



WWF for a living planet®

## IPOC/WWF-Indonesia Impact Assessment on Oil Palm Development

Dr. Asril Darussamin (IPOC)

Fitrian Ardiansyah and Suhandri (WWF-Indonesia)

RT2, Jakarta, 6 October 2004



## Background

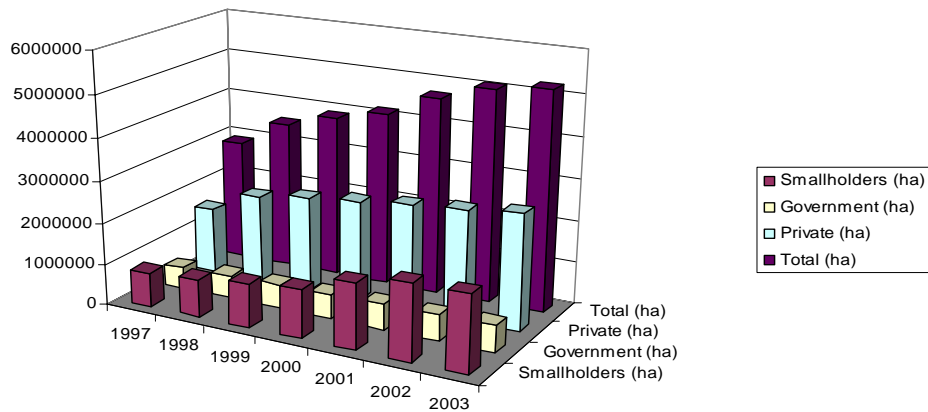
- Deforestation and oil palm expansion?
  - Causes: logging, cattle ranching, shifting cultivation, mining, agricultural expansion, land-use policies, urban development, and population growth (Angelsen & Kaimowitz, 1999).
  - In some areas, oil palm expansion is among these causes (concerns from NGOs: Greenpeace, FoE, WWF, Walhi, Sawit Watch and others).
  - WWF's main concerns: expansion poses threats to HCVF, other critical habitats and ecosystems, biodiversity, and forest dependent people.





## Background

**Figure 1: Area of oil palm in Indonesia (1997-2003)**



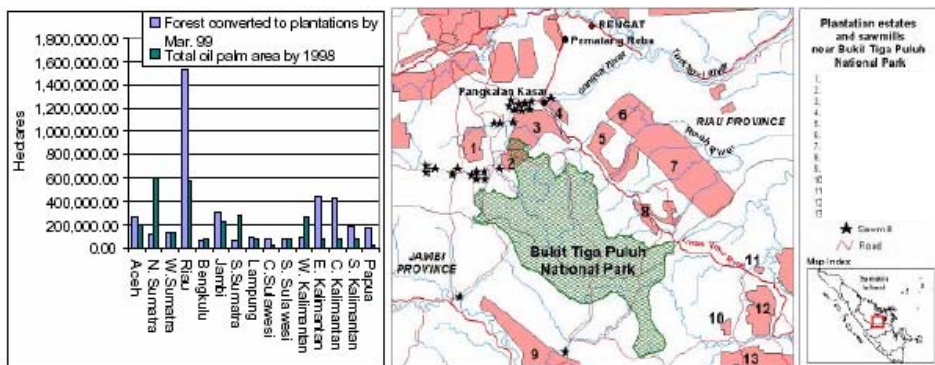
Source: Oil palm statistics 1997-2003 (BPS & IPOC)



## Background

**Figure 2: Oil palm planted in forested lands in Indonesia;**

**Figure 3: Plantation estates and sawmills near Bukit Tiga Puluh NP**



Source: Badan Planologi 1999.

Source: Map data from Ministry of Forestry, DFID & CIFOR.



## Background

- Responses from the industry?
  - Green policy papers from banking sector (ABN-Amro, Fortis, ING, Rabobank, HSBC, etc.).
  - **Roundtable on Sustainable Palm Oil:** Statement of Intent and Development of Criteria for Sustainable Palm Oil.
  - Positive responses, discussions and engagement from Indonesian palm oil industry



## IPOC/WWF Collaboration

- MoU signed in April 2004
- Collaboration in implementing HCVF and BMPs concepts inside oil palm plantations
- Organising RT2 in Indonesia
- Capacity building and transfer of knowledge on environmental and sustainability aspects





## IPOC/WWF Impact Assessment

- Objectives:
  - to acquire clear and sufficient data on the positive and negative impacts of oil palm plantations on forests and biodiversity in Indonesia and to find appropriate solutions of the problems.
  - to identify and learn the impacts and interaction of oil palm plantations on High Conservation Value Forest (HCVF) – inside and in the surrounding plantations – and to understand actions that have been or need to be taken to maintain or improve the quality of the HCVF.



