

Seminar Report

Environmental Community Awareness Seminar Series

CLIMATE CHANGE AND ENIRONMENT QUALITY: CHALLENGES AND OPPORTUNITIES



Prepared By

Asta-Ja Research and Development Centre (Asta-Ja RDC)
Kathmandu, Nepal

Supported By

Non-Resident Nepali Association National Coordination Council (NRNA NCC), USA
Community Environment Academy, and Asta-Ja USA

6th June, 2019

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1. Background

The seminar 'Climate Change and Environmental Quality: Challenges and Opportunities' was held on 6th June, 2019 in Kathmandu as a part of the monthly seminar series on 'raising community awareness on environment issues' with the support of Non-Resident Nepalese Association, USA, Community Environment Academy, USA, and Asta- Ja USA.

Effects of Global Climate Change on environment are widespread from coastal areas to high elevation regions. Commonly cited climate change impacts include increased temperatures, inclement weather conditions, frequent incidences of intense rain events and flooding, and prolonged drought conditions. Similarly, high-altitude regions also currently experience a multitude of climate change impacts including rising in temperatures, early snowmelt, incidences of new diseases and pests on crops, erratic rain events, mass wasting, and drying of springs.

Environment pollution is of a serious concern to the city of Kathmandu in Nepal. Rapid, but unplanned, urbanization, increasing number of vehicles and energy consumption, emissions from industries, heating, and burning woods and other trash materials; trans-boundary air pollution, chemical uses in agriculture, poor and failing septic systems, exposed ground surfaces leading to excessive dust in the air, poor disposal of solid and hazardous wastes, and other activities are leading to environmental degradation at an alarming rate. Environmental pollution has not only threaten public health, it is adversely affecting the aesthetics, tourism, ecological integrity, and economic activities in the city. Unsafe disposal of hazardous waste, e-waste, and biomaterials is spreading highly toxic substances which are often long lasting in the environment. City inhabitants are already experiencing nontrivial impact of geometric growth of contaminants in air and water, and, there is a strong public call for immediate control on environmental pollution and ecological restoration.

2. Objectives of the Seminar and the Participants

The overall objective of the seminar was to raise community awareness on climate change and environment quality of Kathmandu Valley and Nepal.

The participants of the seminar were Professors and students from the Environment Science Program of the School of Geoscience of Louisiana University and Arizona University, USA. In addition, students from Himalaya College of Agriculture Science and Technology (HICAST), Himalayan College of Engineering, and Amrit Science College, Kathmandu participated in the seminar. Additional participants included Nepalese professors, scientists and experts of environment, climate change and agriculture and Asta-JA RDC officials.

3. Programme of the Seminar

The President of Asta-Ja RDC Mr. Pushpa Lal Moktan gave welcome remarks and highlighted the importance of seminar to address effects of climate change ad issues of environmental pollution in Kathmandu valley and Nepal.

The seminar had two sessions, each with five presentations. The first session on 'Environmental Quality of Kathmandu Valley' was chaired by Prof. Dr. Durga Dutta Poudel, Environmental Science Program, School of Geosciences, University of Louisiana at Lafayette, USA. Prof. Poudel introduced the Nepal Field Experience Pilot Study Program of the University of Louisiana at Lafayette, Louisiana, USA, in which sixteen students and two faculty members were visiting Nepal May 23-June 7. All sixteen students presented their findings in the seminar. Associate Prof. Dr. Timothy Duex from the same university chaired the second session on 'Global climate change'.

Asta-Ja RDC Executive Member Mr. Bishnu Dayal Singh presented vote of thanks, and the program was moderated by Associate Prof. Dr. Udhav Raj Khadka of Tribhuvan University, Nepal. The details of program schedule of the seminar is presented in Annex I.

4. Paper Presentations

There were 10 papers presented in two sessions of the seminar. Papers presented in the first session were:

1. Geology of Kathmandu and Nepal
2. Water and sanitation
3. Climate change and zoonotic diseases
4. Air and water pollution of Kathmandu Valley
5. Youth alliance for environment

The papers presented in the second session on global climate change were:

1. An overview of climate change impacts in Nepal
2. Climate change adaptation and green infrastructure
3. Climate change impacts on rainfall pattern, agricultural production, and wildlife
4. Climate change and geohazards and changing hydrology of glaciated landscape
5. Emerging diseases, pests, parasites and zoonotics

5. Discussions

The open session for discussions was facilitated by Prof. Dr. Durga Poudel. There were many questions and comments from the participants. The paper presenters responded to their respective questions and concerns raised by the participants. Some important questions were:

- How is water quality linked with public health and quality of life?
- How can the Bagmati river and other rivers water in Kathmandu valley be made clean?
- What are the precautionary measures to be taken to prevent from water borne diseases?
- Old / outdated vehicles are major cause of emission in Kathmandu valley, how can we manage them?
- Why the rainfall trend of Nepal is decreasing while the flood events are increasing?

