

CURRENT STATUS OF IAS MANAGEMENT IN INDONESIA

By:

L. Agustini, and R. Garsetiasih



R & D Center for Forest Rehabilitation and Conservation
FORESTRY RESEARCH AND DEVELOPMENT AGENCY (FORDA)
MINISTRY OF FORESTRY OF THE REPUBLIC OF INDONESIA

Outline:

- Introduction
- Efforts that have been carried out
- Existing Problems
- Expected Assistances

Introduction

- There are several cases of Invasive Alien Species (IAS) that have been occurred in Indonesia since a long time ago, and causes major negative impact in some conservation forest areas.
- Indonesia has been experiencing of many exotic species since a long time ago. During the colonial time, the Dutch government has allowed all species to come or being introduced to Indonesia for many purposes/reasons.
- This initiative seems to be implemented without any risk mitigation once IAS outbreaks would be happened.
- Status of alien species across Indonesian regions remains unknown (National Inventory on IAS is not yet available).

EFFORTS TO ERADICATE IAS

Several efforts have been made to control and eradicate the spread of IAS in some national parks in Indonesia, e.g.:

No.	Pilot sites	Invasive species	Proposed management intervention
1	Bukit Barisan Selatan NP	<i>Merremia peltata</i>	Integrated control of <i>Merremia peltata</i> including manual, physic, chemical and cultural (re-vegetation) emphasizing restoration into forest ecosystem using local species.
2	Baluran NP	<i>Acacia nilotica</i> <i>Thespesia lampas</i> <i>Flemingia linneata</i>	The control of <i>Acacia nilotica</i> manually, in savanna, while it is considered sufficient, it also creates the invasion of other invasive species mainly <i>Thespesia lampas</i> . The intervention will control <i>T. lampas</i> and other broad leaf weeds using selective herbicides . More over, this will provide grasses preferable by herbivores, especially the local/native species.
3	Gunung Gede Pangrango NP	<i>Passiflora suberosa</i>	Integrated control of <i>Passiflora suberosa</i> including manual, physic, and chemical as well as replacing with native species.
4	Ujung Kulon NP	<i>Arenga obtusifolia</i>	Integrated control of <i>Arenga obtusifolia</i> including manual, chemical, physic and cultural (re-vegetation) emphasizing restoration into forest ecosystem using local species.
5	Meru Betiri NP	<i>Chromolaena odorata</i> <i>Lantana camara</i>	Integrated control of <i>Chromolaena odorata</i> and <i>Lantana camara</i> including manual, chemical, physic and cultural (re-vegetation) emphasizing restoration into forest ecosystem using local grasses species preferable by herbivores.



EFFORTS TO ERADICATE IAS

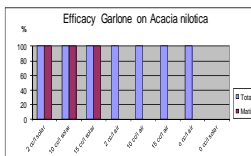
1. Baluran NP : Eradication of *Acacia nilotica*

Controlled burning areas covered by weeds (left) and *Acacia* remains survive after controlled burning.



Eradication methods:

- Cutting down *A. nilotica*
- Swabbing the stumps with herbicide (Garlon & Starane)



REMOVING BARRIERS TO INVASIVE SPECIES MANAGEMENT IN PRODUCTION AND PROTECTION FORESTS IN SOUTH-EAST ASIA

2. Bukit Barisan Selatan NP: Eradication of *Merremia peltata*



- Hampering the movement of tiger (*Panthera tigris sumatrae*)
- Damaging the habitat of large mammals such as elephants, rhinos, tapirs, deer, wild pigs and primates.
- Causing death of various woody or plant species.
- Reduced population of *Merremia* has changed the microclimate, it becomes hotter and unsuitable for some plant's and animals' living.

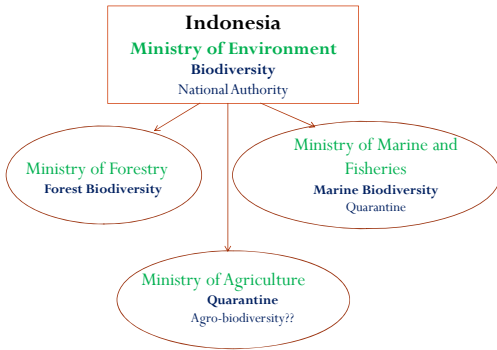
3. Gunung Gede-Pangrango NP : Eradication of *Passiflora suberosa*



- Spreading assisted by lutung (*Presbytis* sp.) that consume its fruits.
- Local community collects the fruits for their income.
- The areas invaded by this species has approaching 30% of the total forest areas.
- Most of the native trees (*Altingia excelsa* = rasamala, and *Castanopsis argentea* = saninten). are dead due to sun-blocked of its canopy and dense coverage of the stem by this species

Existing Problems:

*No national agency to manage IAS
Losses caused by IAS on biodiversity and trade not documented*



Existing Problems:

- **No well-recorded baseline data of IAS across country.**
The actions were taken based on report (or collected data) from the NPs who monitor their areas in a regular basis.
- **Inadequate existing eradication methods.**
Applying **herbicide** and **mechanic** requires further evaluation. Long term impacts for the environment should be considered.
- **Capacity Building for conducting National Inventory of IAS.**
Improvement of human resource on methods of IAS surveillance, risk assessments, early detection, rapid response, etc.
- **Lack of co-operation across relevant sectors.**
National coordination among Ministry of Forestry, Ministry of Agriculture, Ministry of Marine & Fisheries, and Ministry of Environment in handling and managing IAS issues in Indonesia is need to be strengthen.
- **Lack of people awareness on IAS management.**
Based on the recent survey done by PPG team in five national parks, it was very obvious that people were less aware on IAS issues most definitely due to low level of education and lack of information.

Assistances Expected:

Most welcome for :

- ❖ Ideas
- ❖ Basic Data, esp. Bio-ecology of the IAS.
- ❖ Technical Assistances
- ❖ Financial Supports

In dealing with the existing problems.

