



THE WILDLIFE VALUE: EXAMPLE FROM WEST PAPUA, INDONESIA

by: Freddy Pattiselanno

Introduction

The latest assessment indicates that West Papua Province (formerly Irian Jaya) has the highest value of biodiversity and endemism level of flora and fauna in Indonesia. The faunal species include 146 mammals, 329 reptiles and amphibians and 650 birds that are present and utilize a variety of ecosystems as their natural habitat in West Papua. This accounts for more than 50 percent of Indonesia's biodiversity (Conservation International, 1999). Petocz (1994) stated that West Papua has a wide variety of ecosystems situated from the coastal to highland areas, providing a unique and specific habitat for the distribution of endemic animals.

The flora and fauna are very important natural resources which are utilized by many people in West Papua to fulfill their daily needs. For example, many people in West Papua value

forests for the benefits obtained from the extraction of plants and animals

The present paper reviews and discusses the results of research on wildlife in West Papua, in terms of local peoples' approaches to the value and utilization of wildlife as natural resources. This could contribute to the decision-making in connection with wildlife management aspects.

Endemic Species

From previous exploration and research it is known that most of the well known endemic species in West Papua are mammals and birds. Other species (e.g. reptiles, insects and amphibians) are now being seriously studied to make up for the lack of information about these species and their existence has become an interesting part of the research regarding the issue of biodiversity and conservation.

According to the Biodiversity Action Program for Indonesia (1993), some endemic bird species that are being added include cassowary (*Casuarius benneti*), megapodes (*Aepyodius arfakianus*), crowned pigeon (*Goura christata*), and bird of paradise (*Paradisea minor*). In addition, several mammals were identified by Petocz (1988) as endemic species from West Papua, including: porcupine (*Zaglossus bruijni*), cuscus (*Phalanger gymnotis*, *P. orientalis*, *Spiloglossus maculatus*), bandicoot (*Echymipera kalubu*, *Isodon macrourus*), kangaroo (*Dendrolagus inustus*, *Macropus agilis*), bats (*Pteropus* sp, *Nyctimene albiventer*), and rodents (*Hydromys chrysogaster*, *Melomys lorentzi*).

Wildlife Utilization

For the people in West Papua, hunting is one of the main ways of living. McKinnon (1984) and Petocz, (1994) have indicated that in the past, hunting activities by local communities in West Papua were important for catching animals for food and for use in ceremonies. People in the Cenderawasih Bay area often use traditional weapons and traps to catch animals for subsistence hunting (Pattiselanno, *et al.*, 1999).

According to Beehler (1985), some birds were hunted not only for food, but also for their plumes. He concluded that the most prominent birds being hunted for food are three species of crown pigeons. Moreover, certain birds (e.g. New Guinea eagle, vulturine parrot, bird of paradise) are utilized for the valuable parts of their plumes.

Others hold the point of view that wildlife is also valuable because people can earn money from them, in other words for their commercial value. Whitaker *et al.* (1985) cited by Wibowo and Suyatno (1998), noted that since the 1950s, in Mamberamo and Merauke, the two species of crocodiles (*Crocodylus porosus* and *C. novaeguineae*) have been heavily hunted for skins, which are sold in great number due to the premium price they bring. According to Philip (1999), certain kinds of lizards (e.g. *Varanus jobiensis*) in Birds Head Peninsula (West Papua) were trapped by local hunters and sold to local reptile dealers.

Wildlife also used as a symbol by some institutions in West Papua to remind people

how important and valuable our wildlife resources are. For example Cenderawasih University in West Papua uses the bird of paradise as a logo. Merauke, one of the cities in West Papua province, has been nicknamed the 'city of deer', because it is well known for its deer habitats in West Papua.

Another example is the role of the Bird and Orchid Park in Biak, as a source of wildlife information in West Papua, which is not only important for ecotourism, but also in terms of education and scientific purposes. Many papers have been produced from this park based on research conducted by students and researchers in West Papua. The Forestry Research Institute is now developing their research station in Manokwari to study the natural habitats of some endemic birds and mammals of West Papua.

Government Policy

Much of the loss of biodiversity in West Papua and elsewhere is due to misguided economic policies that encourage rapid rather than sustainable exploitation of biological resources (Craven, 1989). To define biodiversity conservation as it relates to economic development in Indonesia, a national action plan for biodiversity is being prepared by the government to provide guidance in preparing a rational plan for action and investment in biodiversity conservation (National Development Planning Agency, 1993).

In collaboration with the Indonesian Government's Directorate General of Forest Protection and Nature Conservation, a conservation and development strategy is being developed for West Papua Province to designate terrestrial and marine protected areas as national parks, nature reserves, game reserves and recreational reserves. Moreover, new legislation regarding the conservation of natural resources and ecosystems and the basic law on environmental management are being enacted to protect the biodiversity.

People's Concern for Wildlife

Regarding the issue of wildlife conservation, some well-known NGOs such as WWF, WCS and CI are now establishing branch offices in West Papua to run programs to protect the wildlife from the extinction. They also collaborate with local NGOs on some research

projects with financial support from some donor countries. Some scholarships and research funding are being offered to students who are interested in wildlife study and research. Awards will also be given to local people who have practiced wildlife conservation, as a part of increasing people's awareness.

Conclusions

The biodiversity in West Papua is from the richness of the natural resources that have many different values to the people. As concern over the issue of wildlife conservation is now increasing, the Government should recognize the value of wildlife not only for the development of the province, but also for the conservation of the wildlife itself. Wildlife conservation is a global concern and even foreign nations (through WWF, WCS and CI) have been willing to provide financial support for research and wildlife development.

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- Author's address: Animal Science Laboratory of Papua University, Jl. Gunung Salju Amban, Manokwari 98314, West Papua Indonesia, Email: fpattiselanno@yahoo.com*

THE BUTTERFLY FAUNA OF VISAKHAPATNAM IN SOUTH INDIA

by C. Subba Reddi, J.B. Atluri, S.P. Venkata Ramana and G. Meera Bai

Introduction

Three important ecological objectives of the world conservation strategy are: 1) maintenance of essential ecological processes and life-supporting systems; 2) preservation of genetic diversity; and 3) insurance of sustainable utilization of species and

ecosystems. The insects (Arthropoda:Insecta) are a vital component of the life-supporting system that requires intelligent management, both to restrain harmful species and to conserve and augment beneficial species. The insects are the most numerous of all terrestrial animals, both in terms of species and total abundance. Their numerical abundance is