNESCO. The strategy establishes connections between development and conservation, as well as guidelines and criteria for determining priorities for the rational utilization of renewable resources, and for identifying unique sites and critical areas of natural ecosystems in need of conservation;

(d) monitoring the status and degree of implementation of international conventions, and serving as secretariat to some of these, such as the convention on International Trade in Endangered Species of Wild Fauna and Flora; the convention on Conservation of Migratory Species of Wild Animals, etc.

84. UNEP's global role is also worth highlighting within the context of the Ecosystem Conservation Group (ECG), established in 1975 and composed of UNEP, FAO, UNESCO and IUCN. UNEP provides the secretariat for this group, the main function of which is to co-ordinate the planning and execution of activities by the four organizations in environmental protection and conservation. Under the ECG arrangement, UNEP's role is described as "the leading organization for the promotion and co-ordination of world efforts and activities in the field of protecting or improving man's environment and quality of life, including ecosystem conservation" 12/.

85. UNEP's activities in the region are carried out in the main by a multidisciplinary technical advisory team attached to the UNEP Regional Office in Bangkok. The team, whose services to governments are supported by short-term consultants and a fellowship programme, is part of UNEP's technical co-operation global project: Regional Advisory Services (RAS). The objectives of these advisory teams are inter alia to: complement the work of the UNEP Regional Representatives; provide professional and technical support for the development of regional activities; contribute to the UNDP country programme exercises in the region; encourage and assist governments of the region to tackle their environmental problems; advise regional organizations to enable them to include an environmental dimension within their activities; and advise UNEP on environmental concerns in the region 13/.

86. In pursuit of these objectives, UNEP technical advisers visited 42 countries in Asia and the Pacific between 1975 and 1980, for a total of 417 days. The missions provided advice on the development of environmental protection legislation, policies and plans, coupled with the creation or strengthening of appropriate institutional machinery. In addition, more than 100 UNEP fellowships have been awarded to countries of the region since 1976, and several workshops and seminars have been held under the auspices of the UNEP regional office in Bangkok. Other activities include the preparation, in collaboration with IUCN, of a regional convention on nature conservation in South East Asia, and the Tiger Paper, the FAO quarterly publication on nature conservation matters in Asia and the Pacific.

87. UNEP's mandate covers a field which is necessarily multidisciplinary and inter-sectoral, and consequently requires close working relationships between UNEP and other organizations active in environmental protection and conservation. Accordingly, besides the ECG framework, UNEP has developed co-ordinative relationships with other organizations and offices in the Asia-Pacific region, particularly with ESCAP through the Environmental Co-ordination Unit, the FAO Regional Office in Bangkok, and the Asian Development Bank.

88. Further, the UNEP Regional Office has undertaken specific joint activities with the WHO Regional Office such as the 1978 joint planning for monitoring the health effects of major irrigation projects in Sri Lanka and with the ILO Regional Office in regard to the UNEP/ILO regional pilot workshop on working conditions and environment, held in Malaysia in 1979. These examples of co-ordination and co-operation with other organizations and institutions is highly commendable, and the Inspectors urge that the approach be pursued as a matter of policy by all organizations involved in natural and cultural heritage conservation, not least because it ensures that the combined technical expertise of United Nations system and other organizations would facilitate the achievement by governments of comprehensive and integrated national conservation strategies and lessen the stress on governments' co-ordination capabilities (see Chapter III. B).

89. At the country level, mention should be made in particular of a large-scale project supported by UNEP in Mongolia (FP/1103-78-01), which aims to establish protected areas in the Gobi region, repository of endangered and unique wildlife resources. This will be a pilot project in the rational utilization of natural resources of arid and semi-arid central Asian ecosystems. Furthermore, in co-operation with other organizations within and outside the UN system, UNEP is assisting several countries in formulating, revising and adjusting their national conservation strategies. On the whole, however, UNEP's ability to finance concrete environmental pro-

12/ See UNEP Report No. 6 (1980) on Wildlife and Protected Areas, page 4

13/ See UNEP Report No. 8 (1980), pp. 12-13.

jects at the national level is hamstrung by the very limited funds it has available for technical co-operation. Nevertheless, some governments of the region have expressed the need for a more vigorous UNEP involvement in country projects.

C. UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (ESCAP)

90. ESCAP, like other United Nations regional economic commissions, has as one of its prime objectives the development and strengthening of subregional and regional co-operation on a broad front of economic and social development. In 1977 the UN General Assembly decided, by resolution 32/197 on the restructuring of the economic and social sectors of the United Nations system, to enhance the role of the regional commissions. Under the terms of this resolution (section IV of the annex thereto), the regional commissions were to become the "main general economic and social development centres" in their respective regions. They were given responsibility for team leadership and co-ordination of the activities of the United Nations system organizations in their regions and they were to be enabled expeditiously to function as executing agencies for non-country field projects falling outside the sectoral competence of other United Nations system executing agencies. A separate JIU report on ESCAP provides an in-depth review of the commission's mandate and current activities.

91. These regional responsibilities signify for ESCAP a forefront role in stimulating concerted policies and actions among its Member States, and co-ordinating in its region United Nations system organizations in the field of conservation and environmental protection. The special significance of ESCAP's potential in this area stems from:

(a) its full and associate membership, which includes practically all the countries and territories of Asia and the Pacific (and some countries outside the region). The commission therefore represents an ideal forum for consultations, information exchange and harmonization of conservation policies amongst its Member States;

(b) the strong regional, multidisciplinary and intersectoral focus of its activities, which gives the commission a comprehensive picture of regional development problems and needs. This particular asset should, among other things, enable ESCAP to strike a proper balance in its regional programming and priority setting exercises between conservation needs on the one hand and natural resource utilization and industrial expansion on the other.

92. ESCAP's activities in environmental management date back to 1971 when two regional seminars on the topic were organized under the auspices of the Commission in preparation for the United Nations Conference on the Human Environment. In following up on the recommendations of this Conference, the Commission convened in 1973 a meeting of government representatives of the region, which adopted an Asian Plan of Action for the Human Environment. However, it was not until the establishment within the ESCAP Secretariat of an Environmental Co-ordination Unit in 1978 that the commission acquired the necessary in-house technical capability to deal effectively with regional environmental management issues.

93. The Unit has six professional staff and UNEP bears 33 per cent of its institutional support costs at present. Its objectives are: (a) to assess the state of the environment in the region; (b) to review the commission's programmes and projects and ensure that environmental factors are taken into account; (c) to plan and implement the commission's environmental activities; and (d) to improve the flow of information between UNEP Headquarters and the UNEP Regional Office.

94. In furthering these objectives, the unit has been involved in a range of activities which have considerably enhanced the role and effectiveness of ESCAP in promoting regional co-operation in environmental management. The subregional environment action programmes that have been adopted by governments of the region with the advisory support of UNEP and ESCAP are particularly worthy of note. One of the areas of emphasis of the unit has been the development of project proposals for co-operative action by UNEP and ESCAP for extra-budgetary funding. On the whole the unit has

been a successful project judging from the impressive record of UNEP/ESCAP-sponsored activities in the region (technical workshops, seminars, advisory missions, inter-governmental meetings, etc), and the many ESCAP studies and publications on the environment since 1978.

95. In one of the latest publications on the subject (Review and Appraisal of the Environmental Situation in the ESCAP Region, 1982), ESCAP states that "in order to succeed, it is imperative to integrate environmental dimensions in development planning, to enforce practical environmental measures, to focus upon major and specific environmental problems in each subregion, and to put forward suggestions which member countries may wish to consider within the context of their socio-economic, political and administrative systems". It is further argued that "both lack of development and the development process itself can create environmental problems. It is not a question of whether to develop or not to develop, but one of how to develop" and that environmental protection should be seen as an integral factor in the development planning process.

96. The Commission has not devoted adequate attention to wildlife conservation as an integral component of environmental management concerns. This short-coming seems regrettable in view of the multifaceted value of this aspect of the human environment. The Inspectors therefore hope that the ESCAP committee on Natural Resources will consider the possibility of devoting more attention to this subject.

#### D. Food and Agriculture Organization of the United Nations (FAO)

97. FAO's contribution forms part of its Forestry Programme, the 1980-1981 medium-term objective of which was to assist the developing countries to achieve self-reliance in the development and management of their forests and to increase the economic and social benefits accruing from these resources. Between 1970-1982, FAO has assisted about 25 UNDP-financed projects concerned with wildlife and parks management in the Asia-Pacific region. Activities financed in this area under the FAO regular programme of technical co-operation have been modest, amounting to five small-scale country projects and one regional seminar at a combined cost of less than US\$1 million. It is important to note, however, that many other FAO activities concerned with forestry development and management or those featuring under other programmes such as agriculture and fisheries, including particularly agrarian reform and rural development activities, also bear closely on and contribute in varying degrees to wildlife conservation and environmental protection. These linkages have been dealt with in detail in chapter II of the present study.

98. Of the large-scale UNDP-funded projects executed by FAO, mention should be made of project NEP/72/002: National Parks and Wildlife Conservation in Nepal. The project aimed at strengthening and expanding the existing National Parks and Wildlife Conservation Section of the Forest Department into a fully-fledged department. Among its other objectives were the development of wildlife conservation legislation and regulations; establishment of four national parks and five reserves in Terai and the Himalayas, including the training of field staff; the initiation of awareness programmes emphasizing conservation courses at all levels of training institutions, coupled with the development of a specific wildlife management training programme at the Hetauda Forestry Institute.

99. The Inspectors are satisfied that the project achieved several of these objectives. Today, Nepal has a large per cent of its surface area under species and habitat conservation and an effective agency to protect, manage and develop these resources. On termination, the project had trained four wildlife graduates with an additional two on training abroad. Also, three officers had been trained at diploma level (middle level management cadre) and another two were on training in New Zealand. However, plans to provide an in-service training programme at the Forest Institute at Hetauda did not materialize leaving the country in urgent need of middle and low-level trained personnel. Like the crocodile project in Papua New Guinea, the project did not provide for the development of national wildlife research capability and most research efforts were by non-governmental investigators supported by various donors.

