

The Eco Generation

Newsletter

International Graduate Conference on Climate Change and People, 15-19 November 2010, Kathmandu, Nepal

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Highlights

0930-1045

Changing Regional Hazards: Murataly Duishonakunov

1100-1200

Disaster Management and Early Warning Systems: S.H.M. Fakhruddin and R. Shrestha

1330-1700

Eco-generation Day presentation: Plotting to Save the Planet: Students' Regional Concerns from the "Roof of Planet Earth" for COP 16 (Mexico 2010) and for COP 17 (South Africa 2011)

As The Conference Frolics on Day 2

With a lot of excitement among participants, the second day started with a presentation from Dr. Michael H. Glantz. He shared his wealth of experiences from Rio Earth Summit to the Copenhagen and raised significant issues on the upcoming COP 16. He described that there were many constraints during his activist stage - the lone man to fight against the climate change while supporting his family. By his influencing words he revealed climate change facts and reasons for difficulty in coping with the changing climate. The day was focused on impacts of climate change on water resources and biodiversity. On this issue, Ashutosh Mohanty, from ICIMOD highlighted on regional impacts of extreme climate variability and change on Greater South Asia with support from a participating PhD student of Bangladesh and a lecturer from Afghanistan.

Prof. Dr. Gordon Young, senior scientist from the International Association of Hydrological Science, in his keynote speech, shared his experiences in the Himalayan region. He explained the need of global governance on water related issues as it is one of the most important components of life.

Similarly, Dr. Dinesh Raj Bhuju, senior scientist at NAST, highlighted the major impacts of climate change on biodiversity. Vegetation shifting in Himalayan region is the best example to prove the above statement. Later on, he opened the floor to discuss climate change and our attitudes to tackle the ongoing problems.

Dhiraj Pradhananga, President of The Small Earth Nepal, introduced the topic "Teachable moment as an educational tool". In his presentation he shared that people are always learning from actions of past activities and therefore teachable moments can also be used in climate change.



Dr. Gordon Young Speaks to the Youth

As the clock ticked 12:00 it was Prof. Dr. Gordon Young's turn to take the stage. Dr. Young is one of the leading scientists at the conference and every participant had a sense of excitement reflecting as he arrived. Dr. Young takes the stage in his ever comfortable and refined style and presented on the challenges of global water management in 2020 with focus on the Himalayan Region. "The major question is that who manages water, how effective is that management and are management styles changing?" he said. Further, he described the grave water management issues society faces and extended his points to the Millennium Development Goals. "There is need to develop river basin authorities and regional cooperation protocols to minimize potential conflicts" Dr. Young emphasized in his lecture. He also added "Countries shall soon start disputes with each other accusing another for over-mining the shared aquifers and water resources". With highlights on energy biased chasms between the rich and poor countries and issues of water pollution he finally concluded with an active discussion session on the biggest issues societies shall face in case of water woes induced by climate changes.



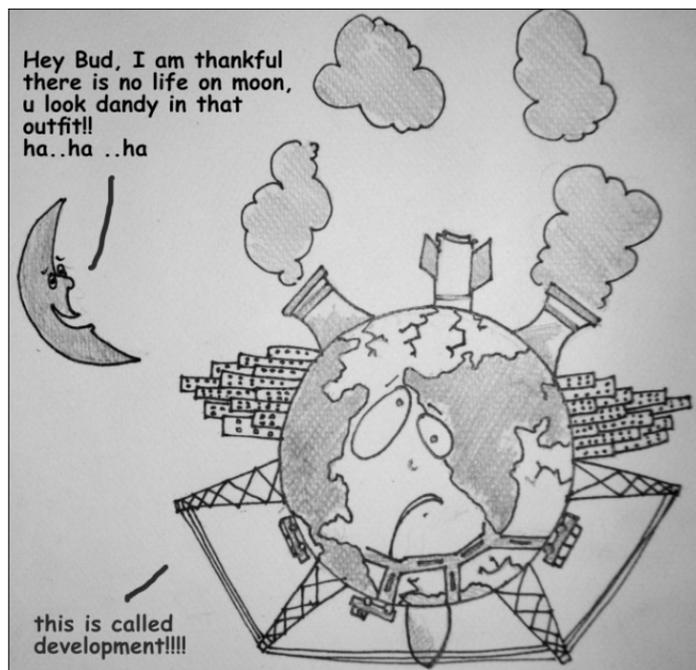
Professor Dr. Gordon Young is currently the president of the International Association of Hydrological Sciences (IAHS) and professor at the Wilfrid Laurier University, Waterloo, Canada. He achieved PhD in glaciology from McGill University Canada in 1971 and from 1991-1992 served as Coordinator of the International Conference on Water and the Environment, based in the World Meteorological Organization, Geneva. In 2000, he was appointed as Coordinator, World Water Assessment Program, the Secretariat of which is attached within the Division of Water Sciences, UNESCO, Paris.

Changing Climate, Losing Species!



