

THE STATE OF SIEGE FOR SUMATRA'S FOREST AND PROTECTED AREAS : Stakeholders View during Devolution, and Political plus Economic Crises in Indonesia

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INTRODUCTION

Sumatra has less than 40% of its natural forest remaining and is losing its forest rapidly at the rate of almost 2.5% a year, due mostly of forest fire (1.7 million hectares in 1997 alone), expansion of forest concessions, agricultural plantation, and the conversion of mangroves to shrimp industry as a result of regional autonomous policy (Environment Report on Indonesia, the World Bank, 2000). Recent forecasts by World Bank indicate that, if no significant conservation efforts are implemented, most of Sumatra's lowland rainforests will be gone in 2004, and other wetland forest will soon follow. Another imminent threat is the wildlife trade, which exports endangered species consumed as delicacy or medicines. This trade is threatening flagship species such as the Sumatran rhinos, tigers, elephants, orangutans, tapir, hornbills, and other unique species. At present, designated protected areas cover only 4.5% of the land area.

Until the end of the 19th century the only thing you could find on the island was forest. Today only 26% of Sumatra's former jungle remains. Some of the most important wetlands of Indonesia are located in the swampy areas of eastern Sumatra. Sumatra's area of 476,000 km² probably has over 10,000 species of higher (seed) plants, most of which are found in lowland forest. The number of tree species per unit area in the lowland forest is likely greater than in similar forest in West Africa or South America.

Sumatra is one of the richest islands in Indonesia for animals. It has the most mammals (210 species) and its bird list (580 species) is second only to New Guinea. Sumatra, the westernmost of the main islands of Indonesia, is 1,800 km long and 400 km wide and has an extraordinary wealth of natural resources: 210 mammal, 194 reptile, 62 amphibian, 272 fish and 580 bird species live on the island. Of these animals 9 mammal species, 30 fish species and 19 bird species are endemic (BAPPENAS 1993). This great wealth is due to the large size of Sumatra, its diversity of habitats and also its past links with the Asian mainland.