100. In Indonesia, project INS/73/013: Nature Conservation and Wildlife, which started in 1974 as a preparatory project, and moved into the third phase in 1978 under a different title: National Parks Development (INS/78/061), helped to identify conservation problems and priorities, and assisted the government in drawing up a Master Plan for conservation. Like in Nepal, the Master Plan provided for a large number of national parks, wildlife management and utilization reserves, watershed protection reserves encompassing marine and terrestrial ecosystems. An important feature of this project, also like the one in Nepal, was the very useful coordinative relationships established with other organizations involved in nature conservation in Indonesia. For example, the project leader also assisted in co-ordinating implementation of WWF/IUCN funded activities covering about 25 projects valued at some US\$1.5 million under Indonesia's 5-year WWF/IUCN conservation programme. A very good working relationship was also developed between the project and the "WWF-Indonesia" (a WWF national organization) following the effective steering role of the Directorate of Nature Conservation in the preparation of a comprehensive conservation programme, to which the World Bank also provided some US\$700,000 to cover the development costs of the Dumoga Nature Reserve as part of a major loan for irrigation development.

101. However, the objectives of phases II and III of the Project could have been achieved earlier but for delays in the recruitment of two associate experts while smooth continuity into Phase III coincided with a period of severe UNDP budgetary constraints, with activities continuing on an ad hoc basis until 1978. Without the high priority which the Indonesian Government assigns to environmental conservation, a valuable opportunity would have been lost. Other FAO-executed projects such as in Bangladesh (BGD/72/005) and the Philippines (PHI/72/006) experienced serious difficulties especially at the take-off stage and due quite often to the usual problem of late expert recruitment. These difficulties led to budgetary revisions, project extensions and significant cost overruns which the Inspectors consider regrettable, particularly in the least developed countries.

102. Another common feature of these projects is their long duration, in some cases spanning nine years (BGD/72/005, NEP/72/002 and PHI/72/006). Even though these were institution-building projects, their very long time-span would seem to suggest some weaknesses in project design and strategy with regard to transfer of skills and training of nationals to enable them to take over as rapidly as feasible from international project personnel in accordance with "new dimensions" in technical co-operation. Not surprisingly, these projects only partially attained their training objectives. As a result, some of the countries that benefited from wildlife and parks management projects have continued to express the need for trained manpower in this area. In their report on the Evaluation of Technical Co-operation Activities of the United Nations System in Sri Lanka (JIU/REP/79/16), vol. 1), the Inspectors stated that the transfer and adaptation of technical and managerial skills, and the consequent strengthening of self-reliance in developing countries, should be the essential criteria of success in UN system technical co-operation (also see Ch. III C above). These points have not been adequately emphasized in the FAO-executed projects mentioned above, although the Inspectors recognize that factors beyond FAO's control may have been involved.

103. One FAO initiative worthy of note is the "Tiger Paper", a quarterly news bulletin on wildlife and national parks management and wildlands conservation in Asia and the Pacific region. It was launched by FAO under UNDP/FAO project RAS-72-029 UNEP provided financial support to the publication from 1975 to 1982. As of 1983, FAO continues to publish the bulletin from its own resources and support from subscribers. In view of the wide success this bulletin has had in raising public awareness on conservation in the region, there is a need to ensure its continued publication.

104. As regards support for and promotion of the TCDC concept, FAO has organized a number of training programmes and study tours, financed mostly from its regular programme of technical co-operation, in which many countries of the region participate. In addition, fellows from Nepal and Sri Lanka have studied at the College of African Wildlife Management, Mweka, Tanzania. FAO also convened in 1980 a very use-



ful "International Consultation on Wildlife Resources for Rural Development in Asia and the Pacific" held at Hyderabad in India. The Inspectors commend this initiative and urge that such encounters be organized periodically.

105. Notwithstanding the foregoing, the general impression gained was that TCDC linkages were not yet firmly established. The Inspectors believe that wildlife and national parks management is one of the fields where the TCDC concept could be readily applied in a most productive manner and should, therefore, be supported and promoted by FAO on a more rigorous and systematic basis.

#### E. United Nations Educational, Scientific and Cultural Organization (UNESCO)

106. UNESCO's support of cultural and natural heritage preservation and management in Asia and the Pacific has been extensive as Annex 2 on projects assisted by the United Nations system shows. This support embraces operational field projects, advisory services, regional and subregional meetings, workshops and seminars, international fund-raising campaigns, support to research institutions, etc. These efforts have been directed towards the preservation and restoration of historic monuments and sites which are numerous in the region, development and strengthening of archives, museums and cultural tourism and conservation of natural ecosystems under the Man and Biosphere programme. The sources of funds for these activities are mainly UNDP, UNEP, other extrabudgetary funds, UNESCO's regular programme of technical co-operation, and UNESCO-administered funds such as the Participation Programme and the World Heritage Fund.

107. Emphasis has been placed on the safeguarding and restoration of historic monuments and cultural properties as well as the building of the technical capabilities for this purpose. In this respect, mention should be made of UNESCO support to the National Research Laboratory for the Conservation of Cultural Property, located in Lucknow (India), under a UNDP-financed project (IND/75/009) costing about US\$400,000. The Inspectors had the opportunity to visit the project site and found that UNESCO implementation of the project was highly effective in strengthening the technical, research and training capabilities of the Laboratory. The Project included substantial equipment which the Inspectors found to be well suited to needs and in excellent maintenance conditions, some consultancies and fellowships. Placed under the management supervision of an experienced and highly capable national director, the Laboratory has been able to broaden its programme of activities. It undertakes research in restoration and repair techniques, provides technical support to under-equipped cultural preservation institutions throughout India and organizes training courses designed to enhance the knowledge and skills of curators and conservators from various parts of the country and from neighbouring States. The Laboratory also issues publications and is set to launch a journal on cultural conservation. The Inspectors believe that the laboratory now has, thanks to the UNDP/UNESCO contribution, the necessary technical capacity for an expanded regional training function under the concept of technical cooperation among developing countries (TCDC).

108. A similar UNESCO-executed project is currently under way in Sri Lanka: Archaeological Conservation and Research Laboratory (SRL/79/036), financed by UNDP at a cost of \$350,000. Briefly, the project seeks to expand and update national capabilities for the conservation of archaeological sites and other monuments which are constantly subject to the ravages of climate, particularly monsoonal rains. On project termination, the Laboratory is expected to provide backstopping services for a wide range of restoration activities in the country, especially within the cultural triangle - consisting of six projects in Anuradhapura, Polonnaruwa and Kandy - which is on the list of UNESCO's international fund-raising campaigns (see below). Project implementation is proceeding satisfactorily and the Inspectors are pleased to note that the project has laid emphasis on the supply of equipment and the training of an adequate number of nationals who are expected to staff the laboratory. The Inspectors recommend that UNESCO should explore the possibility of assisting in establishing a network linking national conservation laboratories in the region. Such network linkages would permit periodic exchanges of conservation and other scientific literature, and of personnel and their experiences, such as is being done under the SPAFA project (see paras. 64-66).

109. Another UNESCO-executed project financed by UNDP is the Master Plan for the Conservation of the Cultural Heritage in the Kathmandu Valley (NEP/74/003). An important self-reliant feature of the project was the development of local restoration capabilities and in particular the revival of Nepalese artistic craftsmanship which, once almost extinct, today constitutes an important means of earning income from cultural tourism. Among other recommendations, the Master Plan urges the adoption of an integrated approach to the conservation of both cultural and natural heritage in Nepal. The Inspectors believe that the same approach should be possible in other countries of the region, as suggested in Chapter III. A.

110. In several cases UNDP funds have served to complement UNESCO's extensive commitment of its regular budget to conservation and restoration activities in the region. This is especially so in Afghanistan, Burma, Indonesia, Nepal, Pakistan, Sri Lanka, Thailand and Vietnam, where UNESCO's regular budget support has helped to focus international attention on major restoration projects and is closely linked with UNESCO's international campaigns to raise funds for these projects.

111. The monuments identified for international fund raising campaigns are the following: Banniayan Site - considered the biggest rock monument in the world, and the town of Herat, both in Afghanistan; the Kathmandu Valley in Nepal where UNESCO has been involved in restoration work over the last decade; the cultural Triangle in Sri Lanka, which comprises three ancient capitals; Pagan in Burma which is estimated to have the largest concentration of Buddhist temples numbering about 2000; the Borobudur Temple in Indonesia which is already completed; Moenjodaro in Pakistan; Sukhothai in Thailand; and the city of Hué in Vietnam.

112. International fund raising campaigns for these restoration projects have been expanded considerably by UNESCO in recent past and committees have been set up for that purpose. However, some of the projects - Banniayan, Herat, Cultural Triangle, Pagan, etc - are only in their initial phase and are yet to receive support from the international community. Others such as the Kathmandu Valley and Sukhothai have received generous support from UNESCO but only limited response from other sources. A notable exception has been the Temple of Borobudur whose restoration is now complete thanks to generous international contributions upwards of US\$6 million to the project. This has been an outstanding success in the record of UNESCO's promotional efforts in support of restoration projects in the region. The Inspectors hope that this example of international solidarity in the safeguarding of the cultural heritage of mankind from irretrievable loss will be extended to other similar projects in the Asia-Pacific region.

113. UNESCO activities in the area of archives and museology have concentrated on provision of equipment and the training of nationals under fellowship arrangements placed mostly within the region, especially in Australia and India.

114. As regards natural heritage, UNESCO's efforts in cooperation with UNEP and IUCN are geared to the conservation of natural ecosystems under Man and the Biosphere programme (MAB). MAB seeks inter alia to promote the conservation of representative ecosystems, with their full array of component species, as a strategy for maintaining genetic diversity; to provide sites for long-term research on the structure, functioning and dynamics of ecosystems and on comparisons between ecosystems, to provide sites for monitoring of environmental change; and to provide facilities for education and training. Biosphere reserves have the potential as on-site laboratories in which methods and strategies for integrated rural development can be elaborated and tested. This should be fully explored and exploited with a view to achieving real and lasting improvements in production systems.

