

Community Based Forest Management and Climate Change Adaptation

From Principle and Policy to Practice

Media workshop

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International Centre for Integrated Mountain Development
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ICIMOD





Presentation outline



- Understanding forest in context to climate change
- Participatory Forest Management (PFM)- climate resilience and adaptive capacity
- Issues and challenges
- Take home messages

Forest in definition



FOR MOUNTAINS AND PEOPLE

UNFCCC, 2001: “Forest is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees having the potential to reach a minimum height of 2-5 meters at maturity in situ.

UNEP/CBD, 2001: Forest is a land area of more than 0.5 ha, with a tree canopy cover of more than 10 percent, which is not primarily under agriculture or other specific non-forest land use.

FAO, 2006: Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agriculture or urban use.



“..Forestry is not about tree, it is about people. And it is about trees only in so far as trees serve the need of people” - Jack Westoby (1967)



- Productive functions
- Protective functions
- Socio-economic functions

Source: FAO, 2010

Forests in climate change

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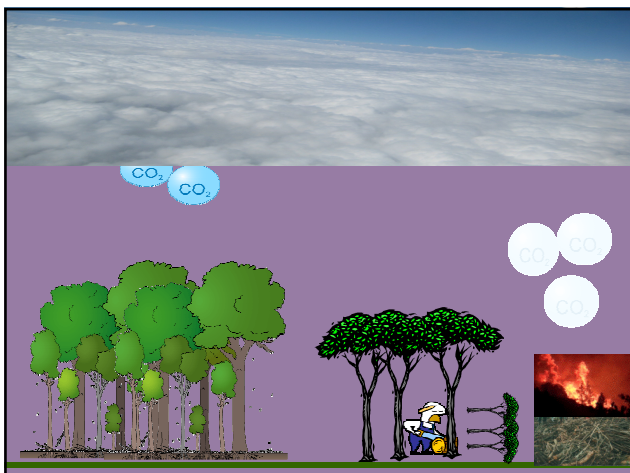
- Highly exposed to climate change stressors
- Sensitive and vulnerable and complex ecological process
- Direct influence of climatic factors – temperature, precipitation and wind
- Accelerated by biotic pressures



Forests in climate change debate

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- Basis of livelihoods- 1.6 billion people depend (food, energy, medicines)
- CO₂ Sequestration capacity - sink
- Carbon storage (1 trillion tons of carbon – twice the amount atmospheric CO₂ is stored in forests)
- Degradation/deforestation – source of GHGs emissions (17%)
- Facilitates hydrological function – water
- Home of wildlife – biodiversity
- Satisfy commitment to international obligations to MEAs (UNCBD, UNFCCC, UNCCD, UNFF, ITTO)



Participatory Forest Management in Asia

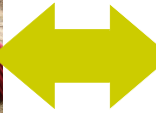
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- **Community Based Forest Management (Nepal) - 1988**
 - 20,000, CBFMGs, 1.2 million ha forest (25%) of total forest (DoF, 2010)
- **Joint Forest Management (India):**
 - Official recognition in 1988 (practice since 1971)
 - 63,000 Forest Protection Committee (27 states)- 140,000 km² (as of 2005)
- **Community Forest (Bhutan) – initiated in 2007**
 - 200 CFMGs (24,997 ha by 9763 hhs) – as of 2009 (NSCF, Bhutan 2010)
- **Community Forestry (Bangladesh)**
 - Forest Policy – 1994
 - Social forestry rules- 2004

CBFM- Nepal, Policy Background
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- Master Plan for Forestry Sector, 1988
- Forest Act, 1993
- Forest Regulation, 1995
- Buffer Zone Management Regulation, 1995
- Forest Management revised policy, 2000
- National Biodiversity Strategy, 2002
- Interim forest management strategy, 2010

CBFM: Some Preliminary Results
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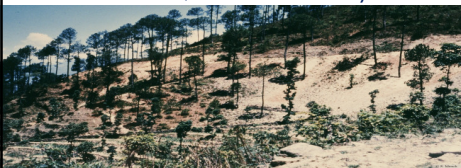

- Institutional strengthening – social network
- Economic diversification – NTFP, PES,
- Self esteem, recognition local rights
- Enhance governance

Stimulate natural regeneration of forests

- Improvement of Forest Condition- Greenery
- Enhance sequestration capacity of forest
- Avoid forest degradation- reduce emissions

Community Based Forest Management
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Pine forest in Mude, Dolakha after 27 years




