

## Threats

Exploitation levels appear to have been sustainable until about 2-3 decades ago; since then, however, the resource base appears to have been steadily eroding, with fish catches declining and forest area dwindling. The main reasons for this are complex, involving the influx of immigrants, increased non-adherence to local customary law, population increase, increased access to external markets, and a steady development of adjacent areas (e.g. by large-scale logging enterprises and plantation enterprises). Interviews with the leaders of 30 villages indicate that 90-93 percent find that fish, honey and wood resources have declined over the past decades, while 80 percent find that rattan resources have declined. This is of course highly subjective, but the trends are supported by other data. Some of the human activities causing resource depletion in DSNP include:

- illegal logging;
- use of chemical poison for fishing;
- use of fine mesh nets for fishing;
- forest fires; and
- land conversion for agriculture and settlement.

These maps from the Ministry of Forestry show that much of the remaining forests outside of National Parks fall within concessions and plantations boundaries. Furthermore, these do not show the countless small-scale concessions (IPPK/HPHH 100 ha), mostly situated in protected forests (hutan lindung) next to protected areas, such as National Parks, which were given by Bupatis, City Mayors and the Governor between 2001 and 2002 after they were granted authority through Ministerial Decree No. 05.1/kpts-II/2000. In March 2002, this regional authority was revoked by yet another decree No. 541/Kpts-II/2002, but concessions awarded before March 2002 remain valid until they expire.

Resource exploitation activities outside of DSNP also affect the ecology and hydrology of the conservation area, including:

- land use change in the Upper Kapuas Basin, including: forest conversion for oil palm plantations and agriculture, road and potential dam construction;
- extensive logging in forests surrounding the park; and
- small-scale gold mining along the Kapuas River and its tributaries.

\*Source: Giesen, W and J. Aglionby, "Introduction to Danau Sentarum National Park, West Kalimantan", Borneo Research Bulletin, Vol.30 (2000).