115. To achieve these objectives, a network of biosphere reserves is being established to include a wide range of ecosystems throughout the world. The network is supported by exchange of information and scientific personnel among biosphere reserves. By mid-1981, 193 sites in 50 countries had been designated as biosphere reserves. Of this number 38 were located in 9 countries of Asia and the Pacific.

116. Three regional meetings sponsored jointly by UNESCO and UNEP were organized in 1974 (Kuala Lumpur) and 1975 (Kathmandu and Varanasi) on integrated ecological research and training needs in the South East Asian region, on southern Asian moun-

tain systems, and on semi-deciduous forest ecosystems of South Asia. UNESCO's activities under the MAB Programme consist essentially of support to national MAB committees, research projects, and regional and international meetings.

117. The general guidelines and criteria drawn up at the international level for selection and establishment of biosphere reserves have been adapted to the conditions of particular parts of the Asia Pacific region; for example, through joint initiatives with UNEP and the convening of an international symposium on criteria for biosphere reserves held in Australia-New Zealand in 1977. Joint activities with regional organizations include the convening of an annual training seminar on environmental science and management in cooperation with the SEAMEO Regional Centre for Tropical Biology (BIOTROP).

118. An International Centre for Integrated Mountain Development as a focal point for information, expertise and training in the Hindu Kush Himalayas will be inaugurated in October 1983 based on an agreement, signed in September 1981, between His Majesty's Government of Nepal and UNESCO. The primary objective of the centre is to promote environmentally sound development in the Hindu Kush Himalayas and to improve the economic well-being of the local populations. This region includes partially or totally Afghanistan, Bangladesh, Bhutan, Burma, China, India, Nepal and Pakistan.

119. Overall UNESCO support to cultural and natural heritage preservation has been considerable and highly effective in filling specific needs and focussing international attention on restoration and conservation needs throughout the region. Regular programme funds for individual projects have inevitably been small, but by emphasizing the transfer of skills and the development of national technical capabilities and self-reliance, UNESCO has enabled Member States to draw substantial and durable benefits from its technical co-operation efforts.

120. Also relevant in this respect is UNESCO's active promotion of TCDC within the region. The UNESCO National Commissions and MAB Committees, its close working relationships with regional and subregional bodies some of which it helped to establish, such as the Asian Cultural Association for UNESCO (ACU), the South East Asia Regional Branch of International Council of Archives (SARBICA), the SEAMEO Project in Archaeology and Fine Arts ((SPAFA), and the UNESCO Regional Office in Bangkok together represent a valuable infrastructure for building regional co-operation and collective self-reliance in the preservation of cultural and natural heritage.

121. While UNESCO has contributed significantly to the development of national and regional cultural conservation and restoration capabilities, it does not appear that it has given equal emphasis to administrative and legislative aspects of heritage conservation, with the possible exception of projects in Afghanistan and Nepal. This is an area to which UNESCO may wish to devote attention in future projects and FAO-executed projects in wildlife and parks management whose objectives have often included the development and strengthening of appropriate legislative and related measures could serve as an example.

122. Lastly, while some Member States in the region are content with the results of their bilateral efforts, some others would like to see a more vigorous UNESCO involvement in negotiating the restitution of cultural properties, especially museum objects and classical manuscripts, removed during the colonial period and now kept in some European countries. Until such a time that these cultural properties can be restored to the countries of origin, in accordance with General Assembly resolution 35/127 of December 1980 on "Preservation and further Development of Cultural Values, including the Protection, Restitution and Return of Cultural and Artistic Property", UNESCO should, at the very least, encourage an arrangement which would give developing countries access, without charge, to their cultural heritage in European countries, particularly for academic and research purposes.

#### F. Other Organizations of the United Nations System

123. Other organizations of the United Nations system such as DTCD, ILO, IMO, UNICEF, WHO, WMO, and the World Bank contribute in various ways to the solution of environmental problems. ILO, for example, organized in Malaysia in 1979, in collaboration with UNEP, a regional Pilot Workshop on working conditions and environment

for Labour Inspectors in Asia. ILO also participates in integrated rural development schemes in Asia and the Pacific. The normative and standard-setting activities of IMO include measures for preventing marine pollution. The Primary Health Care activities of UNICEF and WHO seek inter alia to promote adequate and proper nutrition, supply safe water, improve basic sanitation, and encourage local traditional approaches and community participation, all of which have a bearing on the subject of this study. For instance, UNICEF-supported projects in India, Bhutan, Burma, Mongolia and Nepal are moulded in local cultural and social patterns, drawing directly on what is native to the community. WMO supports several weather monitoring projects in the region that give early warning of impending violent climatic changes such as hurricanes, typhoons, torrential rains, etc. having a disruptive impact on heritage conservation. The World Bank is increasingly involved in environmental activities; it finances a growing number of projects which are directly related to environment or projects with environmental dimension. The Bank's in-house environmental units in conjunction with the Office of Environmental Affairs assess the environmental impact of all projects before their outset. The Bank's activities in the region include among others a UNDP/World Bank project in Indonesia which is geared to strengthening environmental institutions and education; a loan to a hydro and highway project in Nepal which includes preparation for the inventory of the country's natural resources; two forestry projects, one in India and another in Korea, which support programmes with emphasis on public education to encourage tree-planting.

#### G. Bilateral Programmes and Non-Governmental Organizations

##### 1. Bilateral programmes

124. Individual co-operating governments have assisted specific conservation projects in Asia and the Pacific as already noted in the two preceding chapters. Australia supports a range of conservation and environmental projects in several countries, especially the small island countries of the South Pacific region. The Cultural Exchange Section of the Department of Foreign Affairs has a fund that finances cultural projects identified by the South Pacific countries. Japan and New Zealand are similarly involved in a variety of conservation and environmental projects in several countries. Japan, in a special arrangement, is providing funds to finance cultural co-operation activities in the ASEAN region. The Dutch Government has provided significant support towards establishment of the School of Environmental Conservation Management at Ciawi in Indonesia. The United States, through various Government Agencies, is co-operating in many conservation activities. USAID is providing financial support to projects in a number of countries, notably in India, Indonesia, Nepal, Pakistan, the Philippines and Sri Lanka, totalling over \$150 million. The focus of all the projects is principally on natural resources management, including in particular watershed management, reforestation and energy development (fuel wood and electricity). The US National Park and Forest Services either through the US MAB programmes or otherwise, have co-operation projects with a number of countries, including China, India, Indonesia, Japan, Pakistan and the Philippines. The East European countries and the Soviet Union in particular also extend co-operation under the MAB programme.

125. Co-operating countries of the OECD community increasingly include environmental considerations in their development co-operation programmes. This development is encouraging because of the interlocking nature of environmental and conservation problems and the resultant need to solve them through collective action and international solidarity. It should also be said that some of the serious environmental problems confronting the developing countries stem from the developed industrial nations. The "disequilibria, such as the energy crisis, the deforestation we observe in the tropical countries, the depletion of minerals and the reduction of biological diversity have, among their root causes, the dominant production and consumption patterns and lifestyles of the industrial countries and their world-wide effect on the use of natural resources and the environment (...). In addition, what the industrial countries do and how they tackle their problems, have strong and direct impacts on other parts of the world, through technological diffusion and the trans-

nationalization process" 14/.

## 2. Non-Governmental Organizations

126. The International Union for the Conservation of Nature and Natural Resources (IUCN) is the most significant non-governmental organization concerned with the conservation of wildlife and protected areas. Its membership includes more than 20 governments and national NGOs in Asia and the Pacific and it is one of UNEP's main executing agents in the region. IUCN co-operated very closely with the United Nations organizations and especially UNEP in the preparation of the World Conservation Strategy, the World Charter for Nature, international conservation conventions and the United Nations List of National Parks and Equivalent Reserves. Also under a UNEP/IUCN project, the Third World Congress on National Parks was convened in Bali, Indonesia in 1982. With financial support from UNEP, IUCN also provides technical advice to UNESCO under the MAB programme. Most IUCN activities are funded by UNEP and the World Wildlife Fund (WWF), a fund-raising and executive international charity body that uses IUCN machinery to design and manage field conservation projects.

127. Another non-governmental organization supporting conservation activities in the region is the Smithsonian Institution. Its programme, which includes internships as well as exchange of professional and study visits with Asian-Pacific countries, is funded by the Asian Association, Ford Foundation and Fullbright Foundation. The Institute provides training, scientific information and research materials to museums in the region, and recently organized an exchange visit with museum staff in China. Other NGOs actively involved in heritage conservation in the region include particularly the New York and Frankfurt Zoological Societies and the Ford Foundation.

## V. SUMMARY OF MAIN CONCLUSIONS AND RECOMMENDATIONS

### A. Main Conclusions

128. Having reviewed the individual and collective efforts made by countries of Asia and the Pacific in the conservation and management of their cultural and natural heritage, and the contribution of the United Nations system in the process, the Inspectors have found that demographic and other problems deriving partly from national modernization imperatives constitute a serious check to heritage conservation and management endeavours in most of the region. With more than half of the world's population, the region has the highest population density. This, coupled with large-scale development schemes, urbanisation and industrialization processes, are exerting ever increasing pressure on the carrying capacity of land and heritage resources, leading in particular to a rapid rate of deforestation, expanding desertification in some countries and the near extinction of some wildlife species. Physical factors such as earthquakes, hurricanes and monsoonal rains, and the immense problem of poverty in some countries, also pose intractable environmental problems and escalate the costs of heritage conservation and management.

129. Notwithstanding these constraints, the Inspectors are impressed by the high level of awareness in many countries about the multifaceted value of their cultural and natural heritage, and by the practical measures adopted in some cases to ensure effective management measures in spite of the widespread shortage of funds. These

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14/ Statement by the Director-General for Development and International Economic Co-operation to the UN Economic and Social Council, Geneva, July 1981.

efforts are commendable. However, in view of the vital importance of heritage resources to the livelihood of the populations and to balanced socio-economic development in the region, it would seem necessary to elaborate long-term comprehensive and cohesive national conservation strategies, the formulation and implementation of which would involve the full participation of all segments of the population, especially the local communities.