Kathmandu, November 16th, 2010, "I myself cannot judge whether the attitudes of people can be changed or not", these were the final words of the presentation by Dr. Dinesh Raj Bhuju, a leading scientist from Nepal Academy of Science and Technology (NAST). He presented "*Biodiversity services and threats from the climate change*" in the conference. Dr. Bhuju embarked with a short historical description on Climate Change events. Two different types of hypothesis that proves the extinction of dinosaurs were put forward and one of which was related to climate change; different historical researches proved that the extinction of different species is related with climate change. Industrialization, sharp rise in the use of fossil fuels and deforestation are the main activities of human beings that have increased the total carbon dioxide production into the atmosphere at the global level. He opened the floor to discussion about the climate change and our attitudes to tackle the problems of climate change.

By Pranav Pokharel



Cartoon of the day

A Climate Change Hypocrisy

Pranav Pokharel, Nepal

"It is necessary to change the attitude of luxury seeking carbon emitters not the poor minimalists with ecological footprints smaller than their own foot prints", a participant expresses his opinion at the conference. As the conference is progressing, participants are more expressive and the lecture hall transfigures to a ring where different opinions on climate changes wrestle. When one is a victim of *the low emitters are greatest sufferers*, a trend of climate change, overwhelming feelings are obvious, but what my insanely fanatic thinking realizes is that the opinions drawn had a pre conceived prejudiced credo, "Developed countries caused Climate Change".

When cars were built, developing countries equally enjoyed the savory of these luxuries, the point is directly or indirectly the developing world has enjoyed every progress the developed made which contributed to carbon emission. Accusing the developed world for carbon emission is an act of hypocrisy, given opportunity and technologies the developing would have done the same, emit carbon and vandalize the natural system.

I for one find it cynical when the developing world screams at the top of their lungs and accuses developed for causing climate change and we have been doing this for almost 2 decades now, merely achieved anything. For instance if a country is suffering from water scarcity as a consequence of climate change and is experiencing population outburst on the other hand, the failure to adapt is not the lack of technology. The country should consult a family planning policy to reduce the population instead because provided the best technologies population boom is going to outsmart the technology and eventually in a year or two the adaptation plan will fail. Countries should focus more on ameliorating and exercising on internal facts which persuaded them to strand group of poor and under developed. Blaming the rich and developed is like a kid accusing his friend for cheating in tests when he scores an F and his friend A+.

Indeed the developed countries are the major contributors but these verbal abuses need to curb at some stage and focus should shift on other issues to solve climate change. Perhaps strengthening the government system and panning, reducing population could the best available method to adapt with existing and available technologies, this makes management docile and efficient.

As the President of The Small Earth Nepal, Mr. Pradhananga stated in the inaugural ceremony, "Climate Change is a global phenomenon which requires unified action", the developing world should realize their internal defects and the developed should take responsibility of their actions. I hope as the conference proceeds, these matters will be discussed more openly among the participants.



Incentivizing Farmers for Climate-friendly Agricultural Practices

S. Arun, Indian Institute of Forest Management, Bhopal, India

Agricultural ecosystems offer the crucial service of mitigating climate change by sequestering carbon in biomass and soil. These ecosystems are also a source of greenhouse gases (GHG), primarily, methane and nitrous oxide. We have the responsibility of investing in protection and amelioration of the climate change mitigating service of agricultural landscapes. A practical way of doing this is through Payment for Ecosystem Services (PES), which is an economic tool for providing incentives to farmers, for agricultural management practices that can either sustain or augment this service. Incentivizing poor farmers to adopt environmentally friendly agricultural practices would result in both climate change mitigation and poverty reduction. Organic farming, conservation tillage, nutrient management, reduced burning and agro-forestry are some strategies for increasing the carbon sequestration potential and reducing GHG emissions from agriculture. However, there are several roadblocks to establishing an effective PES system among Indian farmers, which include small holding size, weak credit system, disintegrated farm holdings, high level of indebtedness, lack of title and erratic production patterns. PES models must include both market and non-market (public and private) mechanisms of incentivizing farmers so that the overall model is sustainable and achieves its environmental protection goals. Linking PES to Reduction of Emission from Deforestation and Degradation (REDD) or Clean Development Mechanism (CDM) is one way of ensuring a stream of incentives for farmers. Another challenge is to integrate global payments in such a model, as the ecosystem service generated has globally pertinent benefits, and avoiding this aspect would lead to global users free-riding on local resources. Evolving effective PES models can help in including farmers in fighting the impending disaster due to climate change.

Attending the conference...

Prof. Suresh Raj Chalise, Advisory board member of International Graduate Conference on Climate Change and People and Nepal representative at International Association of Hydrological Sciences (IAHS). He was former dean of Institute of Science and Technology, Tribhuvan University, Nepal and was the coordinator of Water Program at International Center for Integrated Mountain Development. His works and publications have been mainly in the areas of climate, hydrology and water resources, hazard management and environmental conservation in the HKH Himalayas.



