Mainstreaming Environment in into Recovery: Myanmar

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Cyclone Nargis – Flooded Areas







Myanmar: Key Environmental Issues

- Salt water intrusion of agricultural land
- Salt intrusion into drinking water
- Sedimentation
- Disaster waste related issues
- Environmental footprint of recovery





Environmental Damages

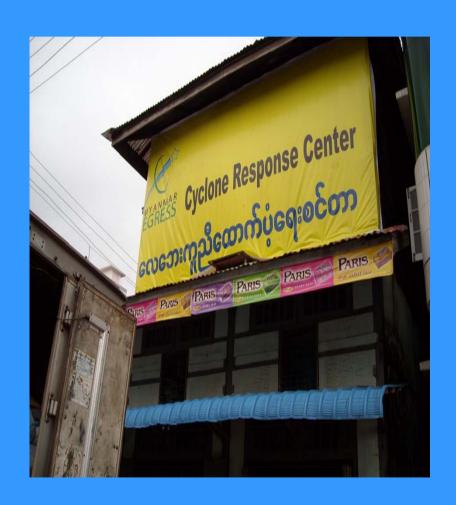
- Damaged some 35,000 ha of natural and planted mangroves;
- Pollution of surface and groundwater sources - 43% of ponds damaged;
- Salination and erosion of agricultural lands 63% of paddy flooded;
- Impact on fisheries by winds & storm surge;
- Sedimentation;
- Waste generation debris from shelters, jetties





Myanmar Key Processes

- Formation of TCG
- PONJA (Post Nargis Joint Needs Assessment)
- UNEP involved in the PONJA process and contributed to the output





Myanmar: Environment is Life

The environment and natural resources underpin the livelihoods of the people of the Ayeyarwady Delta and Yangon Divisions:

- ✓ Agriculture paddy and other cash crops;
- ✓ Subsistence crops and home gardens;
- ✓ Fisheries commercial and subsistence;
- Secondary Natural resources-based industries such as fish processing;
- ✓ Salt production;
- ✓ Forest resources timber, fuel and incomes.



Already Stressed Environment

Impacts of Nargis made worse by preexisting environment degradation:

- √ Loss of 80% of original mangroves through cutting for fuelwood, charcoal, and conversion to paddy or shrimp farming;
- ✓ Shelter over-exploitation of timber and thatching resources;
- ✓ Farming systems based on low-yielding cultivars;
- ✓ Fisheries over-exploitation of resources;
- ✓ Inadequate maintenance of embankments;
- ✓ Sea water intrusion into groundwater as a result of climate change.



PONJA Recommendations

- Direct environmental damage of Nargis;
- * Environmental footprint of recovery;
- Policy constraints and capacity gaps at community, local and national levels;
- Capacity for long-term disaster and riskreduction strategic planning.



Environment Iterfaces of Govt Plans

- Shelter building back better;
- Water access to safe drinking water;
- Agriculture restoration of livelihoods and food security;
- fisheries restoration of incomes from fishing and subsistence fisheries;
- Forestry rehabilitation of forests and mangroves.

Environmental Interfaces of PONREP

Main emphasis is on "Productive, Healthy and Protected lives" for communities.

- Shelter safer and durable housing;
- * Water access to safe drinking water;
- Agriculture restoration of livelihoods and food security;
- fisheries restoration of incomes from fishing and subsistence fisheries;
- Forestry rehabilitation of forests and mangroves;
- DRR systems for disaster risk reduction.



Myanmar Follow up

Government Plans <

Donor projects

NGO Initiatives

PONREPP

Productive lives

Healthy lives

Protected lives

UNEP Technical Advice

Enabling framework

Information