130. Organizations of the United Nations system, particularly ESCAP, FAO, UNDP, UNEP and UNESCO, with the collaboration of IUCN and other NGOs, give firm support to heritage conservation efforts in the region. Their inputs seem small in financial terms compared with other sources of support and overall needs. But thanks to its technical advice as well as its catalytic and promotional role, the United Nations system has achieved some impressive results in the region. Subregional environmental action programmes have been established and environmental awareness is increasingly gaining ground in many countries. Some wildlife species have been saved from extinction while wildlife parks established in several countries have lent stimulus to the tourist industry. Monuments have either been restored or better preserved and national technical capabilities for cultural conservation and restoration have been enhanced.

131. Between 1970 and 1982 UNDP has supported some 60 projects, worth US\$16 million, which are directly concerned with natural and cultural heritage conservation. These projects have been implemented by FAO and UNESCO. In addition, the two agencies, but especially UNESCO, have deployed resources from regular and extrabudgetary sources for that purpose.

132. The thrust of FAO activities has been directed to the establishment and strengthening of national wildlife parks and other protected areas, coupled with relevant protective laws and administrative machinery. By and large these objectives were achieved. In some cases project activities and results benefited from co-ordinative links at the national level with conservation projects funded from other sources. However, not infrequently, operational difficulties - some of which were beyond the control of FAO - hampered smooth implementation and optimum achievement of project objectives, resulting in project extensions, unduly long project duration and cost overruns. The Inspectors saw the need for greater and systematic project emphasis on the training and transfer of technical and managerial skills to nationals as a strategy for achieving self-reliance in this field. Only a few projects addressed the widespread need in the region to train wildlife specialists, management cadres and instructors. The Inspectors conclude that, to fill this gap, the national wildlife training institutes in Dhera Dun (India) and Ciawi (Indonesia) should be assisted to develop regional or sub-regional training programmes. Further, TCDC arrangements should be more firmly established with other developing countries with wildlife management schools, both within and outside the region.

133. UNESCO's efforts have centred on restoration and preservation of cultural heritage, with some remarkable achievements in India, Indonesia and Nepal. It has extensively used regular and extrabudgetary sources especially under the World Heritage Fund to plan and launch international fund-raising campaigns for restoration of historical monuments and sites. Additionally, UNESCO has made a significant contribution to the development of national cultural conservation capabilities through emphasis on training and establishment of relevant training and research laboratories. However, the administrative and legislative aspects of cultural heritage management have not received adequate attention in all cases. There is also a need for a network of co-operation and staff exchanges amongst the conservation laboratories in the region and for developing some of these into full-fledged sub-regional training and research centres. In the field of natural heritage, UNESCO's efforts on biosphere reserves should focus on filling gaps in the present coverage of biosphere reserves in the region (particularly in South Asia and in the Indo-Malaysian and Oceanian realms) and stimulating countries to develop the multiple functional aspects of biosphere reserves, including the reinforcement of research, training and educational activities in existing biosphere reserves. Countries could also be encouraged to become States Party to the World Heritage Convention

and take advantage of the possibilities offered by the Fund of this Convention for strengthening national activities on natural heritage, particularly in the field of training.

134. UNEP has been a valuable catalyst in promoting environmental conservation and management especially at the regional and global levels, and has developed fruitful co-ordination and working relationships with other United Nations system organizations, notably ESCAP, FAO and UNESCO, as well as with IUCN. These organizations serve as executing agencies for UNEP-supported field activities. UNEP co-operation with ESCAP has been good and to a large extent responsible for the high level of environmental conservation awareness noted in the region. ESCAP had promoted this aspect even before the creation of UNEP. Similarly, the subregional environmental programmes - ASEAN, South Pacific and South Asia - owe much to the effort of ESCAP and UNEP, including UNEP Regional Seas secretariat. But there is no regional forum for consultations and harmonization of approaches regarding wildlife and national parks, and the Inspectors urge ESCAP Member States to give more attention to this subject in their meetings.

135. Finally, co-operation between individual countries and groups of countries is worthy of note. Countries from within and outside the region have extended support covering both natural and cultural heritage and Inspectors are pleased to note that United Nations system co-operation has played a role in attracting support from bilateral sources and a number of international non-governmental organizations. TCDC within the region is best exemplified by the SEAMEO project in Archaeology and Fine Arts (SPAFA) under which the restoration of the Borobudur Temple in Indonesia served as training centre with UNESCO support. There is yet no regional convention on conservation of nature and natural resources similar to the conventions of the Organization of African Unity (OAU) and the Organization of American States (OAS), but there have been efforts towards an ASEAN convention. At international level, a number of countries have adhered to multilateral conventions and agreements and are participating in global programmes but there is evident need for increased effort in this direction. On the basis of the foregoing, the Inspectors have arrived at the following recommendations.

#### B. Recommendations

136. Some of the recommendations made by the Inspectors in their report on the Contribution of the United Nations system to the Conservation and Management of Latin American Cultural and Natural Heritage (JIU/REP/82/5) are also relevant in the context of the present study. The following main recommendations pertain to heritage conservation and management in Asia and the Pacific.

##### National Level

RECOMMENDATION 1: ESCAP, UNEP, FAO and UNESCO should encourage and support governments of the region to formulate national long-term conservation strategies as recommended by the World Conservation Strategy in order to ensure the sustained management and utilization of heritage resources.

RECOMMENDATION 2: FAO, UNDP and UNESCO should take appropriate steps in the following directions:

(a) Projects in wildlife and national parks should henceforth be geared more systematically to the training of middle and high-level technical and management personnel with a view to ensuring national self-reliance in this area (also see Recommendation 3).

(b) Projects in cultural conservation should also seek to develop and reinforce administrative and legislative aspects required for the proper protection and management of cultural heritage.

(c) As a matter of policy, projects should be carefully prepared and designed to ensure the completion of operations and the achievement of stated objectives within planned time-frames and resources.

### Regional and Subregional Levels

RECOMMENDATION 3: FAO, UNDP and UNEP, should explore with governments of the region the possibilities of:

- (a) assisting the wildlife training facilities in Dhera Dun (India) and Ciawi (Indonesia) to develop and operate regional or subregional training programmes;
- (b) establishing two new subregional centres in two other suitable locations in the region;
- (c) including wildlife and national parks management training as one of the priority areas for action in the ASEAN Environment Programme (ASEP); and
- (d) further developing TCDC linkages both between countries within the region and developing countries in other regions with wildlife management training schools in a sustained and systematic manner.

RECOMMENDATION 4: UNESCO should encourage the establishment of a network system of co-operation linking restoration and conservation laboratories in both developed and developing countries of the region.

### International Level

RECOMMENDATION 5: FAO, UNEP, and UNESCO as well as IUCN should encourage countries of the region to increase their participation in collective international actions aimed at the conservation and management of heritage, especially through adherence to relevant multilateral conventions and their implementation at the national level.





Policy, Legislative and Administrative Framework for Heritage Conservation in some Countries of Asia and the Pacific Region

COUNTRY	ENVIRONMENTAL IMPACT ANALYSIS	COASTAL ZONE MANAGEMENT	FOREST CONSERVATION	PARKS AND WILDLIFE	CULTURAL ENVIRONMENT
(a) Constitutional provision (b) Organization (1)	(2)	(3)	(4)	(5)	(6)
AFGHANISTAN (a) No (b) General Directorate of "Environmental Survey and Studies" under the Forest and Range Dept. M/Agriculture is partly responsible.			Forest Administration and Management Law; Article 518 of Criminal Law	President Decree No. 707/(56/3/16) President Decree No. 533/(56/3/9) Decree No. 628/(26/12/77)	
AUSTRALIA (a) No (b) Responsibility for most aspects of environmental protection lies with state governments.	The Environment (Impact of Proposals) Act, 1974	Protection of wetlands is responsibility of Australian parks and wildlife authorities; Petroleum (Submerged Lands) Act, 1967-1973 and complementary state legislation; Beaches, fishing grounds, and Sea Routes Protection Act, 1932-1966.	NSW Forestry Act, 1916-1972; Victoria, Forests Act, 1953; Queensland, Forestry Act, 1959-1973; S.A., Forestry Act, 1950-1956; W.A., Forests Act, 1918-1969; Tasmania, Forestry Act, 1959; N.T., Forestry Ordinance, 1959-1965; ACT Timber Protection Ordinance, 1919	National Parks and Wildlife Conservation Act, 1975; NSW National Parks and Wildlife Act, 1974; Victoria, National Parks Act, 1972, Wildlife Act, 1975; Queensland, National Parks and Wildlife Act, 1972; S.A., National Parks and Wildlife Act, 1972; WA, Fauna Conservation Act, 1950, Parks and Reserves Act, 1895-1972; Tasmania, National Parks and Wildlife Act, 1970	Australian Heritage Commission Act, 1975; Victorian Conservation Trust Act, 1972; Archaeological and Aboriginal Relics Preservation Act, 1972; Local government building regulations (for aesthetic quality of buildings)
BANGLADESH (a) No (b) Directorate of Environmental Pollution Control	Planning stage	No specific Acts; generally covered by the Environmental Control Ordinance, 1977	Forest Act, 1927(modified 1973)	Wildlife Preservation Act, 1973	No specific Act, organizational responsibility with Ministry of Education and Cultural Affairs and Ministry of Public Works Cultural Relics Protection Law of the People's Republic of China
CHINA					
COOK ISLANDS (a) No (b) Director of Conservation (under the Conservation Act, 1975)	No formal procedure	No existing system for regulating shore-based development. Government has absolute jurisdiction within its territorial waters, over-fishing and other developments	No forest resources and no laws	There is no legislation for protection of wildlife. Legislation exists for setting aside of certain areas as national parks or reserves and closure of certain areas particularly lagoons, for protection and propagation of plants and marine life (e.g. pearl shells)	No specific laws although it is traditional to preserve cultural heritage
FIJI (a) No (b) Unidentified		Mining Act, 1966	Forest Act, 1953	Forest Act, 1953; Birds and Game Protection Ordinance, 1913; Arms and Ammunition Act, 1962	
HONG KONG (a) No (b) Environment Branch (Policy branch), Government Secretariat, in cooperation with implementing departments	No formal procedure	Foreshores and Seabeds Ordinance, 1974; Fisheries Protection Ordinance, 1964	Forest and Countryside Ordinance, 1974	Country Parks Ordinance, 1977; Antiquities (Protection of Endangered Species) Ordinance, 1976	Antiquities and Monuments Ordinance, 1971
INDIA (a) Yes, under Article 48A (b) National Committee on Environmental Planning and Coordination (and state committees); Central Board for Prevention and Control of Water Pollution	Guidelines have been developed; Consideration of environmental impacts is ensured through licensing in the case of industry; No specific legislation	Maritime Zones Act, 1976	Indian Forest Act, 1927; State forest acts	Wildlife (Protection) Act, 1972	Antiquities and Art Treasures Act, 1972