4. Conclusions

The seminar was a great success on raising awareness among the participants on global climate change and environment quality in Kathmandu valley and Nepal. In addition, it provided a good opportunity for students, professors, scientists and experts of both USA and Nepal to meet, share and exchange their knowledge, views and experiences on the issues of environment pollution and climate change.

Annex 1: Program Schedule of the Seminar

Climate Change and Environmental Quality: Challenges and Opportunities

Date: 6th June, 2019

Venue: Smart Café, Dhumbhbrahi, Kathmandu, Nepal

Time: 8:30 am – 1:00 pm

Organized by: Asta-Ja RDC with support from NRN USA, CEA & Asta-Ja USA

Time	Presentation Topics	Facilitator/ Presentator
8:30 am	Arrival of participants and Registration	Mr. Hari Nath Bhusal
8:30-9:00 am	Tea, coffee and snacks	
Introductory Session		
9:00-9:15 am	Introduction of the participants (Self introduction)	All Participants
9:00-9:10 am	Welcome and purpose of the Conference	Mr. Pushpa Lal Moktan, Chairperson, Asta-Ja RDC, Kathmandu
9:10-9:30 am	Nepal Field Experience Program	Prof. Dr. Durga Dutta Poudel, School of Geoscience, University of Louisiana
Session 1: Environmental Quality of Kathmandu Valley		
9:30-10:30 am	Chair, Prof. Dr. Durga Dutta Poudel; Environmental Science Program, School of Geosciences, University of Louisiana at Lafayette, USA	
9:30 – 9:40 am	Geology of Kathmandu and Nepal	Mr. Timothy Martin, Mr. Luke Immel, and Mr. Andrew Braun, University of Louisiana
9:40- 9:50 am	Water and sanitation	Dr. Udhab Raj Khadka, Associate Professor, TU
9:50- 10:00 am	Climate change and zoonotic diseases	Dr. Ram Pukar Thakur, Former NARC Scientist
10:00- 10:10 am	Air and water pollution of Kathmandu Valley	Mr. George Bailey, Ms. Victoria Gomez, and Mr. Thomas Mizelle, University of Louisiana
10:10- 10:20 am	Youth Alliance for Environment	Ms. Selina Nakarmi, Program Officer, Youth Alliance for Environment, Kathmandu
10:20-10:35	Break	
Session 2: Global Climate Change		
10:35-11.35 am	Chair, Associate Prof. Dr. Timothy Duex; School of Geosciences, University of Louisiana at Lafayette, USA	
10:35- 10:45 am	An overview of climate change impacts in Nepal	Dr. Shanti Kala Subedi, Chief, Research & Innovation Unit, Himalayan Engineering College, Kathmandu

10:45- 10:55 am	Climate change adaptation and green infrastructure	Mr. Brandon Stelly, Ms. Katie Eddings, University of Louisiana, and Mr. Avery J. Baker, Arizona University, USA
10:55- 11:05 am	Climate change impacts on rainfall pattern, agricultural production, and wildlife	Ms. Aubrey Mann, Ms. Hali Corwin, and Ms. Layken Willis, University of Louisiana
11:05- 11:15 am	Climate change and geohazards and changing hydrology of glaciated landscape	Ms. Brittany Broussard and Ms. Holly Heather, University of Louisiana
11:15- 11:25 am	Emerging diseases, pests, parasites and zoonotics	Ms. Allison Higdon and Mr. William Faulk-University of Louisiana
11:25-11:45 am	Concluding remarks	Dr. Durga Dutta Poudel Dr. Timothy Duex
11.45- 11.55 am	Vote of thanks	Mr. Bishnu Dayal Singh, Asta-Ja RDC
12.00-1.00 pm	Lunch	

Annex 2: Photos of the Seminar









