Green Coast experiences of coastal forest rehabilitation towards ecosystem and livelihood sustainability

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"Green Coast experiences of coastal forest rehabilitation towards ecosystem & livelihood sustainability”

More secure livelihoods of beneficiaries through:
- Healthier/more intact natural resource base
- Better security from damage by storm and floods
- Increased potential for economic development
- Stronger ownership by local communities of natural resource base

Green Coast works through national/local offices of WI, WWF, IUCN & Both ENDS and their networks of local NGOs and CBOs in the 5 countries

3 Interlinked components

1. Assess damage on ecosystems & livelihoods
   - Identification of 20 priority coastal stretches & options for recovery
   - Identify local peoples’ needs, views and rights

2. Guiding rehabilitation policies & promotion of Green Reconstruction Guidelines to government, aid agencies, corporate sector

3. Provide financial tools for (till date) 110 community-based ecosystem & livelihood restoration projects in priority areas

“Green Coast restores and manages coastal ecosystems to increase livelihood security for people in tsunami-hit regions”

- Budget: 4.2 million euro (Oxfam/NOVIB via Dutch public charity)
- Green Coast phase 1: June 2005 – March 2007
- Development of Green Coast phase 2: 2007 -2010
  additional funding being sought
### Interlinkage of 3 components

- Environmental impact assessments
  - Social and economic impact assessments
- Assessment of local peoples’ views, rights, capacities and needs

- Selection of communities within coastal stretches for livelihood restoration
- Green Coast restoration through on-ground actions, self-assessment & policy interventions
- Small grants

### Green Coast at work

Green Coast focuses:
- 6 stretches Aceh/Nias: WI/WWF
- 5 stretches Sri Lanka: IUCN
- 5 stretches India: WI/WWF/Both ENDS

Limited support to establish some model examples in Thailand (IUCN/WI/WWF) and Malaysia (WI)

Small Grants Interventions:
- selected by field professionals
- peer reviewed by National Reference Group
- (repres. Government, NGOs, aid agencies)

### Assessing the needs & options for recovery

Methodology:
- Built on rapid assessments done by governments
- NGOs in cooperation with UN agencies
- Literature surveys
- Surveys, satellite imagery & synthesis
- Village meetings

Assessments of:
- Geomorphologic changes
- Damage to coastal ecosystems, forests
- Coral reefs, marine environment
- Agriculture

### Restoration

Forestry rehabilitation:
- Mangroves in lower beach zones (replanting or primary establishment of mangroves)
- Multispecies shelterbelt in upper beach zone
  (Casuarina, Pandanus, Coconut, etc.)
- Home gardens for fruit and nuts
- Greening resettlement areas
- Deep rooted trees to clean and protect drinking water wells
- Planting through local nurseries using local stock

### LIFTED-UP SUBSTRATE & SUBSIDENCE
Mangrove on Lifted Substrate

Land subsidence ----> Lost of Land !!!
Lifted up substrate ----> New Land ????

The fact: Most of lifted up substrate is covered by coral, physically damaged, not appropriate to be rehabilitated

Space/Land for rehabilitation is decreased

Findings and Lessons Learned from Coastal Rehabilitation

Unsampling, Pest threat, No binging after planting, Project approaches, Un-sustained activity

Lessons learned from other coastal/mangrove restoration projects

Wrong sites and Planning, Wrong Nursery Management

Coastal forest rehabilitation in Aceh & Nias by Green Coast

- Small Grants Facility: > 55 grants to local NGOs/CBOs which assist community groups
- Green Coast/WWF technical training to NGOs/CBOs in nursery raising, seedling preparation, silvo-fisheries

Results:
- 600 ha coastal & beach area rehabilitated by local communities in March 2007
- 22 species coastal forest, 8 species mangroves
- Survival rates seedlings > 75%
- > 11,000 beneficiaries of livelihood projects

Combine ecosystem & livelihood recovery approach:

Financial capital for economic livelihood activities to communities who, in return, engage in environmental rehabilitation: preparation of seedlings, planting & care taking. Survival rate seedlings > 75%, loan becomes a grant.

Examples of livelihood activities: silvo-fisheries, livestock, agriculture, horticulture, small enterprises, etc.

Planting Mangrove

Seedling Production in Nursery

Planting Common-coastal plant
Damage to coastal forest in India

- Mangroves not seriously affected except young plantations washed away
- Increase in salinity led to dying of trees
- Heavy siltation and higher salinity due to tsunami led to destruction of habitats of fish, prawns, and crabs
- Casuarina plantations effective as coastal defense but have ecological and social implications

Key areas of support
- Plantation of multiple species coastal forest & shelterbelts in 110 ha and mangroves in 45 ha
- Enhance availability of safe drinking water to 300 hh
- Application of sustainable agricultural practices in 60 ha
- Micro enterprise development for 2800 households
- Awareness on conservation of coastal resources to 3700 hh

Mangrove planting in South India

Restoration of sand dunes in South India
Some lessons learned from Green Coast coastal reforestation

- Provide small financial capital for livelihood projects in return for reforestation activities
- Create ‘incentives’ for community groups for tending the planted seedlings
- Coordination with State/Provincial government & other aid coordinating agencies
- Much training needed to build technical capacities of local NGOs/CBOs
- Regular monitoring and support
- Native vegetation and multiple species

Green Coast phase 2 2007 - 2010

- Replicate and upscale Model examples
- Small Grant Facilities to provide financial tools for community-based restoration
- Guide rehabilitation policies
- Support integrated coastal zone management
- Capacity building & training of local implementors
- Education & awareness raising

More info: WWW.GREENCOASTS.ORG

(No Q/A session.)