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INDONESIA (a) Yes (under Article 33, para. 3 of the Preamble) (b) National Planning Board and the National Committee on Environment in cooperation with sectoral and provincial/local administrations	No formal procedure	Water Management Act No. 11, 1974; Mining Law 1967; Indonesian Continental Shelf Act, 1973; Territorial Sea and Maritime Environment, 1939; Government Regulation 17 of 1974 on Control of Offshore Exploration and Exploration of Oil and Natural Gas	Basic Acts Nos. 5 and 6, 1967; Government Regulation No. 22, 1967, and No. 6, 1968	Nature Protection Ordinance, 1941; Wild Animal Protection, 1931; Government Regulations of Hunting, 1940	Monument Ordinance, 1931, complemented by six ministerial decrees and government regulations
IRAN (a) No (b) The Department of Environment established under Environment Protection and Enhancement Act, 1974					
JAPAN (a) No (b) Environment Agency	Environmental Impact Assessment Act, 1978 (under consideration); Local ordinances	Coastal Zone Management Act; Marine Pollution Prevention Law, 1970; Reclamation of Land (from Sea) Control Act	Forest Law, 1961; Forest (Arround Metropolitan Area Protection) Act; Nature Conservation Law, 1972; Forestry Seeds and Seedling Law	National Parks Law, 1967; Wildlife Protection and Hunting Law; Regulation of Transfer of Special Birds, 1972	Law concerning Special Measures for Preservation of Historic Natural Features in Ancient Cities; Urban Green Space Conservation Law
REPUBLIC OF KOREA (a) No (b) Bureau of Environmental Affairs, Ministry of Health and Social Welfare	Environment Preservation Law, 1977	Marine Pollution Law, 1977	Forest Law; Forests Development Law; Plant Disinfection Law	Birds and Beasts Conservation Law; Fisheries Law; Fisheries Resource Protection Law; Livestock Law; Dairy Development Law	Protection of Cultural Property Law
MALAYSIA (a) Yes (b) Ministry of Science, Technology and Environment/Division of Environment (DOE)	Director-General of DOE is empowered under provisions of Environmental Quality Act, 1974 to require submission of EIS by anyone seeking a licence; Factories and Machinery Act (64 of 1967); Industrial Co-ordination Act, 1975	Town and Country Planning Act 1976			
NIPAL (a) No (b) Division of Environment and Management, Ministry of Forestry	No formal procedure		Private Forests Nationalization Act; Forest Act; Forest Conservation Act	National Park and Wildlife Conservation Act; Rules on Mountain Expedition (rule 28)	Old Monuments Conservation Act; Town Development Planning Implementation Act, 2019
NEW ZEALAND (a) No (b) Commission for Environment under Ministry of Environment	No formal requirements but for all major development projects environmental factors are taken into account as a routine matter	Continental Shelf Act; Marine Pollution Act		Controls over hunting, fishing and import and export of hides and trophies	Antiquities (Artifacts) Act; Historic Places Act
PAKISTAN (a) No (b) Ministry of Housing and Works/Environment and Urban Affairs Division	No formal procedure but EIA is done on project basis by the Environment and Urban Affairs Division	Federal legislation to control pollution is broad enough to regulate coastal zones	Forest Act, 1927	Wildlife legislation	Antiquities Act, 1975 (amended 1977)
PAPUA NEW GUINEA (a) Yes, under fourth and fifth National Goals and Directive Principles of the Constitution (b) Office of Environment and Conservation (Ministry of Environment)	EIA is done on an ad hoc basis for major projects to be enforced in future by the proposed Environmental Planning Act, 1978	Conservation Areas Act, 1978; Environmental Contaminants Act, 1978	Several Acts cover forestry legislation	Fauna (Protection and Control) (Amendment) Act, 1974; Fauna (Protection and Control) (Tonda Wildlife Management Area) Rules, 1976; Conservation Areas Act, 1978; Crocodile Trade (Protection) Ordinance, 1966 and Act, 1974; Crocodile Laws	National Cultural Property Act; Conservation Areas Act, 1978; Environmental Planning Act, 1970; Summary Offences Act

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PHILIPPINES (a) No (b) National Environmental Protection Council (Presidential Decree 1121, 1977)	Presidential Decrees 1151 and 1152	Presidential Decree 1152 (sections 19 and 49)	Presidential Decrees 389, 705, 1041, 1122, 1151, 1152 and other regulations	Presidential Decree 705	Philippines Water Code (Chapter 4, Article 37); National Building Code
SINGAPORE (a) No (b) Ministry of Environment and Ministry of National Development					Preservation of Monuments Acts, 1971
SRI LANKA (a) No (b) Central Environmental Agency, 1931	No formal procedure	Crown Lands Ordinance (Part VIII); Maritime Zones Law 22, 1976; Coast Conservation Bill (proposed)	Forestry laws	Fauna and Flora Protection Ordinance; Fire Arms Ordinance	Several Ordinances and Acts, e.g. Treasure Trove; Antiquities; Protection of Carriage; Tourist Development Act; Places and Objects of Worship
THAILAND (a) No (constitutional provision existed in earlier Constitution of 7 October, B. E. 2517) (b) National Environment Board created under the Enactment and Conservation of National Environment Quality Act, 1975	Environmental Quality Act, 1975 empowers National Environment Board to require EIA		Forest Act, 1941; National Forest Reserve Act, 1964; Social Justice Land Reform Act, 1953; Land for Livelihood Act, 1968	Wild Animals Reservation and Protection Act, 1960; Announcement No.228 of the Revolutionary Party	
TRUST TERRITORY OF THE PACIFIC ISLANDS (a) Yes, under section 2 of Article VIII, General Provisions (b) Environment Protection Board (established by Environment/Quality Protection Act)	United States-funded projects require EIA			Public Law 40-76 (Section 5); Endangered Species Act; Weapon Control Act	Trust Territory Code; "Historical Sites and Antiquities" (Chapter 11 of Title 77)
TUVALU (a) No (b) No centralized agency (island councils enforce by-laws)	No formal procedure	No regulations exist	No regulations exist	Fisheries bill (proposed); Wildlife Conservation Ordinance (No. 2 of 1975)	No regulative provisions

Source: Extracted from ESCAP(1982) Review and Appraisal of Environmental Situation in the ESCAP Region, Table 1.



## Recent UN System-Supported Activities in Heritage Conservation, Asia and the Pacific

Country and Project No. (1)	Project title and duration (2)	Funding Source (3)	Executing Agency (4)	Contribution	
				Organization (5)	Government (6)
				US\$	US\$
<b>AFGHANISTAN</b>					
AFG/75/022	Strengthening Government capability for preservation of historical monuments (02/77 - 01/82)	UNDP	UNESCO	369,972	291,788
800-AFG-70	Associate expert archaeologist (1979)	UNESCO/EB	UNESCO	23,000	
C.7472	Consultant's services for preserving monuments and quality of landscape of the Valley (1973-1974)	UNESCO/RP	UNESCO	26,444	
C.7456	Mission in Herat - Cultural Heritage (1975)	UNESCO/RP	UNESCO	6,124	
C.7113	Safeguarding of Herat: Preparation of an inventory of historic structures & publication of brochure (1978)	UNESCO/RP	UNESCO	11,000	
R.9255	Financial assistance for purchase of a truck needed on the work sites in Herat (1978)	UNESCO/RP	UNESCO	15,000	
4.121.6	Organization of a team of young Afghans to undertake a survey & prepare an inventory of historically interesting buildings in Herat (1978)	UNESCO/RP	UNESCO	3,000	(In kind)
C.9440	Herat Consultants (1981)	UNESCO/RP	UNESCO	4,500	
AFG-72-005	Conservation & utilization of wildlife resources (11/72-03/78)	UNDP	FAO	106,988	36,404
AFG-74-016	National parks & utilization of wildlife resources (Phase II) (10/75 - 01/78)	UNDP	FAO	223,924	161,539
AFG-78-007	National parks & wildlife management (04/78 - 01/83)	UNDP	FAO	331,096	37,254
<b>BANGLADESH</b>					
BGD-78-018	Assistance to the Bangladesh Academy for Theatre, Museum, and Gallery Design (07/80 - 01/82)	UNDP	UNESCO	205,000	3,669,515
BGD/81/007	Preparation of a Master Plan for Conservation of cultural Heritage (06/81 - 08/82)	UNDP	UNESCO	94,750	5,931
R.9309	Preservation & presentation of cultural heritage (One month consultant) (1977-1978)	UNESCO/RP	UNESCO	7,000	
7125/BGD/16	One month mission to assist in the setting up of a national laboratory of conservation (1978-1979)	UNESCO/RP	UNESCO	2,399	(In kind)
R.9309	Mission to assist Department of Archaeology in Bangladesh in preservation and presentation of cultural heritage (1979)	UNESCO/RP	UNESCO	2,330	(In kind)
R.3665	Dacca Museum (one international fellowship for 2 1/2 months) (1979)	UNESCO/RP	UNESCO	4,500	
R.3666	Training of officers of Directorate, Archaeology & Museum (1979)	UNESCO/RP	UNESCO	3,300	
C.9440	Kaharpur Vihara & Khalifatabad: Preparation of a brochure, staff travel & miscellaneous (1981)	UNESCO/RP	UNESCO	4,300	
BGD-72-003	Development of forest research Institute, Chittagong (Consultancy report, Oliver: Wildlife Conservation and Management in Bangladesh) (05/73 - 01/82)	UNDP	FAO	994,447	1,213,064
<b>BHUTAN</b>					
BHU-78-003	Crocodile breeding (05/78 - 09/79)	UNDP	FAO	5,650	
<b>BURMA</b>					
BUR/78/005	Strengthening of national archives (10/79 - 11/84)	UNDP	UNESCO	717,812	539,292
BUR/78/021	Film production for public information (08/80 - 01/82)	UNDP	UNESCO	20,000	2,849
BUR/78/023	Preservation & restoration of national monuments (11/80 - 06/83)	UNDP	UNESCO	497,800	325,051
4110 & 4111	Equipment for copying ancient frescoes & for conservation of mural painting (1975 - 1976)	UNESCO/RP	UNESCO	4,000	(In kind)
C.7499	One crane for the preservation of Pagan (1977)	UNESCO/RP	UNESCO	25,000	
C.7125	Purchase of equipment for restoration & preservation of Pagan (1978)	UNESCO/RP	UNESCO	15,000	
C.4280	Two consultants on landscape architecture/Regional fellowship/equipment (1979)	UNESCO/RP	UNESCO	18,300	
BUR-80-006	Nature conservation & national parks (04/81 - 01/85)	UNDP	FAO	1,440,850	2,034,794
BUR-81-002	Crocodile research and management (3 years)	UNDP	FAO	523,000	3,521,460 (L.C.)
TCP-BUR-0006(T)	Training for the development of national parks and wildlife reserves (09/80 - 04/81)	FAO/TCP	Govt.	51,500	
TCP-BUR-0107(I)	Formulation mission for crocodile farming project (03/81 - 04/81)	FAO/TCP	Govt.	7,500	
TCP-BUR-0107(I)	Formulation mission for crocodile farming Report (03/81 - 04/81)	FAO/TCP	Govt.	7,500	
<b>COOK ISLANDS</b>					
CKI-74-004	Archives, Ethnomuseology and museum management (08/74-01/76)	UNDP	UNESCO	2,478	

