Rehabilitation of Coastal Vegetation through Community Participation in Post Nargis-The Myanmar Experience

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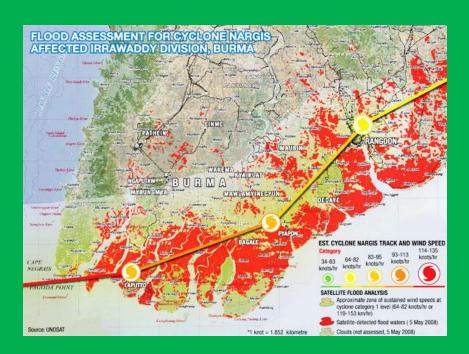
Sendai, Japan 2012 5<sup>th</sup> February

### **Disasters in Myanmar**



- Exposed to multiple natural hazards
- > 2000 km coastal lines
- Urban fires 70%, floods
  11%, storms 10% and other
  9%
- Cyclone "Nargis" (2008)

## Magnitude





#### Est. TOTAL FLOODED AREA (km<sup>2</sup>) PER TOWNSHIP

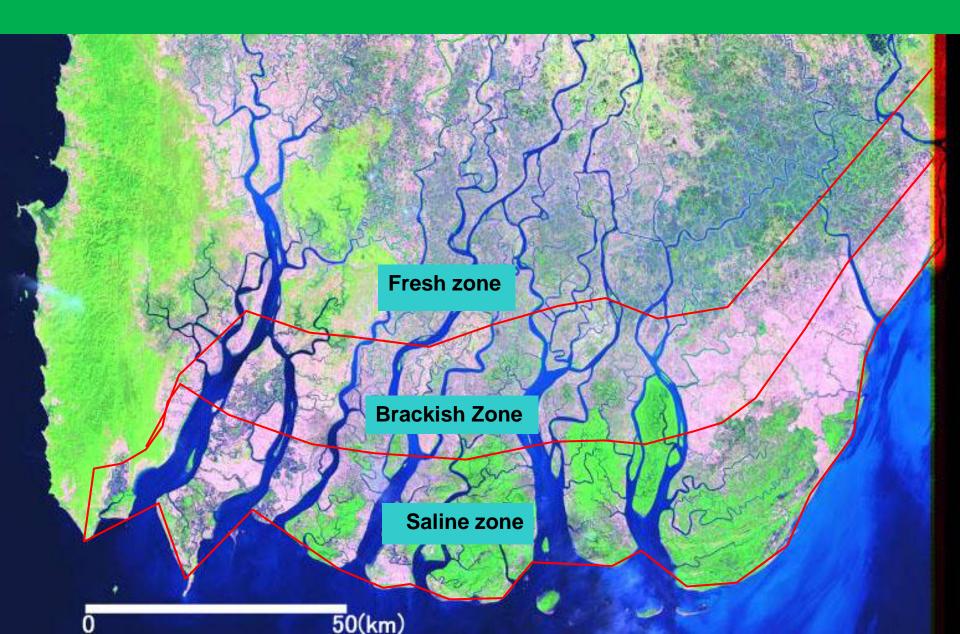
Township	Division	Est. flood water*
Laputto	Irrawaddy	1,504.5
Rangoon	Irrawaddy	1,435.0
Bagale	Irrawaddy	1,202.0
Dedaye	Irrawaddy	599.5
Ngaputaw	Irrawaddy	514.6
Pyapon	Irrawaddy	509.6
Mawlamyinegyun	Irrawaddy	322.3
Maubin	Irrawaddy	280.3
Kyaiklat	Irrawaddy	190.5
Myaungmya	Irrawaddy	84.7
Pathein	Irrawaddy	78.8
Wakema	Irrawaddy	53.2
Einme	Irrawaddy	48.6
*Unit: km²		POSTgraphic

### **DEVASTATION**

- 77,738 dead and 55,917 reported missing.
- 2.4 million people out of 4 million affected
- Over 25,000 ha of mangrove forests and plantations were destroyed