Mr. Duishonakunov Murataly is a senior lecturer at the Kyrgyz National University, Department of Physical Geography on General Hydrology and Water Resources of Kyrgyzstan. Mr. Murataly completed his Post Graduate Diploma on Remote Sensing and Geographical Information System from Centre for Space Science and Technology Education in Asia and Pacific (CSSTEAP) in 2008.

Participant's voice: Is adaptation preferable to mitigation in case of melting of Himalayan Glacier by Climate Change? Why?

Mohammad Arifur Ratman, Bangladesh

Adaptation must be done as mitigation is a very costly process.

Shamimul Islam, Bangladesh

We should definitely go for adaptation, after being adapted to this natural phenomenon we should look towards mitigation.

Iris Cheng, China

Urgency is adaptation but the needs depend on the time and location.

Duong Ngugen Thug, Vietnam

We need to approach both aspects but mitigation is costly.

Anjan Neupane, Nepal

Mitigate direct effects such as glacier retreat and adapt towards indirect consequences such as less productions in agriculture.

Samia Shamin, Bangladesh

Both should be practiced. However, since population are being victimized by climate change, adaptation is needed or beneficial, while mitigation is costly.

Achala Gupta, India

Adaptation is the only one option.

Dr. G.H Amila C.Silva is a visiting researcher at the International Research Center for River Basin Environment, University of Yamanashi. Dr. Silva presented on modeling of the Hydrologic Cycle I and Science Modeling the Hydrological Cycle II on November 15 and 16, 2010 at the conference. He can be reached at amila@yamanashi.ac.jp.



A Rendezvous...



Dr. Dinesh Raj Bhujju, is a leading scientist of Nepal currently at the Nepal Academy of Science & Technology. His areas of expertise are ecology, forestry, nature conservation, biodiversity and region of work interest is the Asia-Pacific. The Eco-Generation team had an opportunity to talk with Dr. Bhujju and has compiled a short interview for our curious readers during the conference.

TEG: As a science practitioner, how do you appraise this conference?

DRB. Looking at the organization of the conference and its participants, personally I found myself much relieved, relieved in the sense that the young generation is taking up the issue (of climate change) so sincerely and with a great deal of dedication. It also demonstrates their ability of handling important events at a larger scale. The conference, no doubt, has impressed the scientific community of Nepal. I can only hope if these youths also focus on real science experiments in generating knowledge. Finally, it is the wisdom what we need to overcome this problem (of climate change).

TEG : How is climate change making impact on biodiversity?

DRB. In a wide perspective, species are the pug-marks of climate, while climate change adds on spectrum on them. The biological diversity we see today is, in fact, a product of climate change forcing adaptation or extinction. Had the Earth not witnessed the climatic roller coasters in its history, neither it would have been a livable place nor lead the evolutionary processes. Our concern today is the rapid deterioration of the environment (example global warming) due to our own misdeed, which is pushing many of the species to the brink of their existence. In brief, climate change is making negative impact on the biodiversity as majority of the species in the ecosystem are losers of the game.

TEG: Is climate change an opportunity or problem?

DRB. Often the problem and opportunity are said to be the two sides of a coin. The climate change is a problem because it is fast dismantling our set-up and development trend so helplessly. However, for an optimist, it is opportunity to discover new knowledge and *eureka* of new technologies. As science understands the reasons behind climate change, for those working with science, it is always an opportunity. Even in a philosophical sense, for some it gives a chance to *nirvana*, while leaving space for others.

TEG: How do you evaluate the climate change research in Nepal?

DRB. That is where I am unsatisfied. Much of the climate change works in Nepal are limited to seminar deliberation, report preparation, media highlights and to some extent awareness building. We lack empirical evidences as we have scarce scientific research conducted in climate change in our condition. We hear and also see a lot of funds being pumped in the name of climate change, but it lacks support to scientific research. The scientific community is bewildered how we are going to adapt and/or mitigate climate change impacts without doing any good science.

Answer of Eco Generation Quiz 2

Mauna Loa, Hawaii, USA and 1958

Congratulations to Mr. **Mohammed Iliwas**, Bangladesh, winner of the Eco Generation quiz 2 by lucky draw.

Thanks to all the participants!

Contact

The Small Earth Nepal

626 Bhakti Thapa Sadak, New Baneshwor, Kathmandu, Nepal

P O Box: 20533, Kathmandu, Nepal

Telephone: 977-1-4782738

Email: smallearth@wlink.com.np

www.smallearth.org.np

Eco Generation Quiz 3

How many countries attended the Stockholm Conference on 1972?

Please send your answer at ecogenerationquiz@gmail.com by 10 pm today. Winner will be awarded with an attractive prize.

Media Team

Dhiraj Pradhananga

Pranav Pokhrel

Jeeban Panthi

Piyush Dahal

Nammy Hang Kirat

Mohan Chand

Achut Parajuli

Rajan Subedi

Sarita Karki

Bibishan Rai

Jony Mainaly