



Adapting to Climate Change in Mountain Regions



UNEP, UNDP and IUCN EbA Side-Event

2 December 2011, Durban

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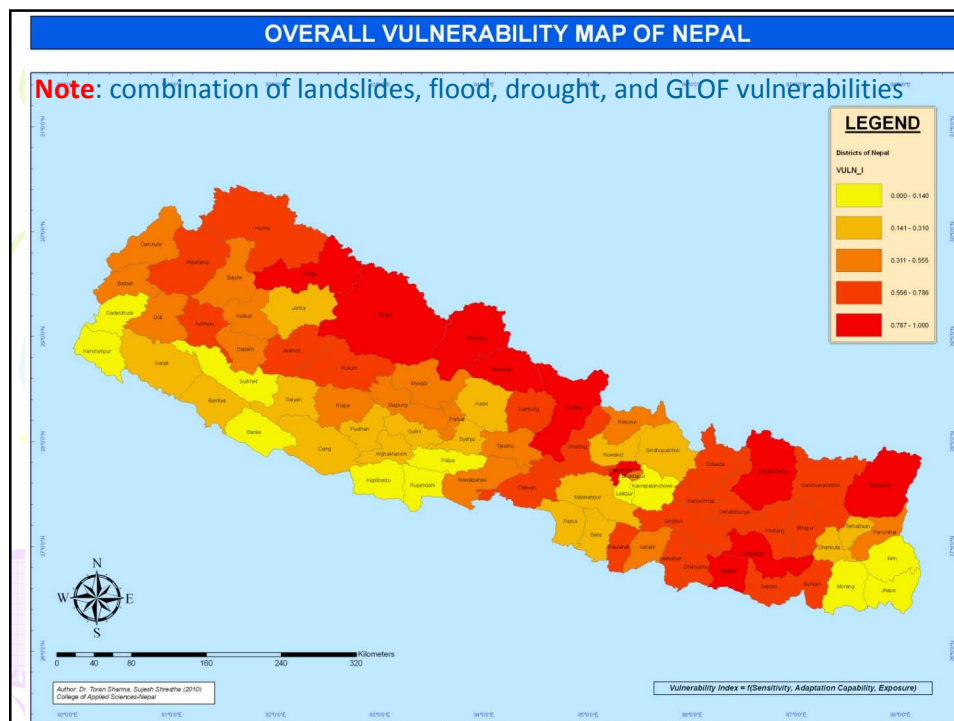
Ecosystems and Livelihoods

- Nepalese people depend on ecosystem services for their primary livelihood
- Agriculture mostly depends on rainfall and forests/rangelands
- Firewood is the major energy source for cooking and warming
- Continued supply of hydro-electricity also depends upon managed forests



Change in Climate and Impacts

- Consistent warming with average warming @ **0.06°C/year**
- **Warming high in northern part**
- GCM with the SRES B2 scenario show the mean annual temperature to increase by an average of 1.2°C by 2030, 1.7°C by 2050 and 3°C by 2100 compared to pre-2000 baseline
- Delayed monsoon, erratic rainfall and shorter rainfall duration and climate-induced disasters
- High rate of snow melting, shifting of vegetation and wildlife migration





Nepal's NAPA, 2010

One-third of Nepal's NAPA priorities are directly linked to ecosystems management

1. Promoting community-based adaptation through integrated management of agriculture, water, forest and biodiversity sectors
2. Forest and ecosystem management for supporting climate led adaptation innovations
3. Ecosystem management for climate adaptation