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<b>INDIA</b>					
IND/68/023	Preservation of cultural properties (12/68 - 07/78)	UNDP	UNESCO	21,391	3,200
IND/72/004	Central Conservation laboratory - New Delhi (1973-1974)	UNDP	UNESCO	18,052	(In kind)
IND/75/009	National Research laboratory for conservation of cultural property (05/78-07/83)	UNDP	UNESCO	436,427	327,904
IND/75/105	Training in modern methods of museology (03/78 - 01/81)	UNDP	UNESCO	17,300	1,927
-	New Delhi - two fellowships for a course in conservation of cultural property (1977-1978)	UNESCO/RP	UNESCO	15,000	
C.4282/CCH/16	Eleven days mission in India to continue study of measures to be taken for preservation of Puri Konarak temples (1979)	UNESCO/RP	UNESCO	3,230	(In kind)
-	Eleven days mission to make recommendations relating to stone preservation of Puri & Konarak Temples in Orissa (1980)	UNESCO/RP	UNESCO	3,083	
IND/75-110	Wildlife conservation management, research & training (10/76 - 01/79)	UNDP	FAO	14,275	
IND-71-033	Crocodile farming in New Delhi Zoo (06/71 - 01/77)	UNDP	FAO	33,788	
IND-72-018	Training in Game farming (10/75 - 01/82)	UNDP	FAO	36,000	
IND-74-046	Crocodile breeding & management (Phase II) (02/76 - 01/83)	UNDP	FAO	1,174,568	148,052
IND-81-003	Wildlife training & research Institute (01/83 - 06/85)	UNDP	FAO		
<b>INDONESIA</b>					
INS/68/032	Conservation of sites and monuments, Borobudur (12/68 - 07/78)	UNDP	UNESCO	340,454	1,106,870
303-INS-70	Safeguarding the temple of Borobudur - Jaba (Expenditure incurred on preparatory work, equipment, main contract, promotional activities (1972-1981)	UNESCO/EB	UNESCO	5,949,102	
P.3.43.1 16 C/5	Consultants' services & equipment for preservation of monuments (1972)	UNESCO/RP	UNESCO	30,000	
C.7467	Services of specialists for preserving and presenting the monument (1973-1974)	UNESCO/RP	UNESCO	27,055	
C.3373	- (1975)	UNESCO/RP	UNESCO	101,800	
C.3373	Safeguarding of the monument of Borobudur (local cost, equipment, consultants)/ Executive Committee (1975-1976)	UNESCO/RP	UNESCO	49,080	
R.3480	Training of specialists in conservation of monuments (1979)	UNESCO/RP	UNESCO	18,000	
-	Borobudur: General operating costs - Borobudur/Campaign(20C/5)/ Consultative Committee (1979-1982)	UNESCO/RP	UNESCO	73,000	
INS-73-013	Nature conservation & wildlife management (09/72 - 01/75)	UNDP	FAO	263,398	44,430
INS-78-061	National parks development (02/79 - 10/81)	UNDP	FAO	733,976	275,468
<b>IRAN</b>					
IRA/68/014	Conservation of cultural heritage (12/68 - 02/78)	UNDP	UNESCO	140,337	10,500
IRA/74/014	Restoration of Ispahan (104/74 -09/74)	UNDP	UNESCO	5,750	9,255
IRA/74/015	Conservation of cultural heritage (12/76 - 02/77)	UNDP	UNESCO	85,000	9,000
IRA/74/016	Development of museums (09/76 - 09/78)	UNDP	UNESCO	32,322	100,895
IRA/74/016	Development of museums (1975-1979)	UNDP	UNESCO	110,330	66,340
IRA/77/008	Establishment of a laboratory branch for restoration & conservation of manuscripts (06/78 - 08/80)	UNDP	UNESCO	10	
IRA/70/008	Wildlife & national parks management (06/70 - 03/74)	UNDP	FAO	23,775	
IRA/72/006	Wildlife & national parks management (05/72 - 08/72)	UNDP	FAO	5,000	2,622
IRA/76/001	Assistance in wildlife conservation & management (05/76-06/78)	UNDP	FAO	63,446	74,598
<b>KHMER REP.</b>					
KMR/68/009	Conservation of Historical sites & monuments (12/68 - 04/71)	UNDP	UNESCO	5,775	
KMR/70/004	Conservation of cultural property (10/70 - 02/71)	UNDP	UNESCO	32,450	
<b>MONGOLIA</b>					
MON/75/001	Development of cultural tourism - Restoration of Amarbayasgalan Monastery (03/78 - 08/83)	UNDP	UNESCO	319,500	1,447,000
No.9129-9132	Equipment & consultant - cultural heritage (1977)	UNESCO/RP	UNESCO	13,400	(In kind)
R.3698	Consultant's services to advise authorities on organization & conduct of excavations & preservation works to be carried out at Karakorum (1981)	UNESCO/RP	UNESCO	7,544	
R.3550	Consultant's services to advise authorities on setting up of an archaeological and ethnological .... (...)	UNESCO/RP	UNESCO	7,394	
MON/68/002	Forestry development (07/69 - 01/78)	UNDP	FAO	192,961	
TCP/6/MON-01-T	Training of conservation personnel (07/77 - 02/78)	UNDP	Govt.	29,000	