## IPOC/WWF Impact Assessment

- Formulation of panel:
  - The Centre for Area Establishment and Forest Conversion, Planning Department, the Ministry of Forestry,
  - The Centre for Mapping, Planning Department, the Ministry of Forestry,
  - Directorate Area Conservation, Directorate General Forest Protection and Nature Conservation, the Ministry of Forestry,
  - The Centre for Environmental Standardisation, Secretariate General of the Ministry of Forestry,
  - Directorate for Plantation Development, Directorate General of Estate Crops Production, the Ministry of Agriculture,
  - WWF-Indonesia,
  - Indonesian Palm Oil Commission, and
  - Plantation companies.





## IPOC/WWF Impact Assessment

- Formulation of criteria:
  - Draft Framework of Criteria for Sustainable Palm Oil (RSPO) developed by Proforest and to be discussed at the coming 2nd Roundtable Meeting,
  - The International Federation of Organic Agriculture Movements (IFOAM),
  - Sustainable Agriculture Network (SAN),
  - Forest Stewardship Council (FSC),
  - Euro-Retailer Produce Working Group Good Agricultural Practice (EUREPGAP),
  - Migros Criteria for Oil Palm Plantations,
  - Rabobank criteria for financing oil palm plantations,
  - Dutch commercial banks (ABN AMRO Bank, Rabobank, ING Bank, Fortis bank),
  - Unilever's Sustainable Palm Oil,
  - Pacific Rim Palm Oil (PRPOL) Environmental and Social Handbook,
  - Environmental Guide for the Oil Palm Agro-industry Subsector (Ministry of Environment, Colombia)
  - Guidelines on Classification of Plantation Companies, the Ministry of Agriculture of the Republic of Indonesia
  - A set of relevant regulations issued by the Ministry of the Environment and the Ministry of Forestry.



## Criteria for Assessment

- Plantation management shall respect relevant Indonesian and international laws and regulations.
- Plantation management shall cover the maintenance of *High Conservation Value Forests* (Type 1 – 6 according to *Forest Stewardship Council*) located inside and/or in the surrounding plantations. Conservation plan shall be implemented and monitored with a clear reporting system.
  - Biodiversity shall be conserved and maintained. Areas unsuitable for plantations shall be reforested.
    - Establishment or expansion of plantation shall not replace or destroy primary forests.
  - Land preparation for new established plantation or replanting shall not use burning methods. Existing plantations shall have system and organisation unit to prevent the occurrence of and the spreading out of forest and land fires.
    - Water resources, in terms of debit and quality, shall be protected.
  - Plantation shall prevent the occurrence of erosion by using appropriate national and/or international planting techniques.
    - Plantation shall ensure the sustainability of watershed areas.
    - Wastewater effluent shall be discharged according to government laws.
  - Pest and disease control inside plantation shall minimise the use of pesticides and optimally introduce biological methods as part of Integrated Pest Management (IPM).
- The use of chemical substances and fertilisers shall be carefully planned considering the needs for environmental safety.
  - Rights of people (including indigenous people) shall be respected.
    - Plantation shall obey labour laws and regulation in Indonesia.
  - Plantation shall socially and economically benefit local people and Indonesia.



## Criteria for Assessment

Group	Sub-group	Variables*
I. Company	Respecting and obeying laws, regulations and relevant decrees	1.Land 2.Permits to establish plantation, company and mills 3.EIA document 4.Wastewater treatment
	Existence of section to mitigate environmental problems	Existence of unit(s) that mitigates environmental problems



## Criteria for Assessment

Group	Sub-group	Variables*
II. Management of HCVF	General	1.HCVF identification 2.Land suitability 3.Land clearing
	HCV 1	1.Endangered and threatened species 2.Elephant, tiger, rhinoceros home range 3. Human wildlife conflict
	HCV 2	1.Forest landscape importance for the life of flora and fauna 2.Corridor/connection between forested areas
	HCV 3	Parts of plantation areas that are peat swamp and/or freshwater swamp



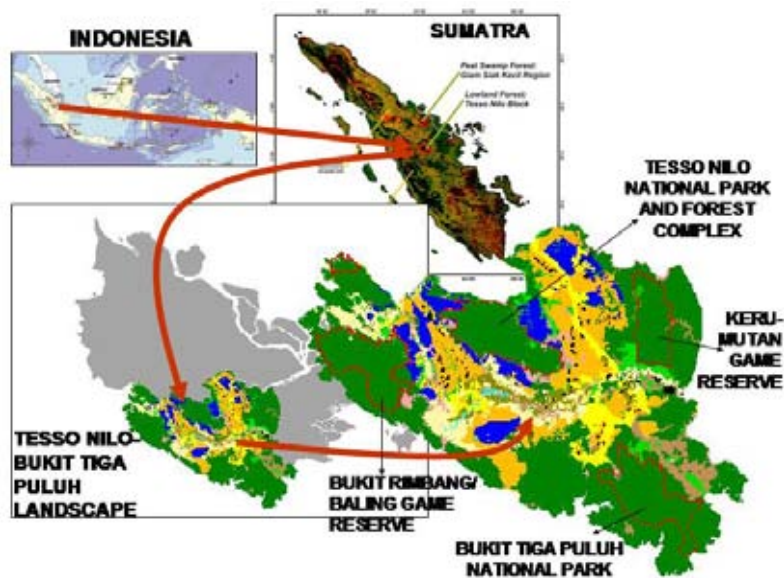


## Criteria for Assessment

Group	Sub-group	Variables*
II. Management of HCVF	HCV 4	1. River and water sources important for communities' activities 2. Water catchment area important to prevent from erosion
	HCV 5	Forest as a source for communities' livelihoods
	HCV 6	Forest as a source for sustaining communities' culture
III. Social-economy	Community empowerment	1. Entrepreneurship development 2. Community economic institution development 3. Transfer of knowledge and technology to communities 4. Job opportunity for communities
	Social activities	1. Education 2. Health 3. Transportation 4. Sport