1978
2005

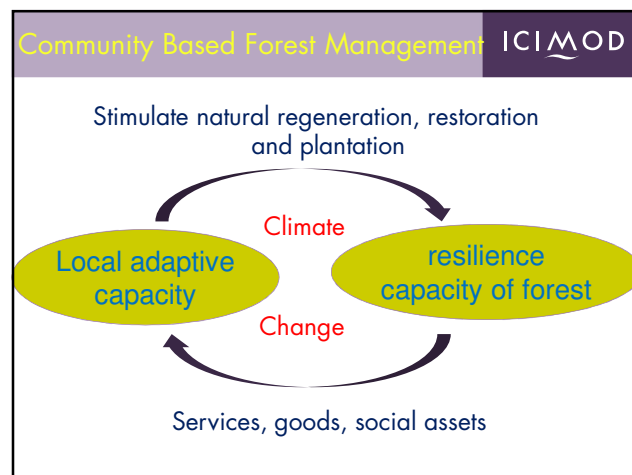
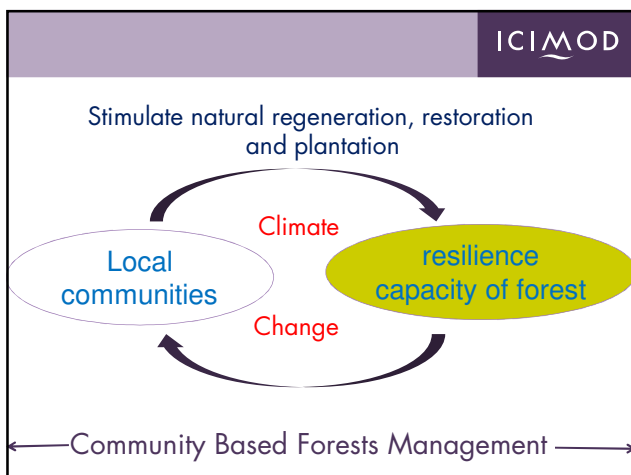
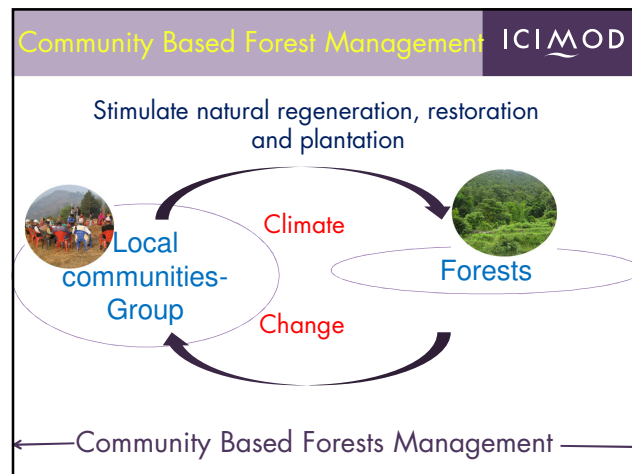
Photo: B. Pokharel

CBFM- Climate Change adaptation
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- Promote ecological process of forest ecosystem (sustainable management)
 - Ecological vigor
 - Resilience capacity
- Improve habitat integrity - harbor rare flora and fauna (biodiversity)
- Promote hydrological cycle and land management
 - Conserve water sources, quality and quantity
 - Enhance soil conservation
 - Floods control

Community Based Forest Management
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- Contribute to livelihood diversification of local-poor communities
- Information networks- means of communication- preparedness
- Social security mechanisms
 - Formal – cooperatives, insurances
 - Informal- credits (saving & credits) loan
- Exchange technology, enhance capacity



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“Adaptation for Forests” and Forests for adaptation “”

CC adaptation Policy Initiative

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- Master Plan for Forestry Sector, 1988
- Forest Act, 1993
- Forest Regulation, 1995
- Buffer Zone Management Regulation, 1995
- National Biodiversity Strategy, 2002

- Climate Change Policy 2010
- National Adaptation Plan of Actions (NAPA) 2010
- Local Adaptation Plan of Action (LAPA)
- REDD (+)
- UNFCCC – CBD
- Payment for Eco- Services

Integration of scientific knowledge, information, traditional technology, participatory approach and monitoring

Take home messages

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- Climate change **inevitable** but human causes **accelerating** it
- Forest is both **suffer** from and **safer** to climate change stressors
- Mitigation has a limit, should complement with adaptation measures (synergize in forests’ roles)
- Community based forest management initiative would be appropriate as it is participatory, context specific, and need based
- Linkage of local policies to international initiatives (PES, REDD, NAPA – UNFCCC/CBD)

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Thank you for your attention

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