### Illustration of salinity zonation in the Ayeyarwady delta



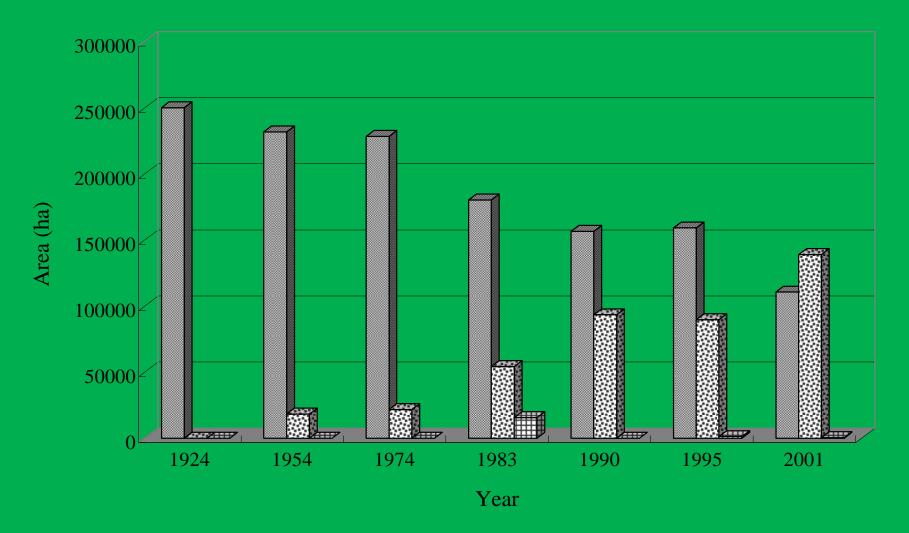
## **CLEAR MESSAGES**

• The areas with less forests were more affected by Nargis.

• More demand for environmental services provided by the forests.

• More demand for stronger communities.

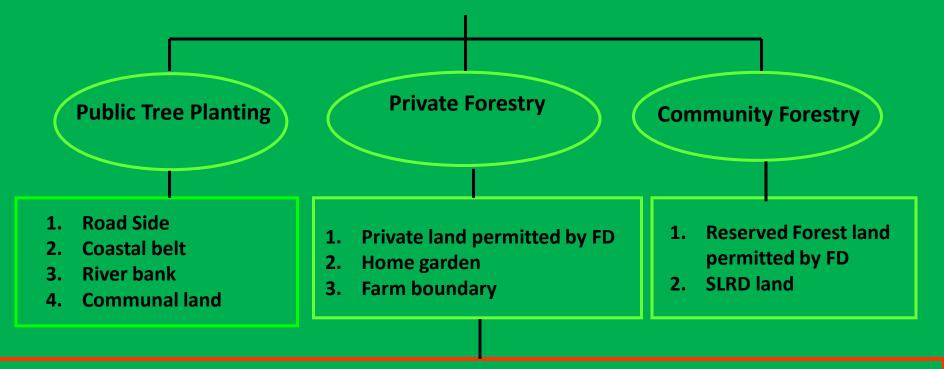
### Change of mangrove areas in the Ayeyarwady Delta from 1924 to 2001



 $\blacksquare$  Mangroves  $\blacksquare$  Cultivation  $\blacksquare$  Others

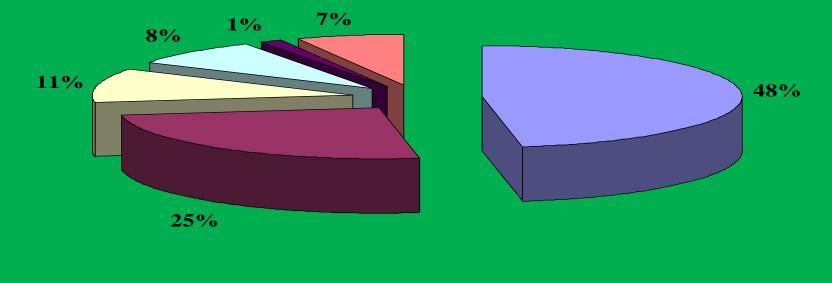
(Source: GIS section, Myanmar Forest Department, 2004)

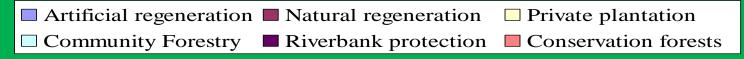
# Strategy for reforestation in the Ayeyarwady delta in post Nargis



To restore forests that support Livelihood and reduce Disaster risk in the Ayeyarwady delta

### **Reforestation programme in the Delta after cyclone Nargis**





### **Opportunities of Reforestation in Ayeyarwady Delta**

- 30 years of land tenure right by Community Forestry Instructions
- Knowledge of forest conservation and reforestation
- Generation of some income from community forests
- Initiative of Community Based Organizations
- Increase of People Participation in resource

management

### **Challenges of Reforestation in the Ayeyarwady Delta**

- Land use conflicts
- Lack of alternative energy source
- Lack of alternative income sources
- Limitation in availability of land for reforestation
- Mutual trust between community and implementation agencies
- Capacity Building for Community members and Staff of implementation agencies
- still a small scale and related technical knowhow
- Maintenance of established plantations

### **Recommendations for successful reforestation**

- Change of Land Use policy
- Awareness raising
- Capacity Building for all levels
- Encouragement on evident base research
- Increase of coordination among relevant stakeholders
- Strengthening of Community Base Organizations
- Establishment of Public Private Partnership
- Policy Advocacy

## THANK YOU