## Sites selection

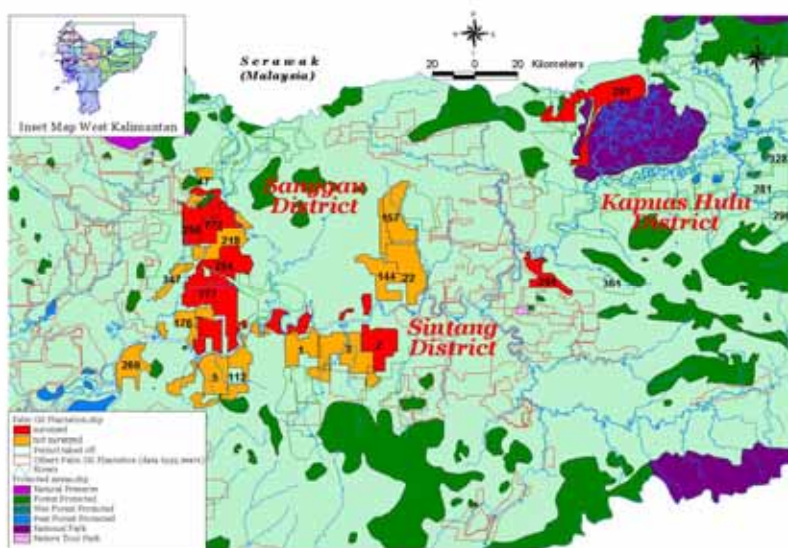




### Sites selection



### Sites selection







## Sites selection

### Oil palm plantations selected for the purpose of the study

Plantations/Companies	Areas (ha)		Total (ha)	Province
	Nucleus	Plasma		
PT Buana Wira Lestari	12,579	8,000	20,579	Riau
PT Arvena Sepakat	1,150	-	1,150	Riau
PT Gandaerah Hendana	7,211	-	7,211	Riau
PT Inti Indosawit Subur	9,072	14,788	23,860	Riau
PT Sari Lembah Subur	7,106	8,000	15,106	Riau
PT Perkebunan Negara V, Air Molek	3,788	-	3,788	Riau
PT Perkebunan Negara XIII, Parindu	2,333	5,046	7,379	W.Kalimantan
PT Perkebunan Negara XIII, Ngabang	3,480	8,000	11,480	W.Kalimantan
PT Sime Indo Agro	4,054	4,268	8,322	W.Kalimantan
PT Multi Prima Entakai	2,200	8,800	11,000	W.Kalimantan
PT Kebun Ganda Prima	4,600	5,000	9,600	W.Kalimantan
PT Riau Agrotama Plantation	2 500	5,000	7,500	W.Kalimantan
PT Plantana Rezsindo	**	**	**	W.Kalimantan



## Activities

- GIS analysis
- Aerial observation (flyover)
- Ground truthing (field survey)
- Questionnaires distribution and interviews





## Results

- Component 1 – Legal and Presence of Environmental Unit
  - Almost all have legal documents,
  - Origins of lands: mostly ex-HPH/logging concessionaires (secondary and primary forests), shifting cultivation areas, ex-illegal logging areas, forest areas allocated for conversion. Please see Table 3 (page 11-12).



## Results

- Component 2 – Management of HCV
  - A number of HCVs found within and in the surrounding concessions (wildlife home range, riparian areas, etc.)
  - Overall companies had limited knowledge on HCVF concepts
  - A few have taken necessary steps (riparian areas conservation, conservation of forests important to community, etc.), others need to improve (blocking road access for illegal logging, wildlife corridors, etc.)





## Results

### Conservation of riparian areas



## Results

### Electrical Fencing





## Results

Oil palm destroyed by elephants



Poor management of river banks



## Results

Infringement to forests





## Results

### Fragmentation of forests



## Results

- Component 3 – Social Economy
  - Companies have systems to assist small farmers/planters for improving oil palm production
  - Other critical issues (rights, etc.) need to be resolved





## Next Step

- Transferring knowledge on sustainability issues (incl. HCVFs)
- Improving practices on the ground (incl. management of HCVs inside concessions)
- Social concerns need to be addressed (incl. mechanism to solve conflicts with locals)



## Next Step





WWF for a living planet®

**Terima Kasih**



[www.ipoc.or.id](http://www.ipoc.or.id) and [www.wwf.or.id](http://www.wwf.or.id)