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<b>NEPAL</b>					
NEP/70/009	Archival Scientist (06/71 - 01/79)	UNDP	UNESCO	99,369	
NEP/71/006	Development of cultural tourism (08/71 - 01/78)	UNDP	UNESCO	317,089	(In kind)
NEP/74/003	Master Plan for conservation of cultural heritage in Kathmandu Valley (07/74 - 01/81)	UNDP	UNESCO	205,861	411
C.3375	Safeguarding of the monuments and sites of Kathmandu Valley in Nepal (equipment, consultant, staff travel) (1976)	UNESCO/RP	UNESCO	14,240	
R.9171/9172	Consultant - Master Plan for the conservation of cultural heritage, Kathmandu Valley (1977)	UNESCO/RP	UNESCO	17,000	
C.7111	Preservation & Presentation of cultural & natural heritage of Kathmandu Valley - staff travel/preparation of a brochure on Kathmandu Valley (1978)	UNESCO/RP	UNESCO	7,820	
R.9172	Preparation of a study & a report analysing major architectural types of monasteries (northern region of Nepal) (1978)	UNESCO/RP	UNESCO	7,302	
C.4280	Kathmandu Valley - Publication of a book/purchase of film rights on Kathmandu Valley (1979)	UNESCO/RP	UNESCO	16,500	
C.4274/CCH/16	Control of landslides at Swayambhu (Valley of Kathmandu) and proposals for a system to be installed to check slides (1981)	UNESCO/RP	UNESCO	6,550	
R.3693	Consultant mission to prepare an inventory of monuments and cultural heritage of northern region of Nepal (1981-1982)	UNESCO/RP	UNESCO	10,650	
NEP/69/002	Wildlife management (10/69 - 04/74)	UNDP	FAO	139,096	
NEP/72/002	National parks & wildlife conservation (05/73 - 01/82)	UNDP	FAO	1,116,661	343,917
NEP/73/018	Assistance in zoo management (09/74 - 01/78)	UNDP	FAO	24,742	
NEP/79/018	National parks & wildlife conservation (Phase II) (07/82-12/86)	UNDP	FAO	895,540	13,330,000 (L.C.)
NEP/81/001	Propagation of endangered species in captivity (08/82 - 12/86)	UNDP	FAO	323,900	5,509,000 (L.C.)
<b>PAKISTAN</b>					
C.231	Preservation & development of monumental site of Moenjodaro (1976)	UNESCO/EB	UNESCO	400,000	
P.3.43.1/16C/5	Programme to aid Government in planning & executing work for conservation of Moenjodaro & its development as a tourist attraction (1972)	UNESCO/RP	UNESCO	30,000	
C.7471	Equipment & services of experts for Moenjodaro/Consultative Committee included (1973-1975)	UNESCO/RP	UNESCO	92,044	
-	UNESCO consultant in Lahore culture heritage (1974)	UNESCO/RP	UNESCO	8,000	
C.3365	Equipment to permit a group of young archaeologists to continue working on the survey of sites in Baluchistan (1976)	UNESCO/RP	UNESCO	5,000	(In kind)
C.3374	Safeguarding of site of Moenjodaro first meeting of the consultative Committee/technical studies (1976)	UNESCO/RP	UNESCO	25,500	
C.7109	Safeguarding of Moenjodaro - technical aspects/promotional activities/session of Consultative Committee (1977)	UNESCO/RP	UNESCO	34,900	
C.4280	Meeting of Moenjodaro Consultative Committee - Islamabad/- Missions of consultants (experts on landscaping, meeting of experts on the conservation of bricks)/equipment/miscellaneous/general operating costs (Moenjodaro Campaign (20 C/5) (1979-1980)	UNESCO/RP	UNESCO	41,000	
C.4280	Consultative Committee/Consultant Architect/Restorer on an analysis of factors leading to development of cultural tourism in Pakistan (1980-81)	UNESCO/RP	UNESCO	29,018	
C.9440	Consultative Committee/Executive Committee (1981)	UNESCO/RP	UNESCO	19,300	
Obj.7.6/04	Consultant's services to meet the authorities of Moenjodaro project equipment (1981)	UNESCO/RP	UNESCO	2,541	
PAK/69/001	Wildlife preservation and management (07/69 - 04/73)	UNDP	FAO	54,550	
<b>PAPUA NEW GUINEA</b>					
PNG/74/029	Assistance to crocodile skin industry (11/76 - 01/82)	UNDP	FAO	1,456,711	1,206,911
PNG/78/040	Assistance to the deer industry (05/79 - 05/81)	UNDP	FAO	49,705	264,705
<b>LAOS (PDR)</b>					
LAO/72/004	Forestry development (09/72 - 07/76)	UNDP	FAO	71,534	9,238
<b>PHILIPPINES</b>					
PHI/72/006	Applied multiple use management & forest research (consultancy report : national parks & wildlife conservation in the Philippines) (12/72 - 01/82)	UNDP	FAO	1,492,265	2,004,037
<b>SOLOMON ISLANDS</b>					
SOI/78/003	Collection of oral traditional & Archaeological site survey (03/80 - 01/83)	UNDP	UNESCO	18,000	



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<b>SRI LANKA</b>					
SRL/74/023	Cultural tourism (stone conservation, painting, lighting (09/74 - 01/76)	UNDP	UNESCO	47,395	(In kind)
SRL/79/036	Archaeological conservation research laboratory (01/81 - 01/84)	UNDP	UNESCO	133,383	255,459
C.4280	Cultural triangle - Preparation of the campaign (1979)	UNESCO/RP	UNESCO	7,000	
C.4282/CCH/16	Mission to Sri Lanka to make recommendations on restoration of the Sigiriya frescoes, on repair of other paintings damaged by a recent cyclone (1979)	UNESCO/RP	UNESCO	2,329	(In kind)
R.9433	Adviser - Department of Archaeology/Organization & setting up of a documentation center (1979)	UNESCO/RP	UNESCO	3,500	
C.4280	Cultural triangle: One consultant to assist in identification & collection of cultural property (1980)	UNESCO/RP	UNESCO	13,750	
7.6. Act.1	UNESCO Mission to Advise Sri Lanka Government on technical aspects of cultural conservation (1981)	UNESCO/RP	UNESCO	824	
-	Exceptional monuments & sites in the cultural triangle: Meeting of working group/staff travel/consultant/miscellaneous (1982)	UNESCO/RP	UNESCO	13,800	
TCP/SRL/8908(T)	Assistance in capturing wild buffaloes (01/79 - 08/79)	FAO/TCP		10,000	
<b>THAILAND</b>					
R.9111	Documentary film - cultural heritage (preservation & presentation of Sukhothai monuments and site)/Review of Master Plan for preservation & presentation of Sukhothai (1977-1978)	UNESCO/RP	UNESCO	14,400	
C.4280	Sukhothai: launching of campaign - staff travel/Implementation of plan of action (1979)	UNESCO/RP	UNESCO	34,000	
R.9227	SEAMEO - Training course in Underwater archaeology to be conducted in Thailand (1978)	UNESCO/RP	UNESCO	7,000	
C.413-THA-70	Equipment for Sukhothai historical park development project (1979)	UNESCO/RP	UNESCO	28,500	
-	1 month mission to identify monuments in Sukhothai (1980)	UNESCO/RP	UNESCO	5,150	
C. 4280	Sukhothai: Publicity/Financial grant/Consultant/Miscellaneous (1980)	UNESCO/RP	UNESCO	21,520	
C.9440	Sukhothai: Consultant/Publicity/Staff travel/Miscellaneous (1981)	UNESCO/RP	UNESCO	26,500	
THA/77/003	National parks and wildlife management (01/80 - 01/81)	UNDP	FAO	107,400	
<b>VIET NAM</b>					
C.4280	Consultant mission (1979)	UNESCO/RP	UNESCO	8,000	
C.4282	Publicity: brochure/film on Hué/consultant services/-staff travel (1980)	UNESCO/RP	UNESCO	15,420	
<b>REGIONAL PROJECTS: ASIA &amp; THE PACIFIC</b>					
RAS/68/563	Regional training course for protection of cultural property (1972-1973)	UNDP	UNESCO	23,625	
C.3384	Assistance to Member States: preservation & presentation of cultural heritage (Eastern, Southern & Western Asia) (1976)	UNESCO/RP	UNESCO	20,980	
C.9440	Asia & Oceania (India, Indonesia, Nepal, Thailand) and SPAFA/Consultant (1981)	UNESCO/RP	UNESCO	12,000	
RAS/73/002	Master Plan for the Development of Lumbini	UNDP	UN	876,469	150,000
RAS/72/029	Regional wildlife & national parks management adviser (02/73 - 01/75)	UNDP	FAO	30,339	
<b>Others:</b>	<ul style="list-style-type: none"> <li>- Regional programme on wildlife resources development and utilization for rural poor in Asia and the Pacific</li> <li>- FAO regional programme (RAPA/FOR/AGDE) regional information exchange in wildlife and national park (Tiger Paper) 1982 - continuing</li> <li>- FAO regional programme (RAPA/FOR/AGDE) International Consultation on wildlife resources for rural development, Hyderabad (India), July 1980</li> <li>- FAO/RAPA regional programme study, management &amp; husbandry of blackbuck (1981/1982)</li> </ul>				
FP-0202-73-01	State of knowledge report on sub-humid tropical ecosystems as a basic tool for research design, training and integrated planning (11/73 - 06/82)	UNEP	UNEP	212,323	
FP-0302-75-52	Regional advisory services - regional office for Asia and the Pacific (09/75 - 12/83)	UNEP	UNEP	1,239,442	
FP-0302-77-03	Strengthening environmental capabilities of ESCAP (06/78 - 12/83)	UNEP	ESCAP	548,041	
FP-0305-80-03*	Promoting understanding of conservation through information, education and training (01/81 - 12/83)	UNEP	IUCN	247,500	
FP-0502-74-01	Conservation of aquatic mammals (08/74 - 12/78)	UNEP	FAO	277,704	

1	2	3	4	5	6
FP-0502-78-02	Development of a global plan of action for conservation, management and utilization of marine mammals (09/78-12/83)	UNEP	FAO	164,832	
FP-0502-80-01*	Promotion of establishment and effective management of coastal and marine protected areas (01/81 - 12/83)	UNEP	IUCN	212,500	
FP-0503-79-04	Impact of pollution on the mangrove ecosystem and its productivity in South East Asia - preparatory phase (09/79-12/82)	UNEP	FAO	90,904	
FP-0503-79-15	Development of an environmental programme for South-West Pacific (01/80 - 12/82)	UNEP	ESCAP	322,000	
FP-0503-80-05	Development of a comprehensive action plan for protection & development of marine environment & coastal areas of the East Asian Region (03/80 - 07/82)	UNEP	UNEP	160,175	
FP-0503-82-05	UNEP support to the East Asian Seas Action Plan (07/82-06/83)	UNEP	UNEP	124,500	
FP-0605-74-01	Advisory services in ecology & conservation concerning living aquatic & terrestrial resources with special attention to ecosystems, endangered species, national parks & nature reserves (04/74 - 12/78)	UNEP	UNEP	219,909	
FP-1000-76-01	Environment protection & assessment of some multilateral development financing agencies: a review of programmes and their implications (08/76 -07/77)	UNEP	IIED	63,652	
FP-1001-79-02	Preparation of a "Declaration of Principles & Operational guidelines for inclusion of environment concerns in activities undertaken by development financing agencies (06/79 - 07/82)	UNEP	UNEP	213,069	
FP-1102-76-01	Pilot projects in ecological training & management in tropical forest areas as a basis for environmentally sound development (01/77 - 12/83)	UNEP	UNESCO	1,146,652	
FP-1102-78-01	International post graduate training course on eco-management for developing countries at Technical University of Dresden (06/78 - 12/83)	UNEP	UNESCO	1,227,690	
FP-1102-79-01	Meeting on deforestation in tropical areas (07/79 - 12/82)	UNEP	UNEP	259,900	
FP-1103-75-04	Conservation & development programme strategy for ecosystem conservation promotion and coordination action (05/75 - 05/79)	UNEP	IUCN	1,862,369	
FP-1103-78-01	Assistance to Mongolia in establishment of Great Gobi national park, Mongolia (10/78 - 08/83)	UNEP	Govt.	1,628,374	
FP-1104-75-02	Regional information exchange in wildlife & national park management for Asia and Far East (Tiger paper) (Ph. I & Ph. II) (01/76 - 12/81)	UNEP	FAO	54,179	
FP-1104-76-01*	Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (04/74 - 01/83)	UNEP	IUCN	1,477,101	
FP-1105-80-02*	Conservation strategies for critical ecosystems especially coastal and freshwater ecosystems (01/81 - 12/83)	UNEP	IUCN	230,000	
FP-1106-80-03	Expert meeting on world soil policy & plan of action for its implementation (01/81 - 06/82)	UNEP	UNEP	132,800	
FP-1107-79-01	Training courses for environmentally-sound management and utilization of river basins (02/79 - 12/82)	UNEP	UNEP/COM	1,265,954	
FP-1110-79-01	Development & promotion of the implementation of a World Conservation Strategy (01/79 - 12/81)	UNEP	IUCN	1,613,878	
FP-1110-80-01*	Monitoring the status of wild fauna and flora (01/81 - 12/83)	UNEP	IUCN	190,000	
FP-1110-80-02*	Promoting the conservation of wild fauna & flora (01/81-12/83)	UNEP	IUCN	432,000	
FP-1110-80-03*	Promotion of establishment & effective management of terrestrial and freshwater protected areas (01/81 - 12/83)	UNEP	IUCN	280,000	
FP-1110-80-04*	Promotion of conservation strategies in selected tropical countries (01/81 - 12/83)	UNEP	IUCN	300,550	
FP-1110-81-01*	Checklist of the Vertebrates of the World (01/81 - 12/82)	UNEP	CITES	20,000	
FP-1110-81-02*	Identification Manual for Endangered Species (02/81 - 12/83)	UNEP	CITES	150,500	
FP-1110-81-03*	International Congress on Biosphere Reserves, Minsk, USSR (06/81 - 04/84)	UNEP	UNESCO	660,050	
FP-1110-81-04*	Study tour on protected areas & wildlife in USSR (06/81-12/83)	UNEP	UNESCO	297,000	
FP-1110-81-05*	Establishment of Biosphere Reserves in Arid and Semi-Arid Lands (10/81 - 12/83)	UNEP	UNESCO	183,500	
FP-1301-78-04	Tropical forest resources assessment (10/78 - 07/83)	UNEP	FAO	277,353	

