Climate Change and Indigenous Peoples in Nepal

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NEFIN, NEPAL
Nepal’s International Commitments


- ILO C. 169

- UNDRIP
Nepal’s Share

- The share of Nepal in the global emission of greenhouse gases is negligible

- Per Capita CO 2 emissions in the country is estimated at 0.13

- Average temperature in Nepal is rising by 0.5 degrees Celsius per decade
Climate change effects are visible in Nepal for last few years
Main effect
Extreme climate events

- Melting of Himalayan glaciers
- Flood
- Draughts
- Heat wave
- Cold stream
Tsho Rolpa from 1950s to 1997,

Photo © P.K. Mool, 2000 and WWF
GLOF Destruction (Dr. Sherpa)

- Dig Tso destroyed Namche Micro-hydro
- Destroyed farms and bridges
- Caused loss of life
- Redevelopment costs
Melting of glacial ice mass and loss of water storage capacity (Dr. Sherpa)
Decreasing water availability
“A icy river of the Annapurna turned into a dry river bed” – The Gorakhpapatra Daily, February 6, 2009
Effects on crops: Myrica esculenta ("Kafal")
Ripe in February, instead of April & May
Kantipur Daily, February 18, 2009
आलुबीउमे दुसा प्लाजिप्पि किसान चिन्तित
Changes in monsoon pattern
Loss of productivity in rain fed agriculture

Shortage of water for crop irrigation and conflicts.
Climate change and farming systems

Forcing shifts to other virgin areas,

Encroachment of forest land

As consequences,
  • farmland retreat ultimately;
  • frequent storm would cause crop damage; and
  • changes in precipitation would reduce productivity of land.
Climate change and farming systems

Other impacts of climate change on farming systems are:
- Changes in water resources available for irrigation and damage to irrigation infrastructure
- Longer growing season in frost-affected areas which affect upland farmers;
- Desertification of productive agriculture land due to flood, draughts and soil erosion;
- Risks of monoculture instead of diversified agricultural production due to extreme weather events, pests and diseases;
- In the country about 64 percent of cultivated areas are fully dependent on monsoon rainfall;
- Crop productivity is also vulnerable to change in nature, time and duration of monsoon rainfall;
- In drier areas, climate change is expected to lead to salinisation and desertification of agricultural land; and
- Productivity of many crops could be decreased due to heat stress, longer dry seasons, uncertain rainfall and degradation of land, with adverse consequences on food security.
Recent Effects

- **Other Crops/Plants**
  - Peas (early plantation; change seeds)
  - Rhododendron (early flowering)
  - Apple (loss of sweetness)

- **Water**
  - Damage in irrigation infrastructure

- **Insects**
  - *Bhusuna*
  - Mosquito
Vanishing snow Peaks
Wetlands dry up and
Lake level drops
Vulnerable to natural hazards
Displacement and migration
Loss of Biological Diversity and Economic values
Loss of habitat
Poverty and hunger

Strategy for food security
Agricultural productivity is suffering from severe losses and

Attainment of food security is under tremendous threats
Results of Climate Change

- The Tsho Rolpa glacial lake, which is known as the most dangerous glacial lake in Nepal, has swollen containing nearly 100 million cubic meters of water.

- It was reported that if it burst, the Tsho Rolpa could affect life and property as far away as 100 kilometers downstream.

- The water level of the lake needs to be brought down by at least 20 meters to ensure safety.

- Recently in 2003, the Kawari glacier lake, situated in the foothills of the Annapurna II mountain, burst, destroying property worth US $100,000.

- Five people were killed and dozens rendered homeless.

- Glacial lake bursts on smaller scales have been frequently reported in the past.
Results of Climate Change

- Flood, hailstones and crop diseases which caused serious production losses

- Every year, the number of people dying in floods and landslides is in increasing trends. In the years 2000 to 2005 more than 1314 people died of floods and landslides across the country

- In July 1993, Nepal experienced the worst natural disaster in record. Two days of torrential rainfall in central Nepal triggered disastrous landslides, and caused major flooding in main streams and the Terai plains

- About 28,000 people in the mountain areas and 42,000 people in the lowlands were affected

- About 160 people in the highlands and over 1000 people in the lowlands were killed due to flood and landslides.
Non-IPs Perspectives on Social Impacts

- Consequences of climate change vary by geographical location and remoteness.