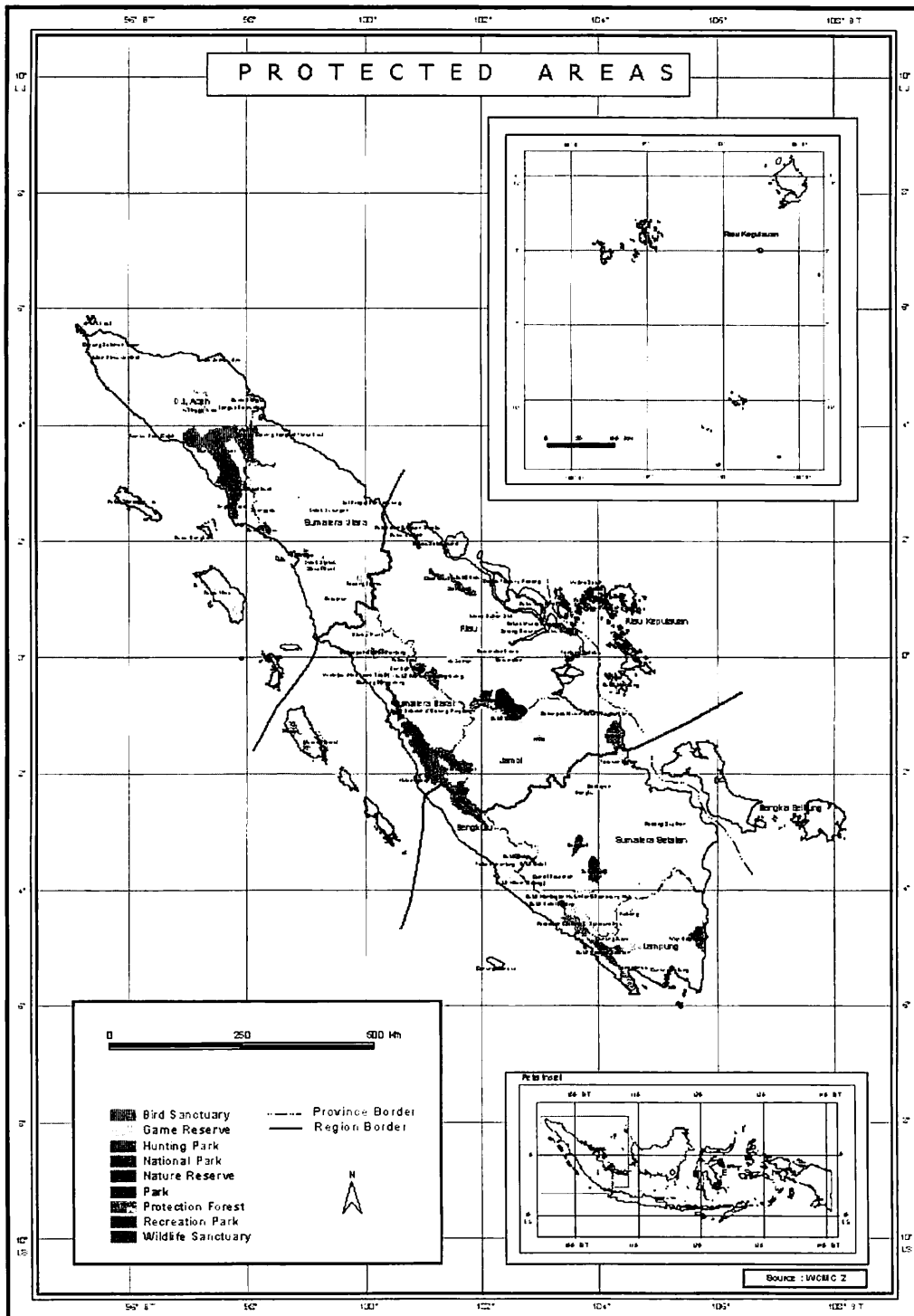
Sumatra and its nearby islands have at least 15 ecosystem types: sub alpine forest, limestone tropical forest, tropical montane forest, tropical pine forest, lowland limestone forest, semi-evergreen forest, lowland evergreen rainforest, ironwood forest, peat swamp forest, freshwater swamp forest, rivers and lakes, mangrove forest, sandy beach forest and coral reef. Based on altitude, the ecosystem types are aggregated in 4 groups: 0 – 1200 m is categorized as lowland forest; 1200 – 2100 meters is lower level Montane forest; 2100 – 3000 meter is upper level Montane forest and more than 3000 meters is categorized as sub alpine forest. (Whitten *et al* 1987). Sumatra's ecosystem types are distributed over 8 sub- biogeographic areas which can be

seen in Figure 1. A table of the Sumatra's sub- biogeographic, location at the map and its ecosystems summary is as follows: south Sumatra, North Sumatra, mentawai islands, Nias, Batu and Simeuleu islands, Lingga Islands and Nicobar Islands.

We have not really understood of how government established protected areas and national parks. For that reason, we anticipate with how much is really need for all ecosystem in Sumatra has been protected and represented in the current protection system in Indonesia. At the same time, we also challenge the accuracy of the World Bank report (2000) and see if we can identify their actors, root cause and stakeholder opinions. To do those activities we have been using many methods including our research on Sumatra's forest status and threat, the problems with protected areas and also three consecutive workshops with stakeholders in North (Medan), central (Pekan Baru) and South (Bandar Lampung). Workshop on scientists opinion was also carried out to understand their views on Sumatra's biodiversity and threats. The theme selected for the consultations, workshops was "Siaga Satu Hutan Sumatra" or "The Stage of Siege for Sumatra's Forest". The agenda for each two day meeting was:

- Is there really an ecosystem emergency in Sumatra?
- How serious is it?
- What is happening to the ecosystems?
- What are the direct causes?
- What are the indirect causes?
- Where is it occurring?
- Who is behind the ecosystem degradation?
- Why are they doing it?
- What can be done by civil society organizations to stop them?
- How can it be accomplished?
- Are there signs of hope?

