

# Climate Change and the Himalayan Glaciers: Problems and Prospects

Resolutions of the global e-conference on  
Climate Change and the Himalayan Glaciers  
7-30 May, 2007

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# Problem statement

- Global warming and climate change are no longer the issues of debate.
- Mountainous regions are relatively more prone to these effects and snow and ice covered areas are most sensitive.
- Glacier and Ice cover about 17% of the Greater Himalayan region, a total area of nearly 113,000 sq. km. (Xu et al 2007)
- The average earth surface temperature increase trend: 0.3 to 0.6°C over past hundred years. (IPCC 2001)
- Warming in Nepal & Tibet was 0.2-0.6°C between 1950 and 2001. It has also lengthen the life of warm seasons (Xu et al 2007)
- On the Indian subcontinent IPCC prediction is between 3.5 to 5.5°C by 2100 (IPCC 2001). Recent predictions are more alarming.
- Lack of a platform to discuss on various dimensions of CC in the region

# Response: e-conference on Climate Change and the Himalayan Glaciers

## •Objectives:

- Facilitating a series of dialogues among different levels of experts on the e-conference theme;
- Sensitizing different aspects of the theme of the e-conference at various level;
- Promoting knowledge sharing mechanism on the theme of the e-conference.

## •E-conference Overview:

- 161 entries by 150 participants from 26 countries (all continents represented). About 60% of them are from the region.
- All major institutions/individuals participated (eg. APN, ICIMOD, ITDG Nepal, IUCN Nepal, NTNC, Reynolds Geo-sciences, Tribhuvan University, Winrock International, WWF Nepal & India, MoEST/GoN)

# E-conference organization

- Lead by Environmentalist's Association of Nepal & supported by Ministry of Environment, Science and Technology, Government of Nepal.
- All possible channels used to maximize qualitative representation from all concerned sectors (Government, I/NGOs, Academia etc.).
- Grouped into three sessions: Background paper for first two sessions was introduced and last session was open discussion.
  - Current Status and Pressure (7-15 May 2007)
  - Future Potential Threats and Challenges (16-22 May 2007)
  - Future Course of Action and Priorities (23-30 May 2007)
- Dedicated website developed and discussion maintained in Google groups.

# Discussion: Current Status and Pressure

- Scientific communities to focus on immediate actions for adaptation rather than making future projections.
- clarity needed on what is caused locally and what is contributed by the global process?
- scientists need to be more honest about the uncertainties surrounding climate change prediction to avoid losing public trust.
- Lack of sufficient monitoring stations and baseline information.
- Numerous example presented supporting impact of climate change in the region; including change in vegetation pattern, variation in river flow, glacier related hazards and may other climatic extremes.

## Consensus of the 1st session

Climate change is real, its has already started to show its impacts but it should be carefully analyzed rather than overestimating

# Discussion: Future Potential Threats and Challenges

- Many species including Adelie Penguins, Caribou, Monarch Butterflies, Migratory Songbirds, Polar Bears, Trout, Coral Reefs and Arctic Foxes are at verge of extinction in various parts of the world.
- Various projections and images were shared to show present development and future trends. Future projections are terrifying.
- Advocated to look the climate change induced issues in a wider level. Highlighted changes in temperature, wind and precipitation, weather hazards, vegetation, water supply and housing, agriculture and lifestyle/ business as major areas to be considered for climate change research.
- Human security should be linked with climate change

## Consensus of the 2nd session

More scientific works and monitoring mechanisms are needed in the region to acquire minimum information base for effective planning.

# Discussion: Future Course of Action and Priorities

- Regional Inventory published by ICIMOD and UNEP in 2001 was the most useful document at that time but now its time to update the study covering all existing information and using Hi-Fi technologies.
- Regular monitoring is needed in all possible areas prone to disaster as well as where future danger lies.
- National and regional works in the regions should come through international journals and more authentic channels in order to disseminate the information at wider level and minimizing the duplication.

## **Consensus of the 3rd session**

Sufficient researches should be carried out in the region and at the same time adaptation and mitigation plans should be developed to prevent people from danger

# Concluding Remarks...

- Debate on global warming (glacier melting included) has diverse views and perspectives. They help the process of reaching the better truth and should be allowed.
  - More scientific objectivity focused work in diverse situations needs higher priority.
  - Adaptation focused research addressed to specific contexts should also get high priority.
  - The present E-conference has demonstrated the utility and need as well as has imparted considerable confidence to the organizers to repeat the E-mail based debate on other related subject.
- From concluding remarks by Dr. N. S. Jodha



# ...Concluding Remarks

## **ClimateHimalaya was urged for the following activities**

To develop a discussion group for regular update and necessary discussion.

<http://groups.google.com/group/Environment-Professionals?Ink=iggc>

- To develop a network of related professionals and institutions in the region or with work at regional level.
- To develop an information base focusing various aspects of climate change and possible impacts and mitigation measures in the region.
- Publishing an e-newsletter in a regular basis covering all the issues (like member's database, related events, emerging areas, and partner/member organization's activities)
- Continuing discussions on climate change with thematic focus

[All in progress](#)