- Effects will be more negative to communities who are living in hills, mountains and river flood plains.

- Poor communities are more vulnerable as they have less capacity to cope with disaster and are more dependent on natural resources such as land, water, forest, pastures and food supply for their livelihood.

- Moreover, women are the most vulnerable group and bear much of the consequences. Because in rural areas women are very close to nature and environment as they gather fuel wood, fodder and manage local water supply.
Social Impacts

- Affects health of millions of people especially the poor, the elders and the city dwellers through increased deaths, disease and due to heat waves, floods, storms, fires and droughts.

- City dwellers are especially affected due to acute water shortages.

- Migration as people have tendencies to migrate in more climatically suitable areas.

- Invasion by non-native people could distort tradition and culture of native people of that particular location and available natural resources of that area will be in further stress.
Mitigation measures proposed by non-IPs

- Controlling population growth
- Limiting fossil fuel use
- Promoting hydropower
- Promoting geothermal
- Sequestering carbon through a forestation
- Changing food habits (less meat)
- Creating understanding & awareness
- Promoting cooperation
Nepal Government has no money and political will

Nepal government's and international donor’s policies, plans and programs ignore IPs

IPs at the local level are not aware about climate change, IPs rights ensured by UNDRIP and other international instruments of human rights
Adaptation

- Adaptation is a process through which societies make themselves better able to cope with an uncertain future.

- Adapting to climate change entails taking the right measures to reduce the negative effects of climate change (or exploit the positive ones) by making the appropriate adjustments and changes.
Adaptive Measure

- Disaster management and awareness
- Agricultural research and trials
- Settlement planning
- Water harvesting technologies
- Protected areas and conservation
- Becoming aware
- Scenario Planning and being ready for uncertainties
- Others
Cooperation

- International, national, local and individual level.

- Expecting sudden changes and uncertainty

- Planning for it.
Nepal’s Experience in Climate Change Issues
Mr. M.B Karki, Secretary, MOPE, Nepal

Current Activities
- 1 Initial National Communication to UNFCCC is finalized (endorsed by HMGN on July 1, 2004)
- 2 INFOTERA agreed in providing infrastructural support to strengthen Climate Change unit in MOPE.

Pipeline Activities
1 National Adaptation Plan of Action (NAPA) is under preparation under UNDP collaboration.
2 CDM strategy for Nepal is under preparation.
3 MOPE in collaboration with UNEP has finalized a program for capacity building in climate change.
4 National Climate Change Strategy is under preparation.

Needs
1 Institutional Strengthening.
2 Implementation of the recommendation of National Communication.
3 Demonstration Project like "Establishment of systemic observation of climate change" with equipments.
4 Climate change awareness program
5 Support to training, seminar, and conference on climate change.
NEPAL IN REDD PROCESS

Ministry of Forest and Soil Conservation (MFSC) has taken a step towards climate change mitigation through market mechanisms offered by REDD.

Eembark on the World Bank’s REDD program so as to be ready for forest carbon transaction when the tenure of the KP ends in 2012

Preparation and submission of the Readiness Plan Idea Note (RPIN) is the first step in this direction.

The R-PIN process has been characterized by:
• Exploration of potentials, problems and recommendations associated with the future national REDD framework
• Capacity development package to fulfil the operationalization aspects of the above framework
• Exploration of the impending governance issues related to the operationalization aspects
• Setting informal multi-stakeholder processes in motion by developing R-PIN through a consultative process
• Projecting success in participatory forest management regimes for leveraging on a pro-community forestry REDD concept.

Nepal’s R-PIN was sanctioned by the World Bank under its FCPF’s Readiness Fund.
CHALLENGES IDENTIFIED BY NEPAL GOVERNMENT

There are four major challenges in implementing the REDD strategies in Nepal:

a) policy and institutional aspects;

b) financial instruments;

c) capacity development; and

d) equity and inclusiveness
Thank you!

Horche!