

# NFI and Forest management in Thailand

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Promoting and Strengthening  
Multi-purpose National Forest Inventory System  
In the Asia Pacific region in connection with climate change

A Status of NFI policy  
to mitigate climate change

**NFI and Forest Management  
in Thailand**


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Royal Forest Management



### 1. Current Situation of Deforestation and Degradation


- **Change of Forest Area (1,000ha)**  
– 1990:14,005.75 2000: 17,001.08 2008: 17,158.65
- ※ **Main causes of Change**
  1. demand of forest land by rural people
  2. occupation of large forest areas by capitalists
  3. Illegal logging
- **<Change of Designated functions of Forest (1,000ha)>**

– year	1990	2000	2008
– Production	320	748	1,800
– Protection	6,377.12	9,132.66	9,826.80
– Conservation	7,308.63	7,087.52	5,130.10
– Social services	-	32.90	401.75



### 1. Current Situation of Deforestation and Degradation

- **Change of Growing Stock (m<sup>3</sup>/ha)**  
– 1990: n/a 2000: n/a 2006: 92.74
- ※ **Main causes of Change**
  1. Deforestation by illegal logging
  2. Change in land use pattern
  3. Forest fire damage
- **Change of Carbon Stock (million tons)**  
– 1990: n/a 2000: 1741.01 2006: 1,741.12
- ※ **Main causes of Change**
  1. Logging banned
  2. Promoting private plantation and tree planting



### 2. Strategy to reduce Deforestation and Degradation

- **Strengthening Forest Policies**
  - **Establishment of long-term Planning**
    - ex: rehabilitation of important forest area 59,200 ha during 2005-2008
    - ex: Promoting forest community management 2,790 communities during 2005-2008
  - **Enactment of Forest Laws**
    - ex: National Park Act B.E. 2504(1961)
    - ex: Wildlife Preservation and Protection Act B.E. 2535(1992)



### 2. Strategy to reduce Deforestation and Degradation

- **Enforcement of Forest Administration Organization**
  - **Central government**
    - ex: Increasing protected area such as national parks and wildlife sanctuaries
    - ex: Promoting rural people participate in community forest management



### 2. Strategy to reduce Deforestation and Degradation

- **Increasing of Forest Budget (millions\$)**
  - **Central government**
    - 1990: 110.29 2000:198.97 2008:369.09
  - **Local government**
    - 1990: - 2000: - 2008: -



### 3. Brief on National Forest Inventory

- Brief history of Forest Inventory
  - 1st Inventory
    - Institution: Royal Forest Department
    - Inventory Year: 1969-1976
    - Budget (national: n/a \$, international: - \$)
  - 2nd Inventory
    - Institution: Royal Forest Department
    - Inventory Year: 1987-1981
    - Budget (national: n/a \$, international: - \$)
  - 3rd Inventory
    - Institution: Royal Forest Department
    - Inventory Year: 1993-1996
    - Budget (national: n/a \$, international: - \$)



### 3. Brief on National Forest Inventory

- 4th Inventory
  - Institution: Department of National Park Wildlife and Plants
  - Inventory Year: 2004-2006
  - Budget (national: 677,743 \$, international: 382,677 \$)



### 3. Brief on National Forest Inventory

- Latest National Forest Inventory Design
  - Remote Sensing
    - Introduced year: 2000
    - Type of satellite data: LANDSAT-5 TM
  - Field Inventory
    - Sample intensity: 20X20 km
    - Interval of inventory: 5 year
    - Sample size: circle (radius 17.84m)
    - Number of sample: 5,645



### 3. Brief on National Forest Inventory

- Implementation System of NFI in government
  - Administration
    - Organization: Forest Resources Assessment Division
    - Staffs: number 26 Budget (2010): 0.49 million \$
  - Research
    - Organization: Forest Resources Assessment Division
    - Staffs: number - Budget (2010): - \$
  - Collaboration with policy-making system
    - Inside Forestry agency:
      - ex: to support central information system
    - Relating to national development plan:
      - ex: to develop national data base system to maintain natural resources, conflict problem solution and natural disaster protection



### Relationship between NFI and Forest management plan



### 4. Suggestions for promoting and strengthening NFI System

- <Consideration Points>
  - Forest Policies
    - The change in policy perspective over the past two decades (from timber production to social, economics and environmental issues) has necessitated the need to integrate policy development and information from different sources. NFI system is needed to present information in a useful format for policy-making, planning and reporting requirement.






**- Administration Organization**  
In Thailand forest information collection activities are now supervised by more than one agency.  
Good cooperation make these activities possible and also formal regulation are needed, particularly concerning reporting for international assessment.



**- Human Resources**

- **Administration**  
Core office for forest resources inventory should be established in forest regional office to promote NFI system.
- **Research**  
New technologies/methodologies is needed for evaluating forest resources because some areas could not access.



**- Financial Resources etc.**

- **National**  
The state should support enough budget in order to develop an effective continuous national forest resources monitoring information system.
- **International**  
International fund is needed for continuous NFI system.



**Thank you!**