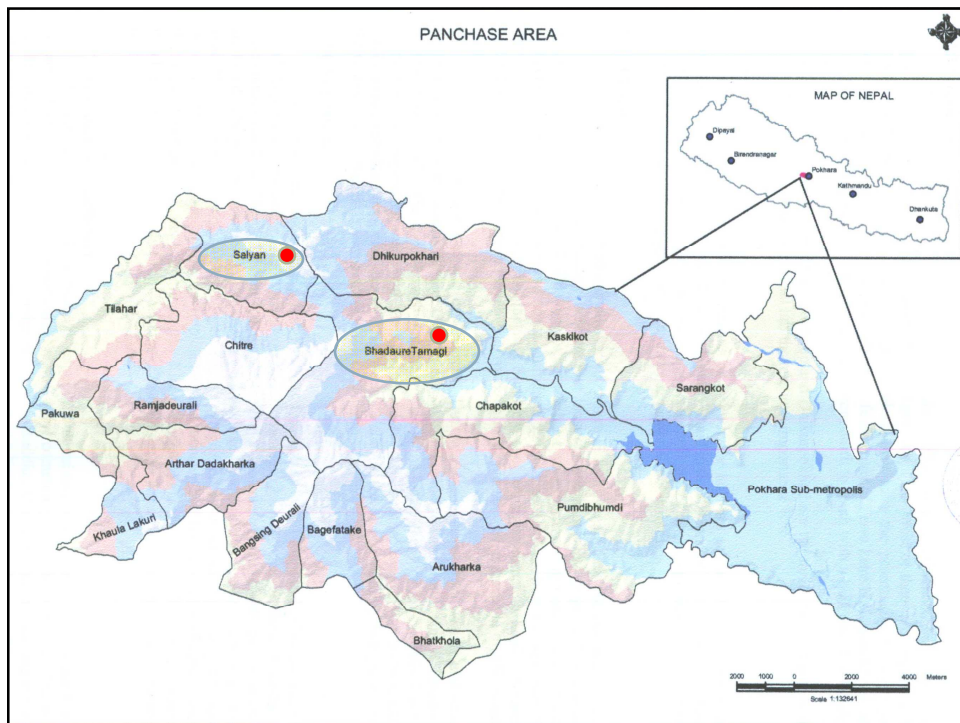
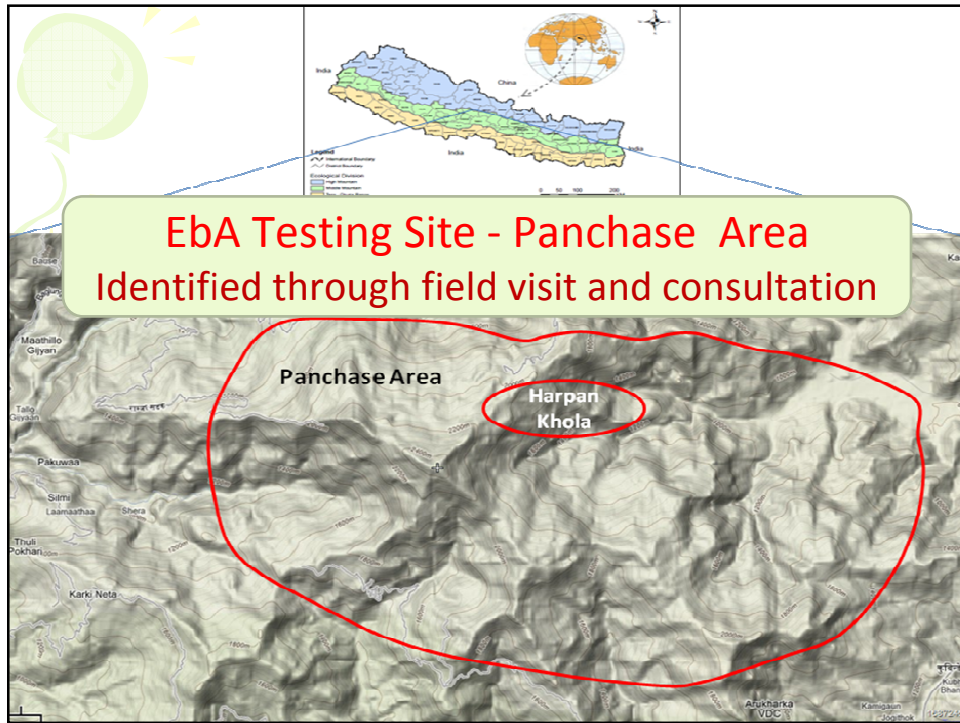


Global Flagship Project: EbA Outcomes in Nepal

Goal: *Plan and implement EBA strategies and measures at national and ecosystem level based on best available scientific knowledge and practices.*

EbA Outcomes

1. EbA measures integrated into national and ecosystem level policies and plans
2. EbA to climate change plan developed and demonstrated to increase resilience of vulnerable mountain communities and ecosystems
3. National and international EbA knowledge enhanced





Panchase Area – Ecosystem services

Challenges and Actions

- Human wellbeing highly dependent on ecosystem goods and services
- Ecosystem services – highly vulnerable to CC
- Major challenges - landslides, soil erosion, availability of drinking water, reduced agricultural production (pest), and degraded grazing land
- Possibility for developing PES system
- Development and piloting of tools and methodologies – replication
- Project document under review process
- Implementation in line with NAPA 2010, CC Policy 2011, and LAPA, 2011