

Synergies between Adaptation and Mitigation: A case of Bishnupur Community Forestry of Nepal .

4th Asia-Pacific Climate Change Adaptation Forum, 1-3
October 2014, Kuala Lumpur, Malaysia

Nirmal Kumar BK
Forest Action, Nepal

Background

- The role of Community forest (CF) in community based climate change adaptation (BCCA) and potential mitigation strategy is importantly recognized by and **National Adaptation Programme of Action (NAPA)-2010** and **climate change policy-2011 of Nepal**.
- In Nepal , Since 1980 to date, 17685 community Forest User Groups (CFUGs) are formed who are managing around 1.65 million hectares of forest (**30% of total forest**). These groups include 2.2 million households which is about **35 % of total population** of country.

Objectives of the study

- To assess the impacts of climate change in forest ecosystem and livelihoods of forest user groups.
- To identify the role of community forestry in climate change adaptation.
- To identify synergies and strategic linkages between community forestry based climate change adaptation and mitigation

Study methodology

Study area

- Sarlahi district
- Bishnupur CFUG

CF Vulnerability assessment

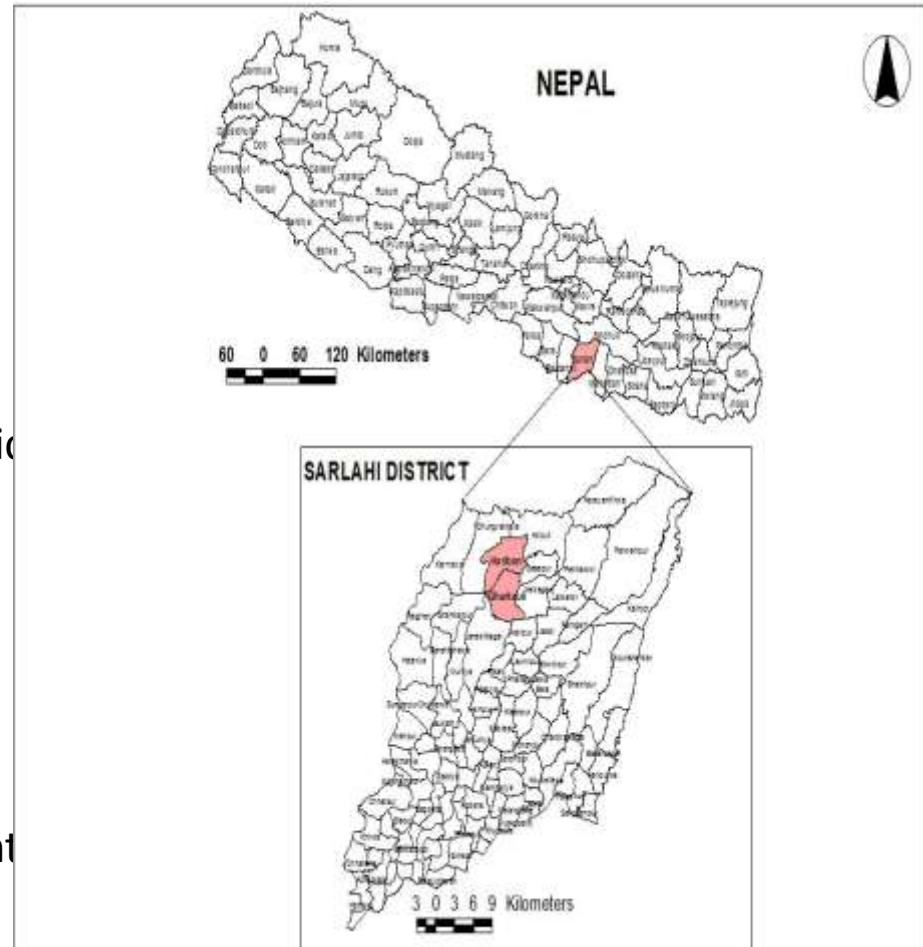
Selection of piloting site

- Women lead community forest
- High vulnerability due to climatic and natural factors.
- Practice of community forest management

Methods

- Baseline survey
- Detail vulnerability assessment
- Specific vulnerability assessment

Stakeholders analysis



Findings and Discussions

Local Experience: Impacts of climate change in forest

- **Plant sift:** *Dalbergia sisso* is now found in up hill side in the area where traditionally not found.
- **Animal sift:** Local people experience sifting of tiger, wild cow, and wild boar.
- **Changes in phenomenology :** Early flowering, seeding and shedding of leaf of Sal and Asna can be seen. Before it was occurred in late March, but now it is in late February.

Local Experience: Impacts of climate change in forest

- The production of fruit trees that give **fruit in summer** in May/June (mango, *jamun*, *kusum*) **has decreased** while the production of **fruits that ripens in winter** season (Dec/Jan) like *amla* and *amaro* **increased**
- **Decreased the availability of the grass species and NTFPs** like *ghyukumari*, *bojho* used as traditional medicine .
- **Change in species composition**, more drought resistant species. New species of shrubs emerging. Extinction of drought sensitive species: *dabdabe*, *sadhan*, *kubhindo*, and *foshro*

Local Experience: Impacts on forest dependent people

- Decreased forest based income through fruits, vegetable and medicinal plants.
- Livelihoods of the traditional wood workers have negative impacts through decline in availability of timber.
- May increase competition in forest product use and management priority.

Approach of community forestry

Community forest increased the adaptive capacities of the vulnerable

- Bottom up process
- Providing inclusive platform
- As rural financial institutions.
- Provision of revolving fund
- Equitable product distribution
- Entry point for service delivery



Positive impacts

- Stabilization of natural resource flow: river system, forest product use, biodiversity.
- Contributed agricultural production and food security.
 - increase compost manure use
 - Reduced work load of women
- Build social capital of
 - ❖ marginal community



Barriers to adaptation

- **Membership exclusion:** non user not benefit from the plan.
- **Restrictions on forest product extraction:** hamper on forest dependant people's livelihoods.
- **Diverse forest growing stock:** Larger the forest area has more adaptation potentialities.
- **Fund expenditure:** in non-climatic activities.

Linkages between adaptation and mitigations

- CF promote EBA and CBA simultaneously.
- CF has controlled and reduced the rate of deforestation.
- Increases in forest growing stock (approximately 50% since the CF).
- Reduction in GHGs emission through reduction in cattle (50% reduction in cattle)
- Potentialities of pro-poor and people-centered mitigation.

Potential gaps and conflicts between adaptation, CF and REDD+

- **High value timber forest:** have high opportunity cost of conservation for mitigation.
- **Problem of landlessness:** it is the issues of whether forest land is for forest or for agriculture land.
- **Issues of land tenure:** user has tenure on forest but not in forest land.

Further action need

- How down and upward PES mechanism promoted?
- How local budget (public, private..)made more climate sensitive.
- How CC sensitive forest management guidelines developed.
- How conservation oriented management diverted towards more utilization.

Thank you