C: Code; R: Request

\* Reported by UNEP letter of 12/8/1982.



Ratification of Multilateral Treaties and Participation in Environmental Conservation  
Programmes by Countries of Asia and the Pacific Region

COUNTRY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
AFGHANISTAN					x									x		x
AUSTRALIA				x	x	x			x	x	x				x(13,16)	x
BANGLADESH						x								x	(x)	x
BHUTAN														x		
(BRUNEI)																
BURMA	x	x												x		x
CHINA						x				x	x				(0,1)	x
COOK ISLAND												x				
HONG KONG																
KAMPUCHEA	x	x	x												(x)	
FIJI															(0,1)	
INDIA	x	x	x	x	x	x	x			x	x			x	x(2,3)	x
INDONESIA	x	x				x							x		(1,0)	x
IRAN	x	x	x	x	x	x								x	x(0,0)	x
KIRIBATI												x				
JAPAN				x		x			x	x	x				(2,8)	x
LAOS (PDR)															x(0,0)	
MALAYSIA	x	x											x		x(2,1)	x
MALDIVES														x		
MONGOLIA	x														x(0,0)	x
NAURU												x				
NEPAL			x		x	x								x	x(0,0)	x
N. ZEALAND				x					x	x	x				x(5,4)	x
NIUE												x				
PAKISTAN	x	x	x	x	x	x								x	x(1,1)	x
P.N.GUINEA						x		x				x			(1,0)	x
PHILIPPINES						x	(s)						x		(1,1)	x
KOREA (DPR)												x			(0,1)	x
KOREA (REP)															(1,5)	x
SAMOA												x			x(0,0)	
SINGAPORE													x		(0,1)	
SOLOMON ISL.												x				
SRI LANKA			x		x	x	(s)							x	(1,1)	x
THAILAND	x	x				x								x	x(0,1)	x
TOKELAU												x				
TONGA												x				
TRUST TERR. PACIFIC ISL.																
FUVALU																
VANUATU																
VIET NAM															(x)	
FRANCE	x	x			x	x	(s)	x	x	x	x				x	x
NETHERLANDS	x	x		x		(s)	(s)				x				x	x
U.K.				x		x	(s)		x		x				x	x
USA					x	x		(s)	x	x	x					x

SOURCES: IUCN/CEPLA Feb. 1983; CITES Secretariat Feb. 1983; IUCN Membership List, Jan.1983; UNEP Regional Office, Bangkok, Asia-Pacific Report 1981; UNESCO

- Convention for the Protection of Cultural Property in the Event of Armed Conflict and Regulations for the Execution of the said Convention (Paris, 1954)
- Protocol for the Protection of Cultural Property in the Event of Armed Conflict (Paris, 1954)
- Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (Paris, 1970)
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, Feb. 1971) as of Jan. 1983
- Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, Nov. 1972) as of February 1983
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, March 1973) as of Feb. 1983
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979)
- Convention on Conservation of Nature in the South Pacific (APIA, June 1976)
- Convention on the Conservation of Antarctic Marine Living Resources (Canberra, May 1980) as of February 1983
- International Convention for the Regulation of Whaling (Washington, December 1946) as of February 1983
- Protocol to the International Convention for the Regulation of Whaling (Washington, November 1956) as of February 1983
- South Pacific Regional Environment Programme (SPREP)
- ASEAN Environment Programme (ASEP)
- South Asian Cooperative Environment Programme (SACEP)
- Statutes of the International Union for the Conservation of Nature and Natural Resources (IUCN) (Fontainebleau, Oct. 1948) and Membership as of Jan. 1983

(x) Membership elapsed; members in brackets indicate governmental and non-governmental organizations

- MAB National Committees (as of March 1982), and see Annex 4 for countries with biosphere reserves.



Situation regarding the Protection of Natural & Cultural Heritage in relation to Area,  
Asia and the Pacific Region

COUNTRY	Surface Km <sup>2</sup>	Area & percentage under conservation <sup>2/</sup>		Number of protected areas <sup>2/</sup>				Population 1980 <sup>3/</sup> Million (% growth)	Tourist arrivals (,000), 1979
		Area km <sup>2</sup>	%	NP	GR	BR	WHS <sup>(4)</sup>		
AFGHANISTAN	647,497	1,210	0.2	1	3	-	(0)	15.49 (2.5) <sup>a/</sup>	37.2
AUSTRALIA	7,686,848	316,595	4.1	218	192	12	3(11)	14.62 (1.2)	793.3
BANGLADESH	143,998	324	0.2	-	4	-	(0)	88.66 (2.8)	57.2
BHUTAN	47,000	5,250	11.2	-	1	-	(0)	1.3 UN (2.2) <sup>ab/</sup>	-
BURMA	676,552	3,139	0.5	-	5	-	(0)	35.29 UN (2.4) <sup>a/</sup>	-
CHINA	9,596,961	20,117	0.2	-	49	3	(10)	956.85 (1.4) <sup>b/</sup>	-
FIJI	18,272	53	0.3	-	2	-	(0)	0.62 (1.8)	188.7
INDIA	3,129,316	89,010	2.8	22	184	-	(8)	663.60 (2.0)	764.8
INDONESIA	2,027,087	88,624	4.4	10	70	6	(11)	151.89 (1.7) <sup>b/</sup>	501.4
IRAN	1,648,000	41,566	2.5	11	13	9	3(0)	38.08 (3.0)	618.1 <sup>c/</sup>
JAPAN	372,313	23,116	6.2	27	24	4	(3)	116.78 (0.9)	1,112.6
KAMPOUCHEA	181,035	107	0.06	1	-	-	(2)	8.87 (1.7) <sup>ab/</sup>	-
KOREA, REP.	98,431	2,371	2.4	11	-	-	(0)	32.37 <sup>d/</sup>	-
MALAYSIA	329,749	7,568	2.3	12	6	-	(2)	13.44 (2.5)	1,416.4
MONGOLIA	1,565,000	45,791	2.9	1	2	-	(1)	1.67 (2.9) <sup>b/</sup>	-
NEPAL	140,797	4,578	3.2	4	3	-	2(2)	14.01 (2.3)	162.3
NAUMEA	19,000	402	2.1	-	4	-	(0)	-	-
N. ZEALAND	268,676	26,274	9.8	59	50	-	(3)	3.10 (1.1)	431.9
PAKISTAN	803,943	4,187	0.5	4	1	1	5(0)	82.44 (2.8) <sup>b/</sup>	318.6
P.N. GUINEA	461,691	119	0.03	4	1	-	(2)	3.08 (2.7) <sup>b/</sup>	32.7
PHILIPPINES	300,000	2,424	0.8	7	1	1	(1)	48.40 (2.7)	840.1
SINGAPORE	581	24	4.1	-	1	-	(0)	2.39 (1.2)	2,247.1
SRI LANKA	65,610	6,078	9.3	5	28	2	(3)	14.74 (1.7)	250.2
THAILAND	514,000	36,734	7.1	33	24	3	(1)	46.46 (2.3)	1,591.5
TONGA	699	31	4.4	-	5	-	(0)	-	-
SAMOA(W)	2,842	41	1.4	1	1	-	(1)	0.16 (1.3)	22.8
Total:				431	674	41	13(61)		

Sources: (1) UN/DPI - A map of the United Nations No. 3105, Rev. 1 (F)

(2) United Nations List of National Parks and Protected Areas, 1982 Edition

(3) United Nations Statistical Pocketbook, Sixth Edition, 1981

(4) IUCN-UNESCO-World Heritage Committee (1982) - The World's Greatest Natural Areas. Number in ( ) includes natural heritage sites worthy of inclusion in the World Heritage List.

a/ 1979

b/ UN Estimate

c/ 1978

d/ 1975 Estimate

Key to abbreviations

BR - Biosphere Reserves

GR - Game reserves

NP - National Parks; some of them also biosphere reserves or world heritage sites

WHS - World Heritage Sites.