The process objective was to determine the level of consensus of these questions and to gather enough information to credibly include stakeholder perspectives and comparing with scientists and data availability. The consultations provided the opportunity for interviews around the plenary which turned out to be a very important source of "reality checking" from people who work at ground level.



WORKSHOPS METHODOLOGY

Consultative meeting Process

for logging was 12 million hectares or about 26% of Sumatra land surface. This trend, unfortunately, continue to increase; from 1979-89, the total forest area designated for logging was over 15 million hectares or 33% Sumatra land surface (Leksono 2000).

Despite improvements in operations, the exploitation of timber and every other biological and physical resource appears to have progressed without restraint. Greed and haste appear to be powerful drivers. If it could be argued that the people of Sumatra had benefited, especially those who once used and lived near those resources, maybe the loss would at least help a group that needs it. Instead there are numerous reports of token or no compensation, intimidation, corruption, evasion and bending of regulations, and of opaque planning processes. Gone are all but a very, very few of the grand and awe-inspiring dryland lowland forests. As Laumonier (1997) says in his new and authoritative book, "The current situation of the forests of Sumatra" is quite clear. "There is no intact [dryland] lowland forest left.... In a few decades, [even disturbed] lowland forests will have disappeared completely in Sumatra if logged-over forests are not maintained under sustainable management."

Hill forests have also been affected and are currently being decimated by the frenetic forest exploitation. One forest type, which has now probably been erased totally from the landscape in its original and even modified form, is the exceptional pure stands of ironwood forest. This very valuable resource has been squandered, its potential for regeneration by-passed, and the cultural links with Jambi lost.

The range of view regarding who is responsible is broad. One view is that corporations and companies engaged in the large-scale conversion of land to tree-crops, timber plantations or transmigration settlements are responsible. Another is that small-scale farmers are clearing land for crops. Supporters of the first reason are being branded as communists, and those supporting the latter are accused of being anti-people. Whatever the reason, it has been recommended for years that if farmers were given security of tenure on the land they farm they would be more likely to be concerned about its treatment. This failure has led to burning for land clearing. Since undisturbed tropical rain forest does not burn except under the most severe conditions, very few native Sumatra species of animals and plants are adapted to fire. As a result there is heavy ecological damage, and the extent of the burning means that forest re-growth will be very slow, even in protection forests and conservation areas.

Wildlife Trade

With the loss of habitat, inevitably the populations of plants and wildlife have been reduced, separated and isolated. This, together with poaching, has taken some species to appallingly low numbers. For example, over the period 1990-1996 the numbers of Sumatran rhino in Kerinci National Park and adjacent forests fell from about 300 to just 30. The Sumatran rhino is the focus of a UNDP/Global Environment Facility project which is developing capacity to deal with rhino conservation in PHPA (the conservation agency) with the objective of arresting and reversing the decline due to poacher activity and habitat disturbance toward the national and global goal of recovery of viable populations of rhino species in Indonesia. Unfortunately, this program may be ineffective as the impact of decentralization on natural resource management is felt.

Disappearing only slightly less rapidly is a tiger, which have experienced a 95% decline throughout their range during this century. These 'protected species' are sought within Indonesia and beyond for their skins and body parts, and possibly just 500 remain of the Sumatran subspecies, many in areas now unable to sustain populations. While the trade in skins is largely domestic (highly skilled taxidermists can be found in major Sumatran towns), the illicit trade in parts focuses on China where, for example, tiger forelimbs sell for \$1,000 per kg, and \$320 buys a bowl of tiger penis soup. Bones are believed to have healing powers, and whiskers and eyes