



# Nepal Climate Change Knowledge Management Center

*In Partnership with Ministry of Environment*



## FINAL REPORT

Sep-Dec 2010

Nepal Academy of Science and Technology  
Khumaltar, Lalitpur

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## BACKGROUND

Climate change, mainly the global warming due to green house gases produced by industries and other human activities, has been a global concern today. No habitat under-water, nor any eco-tone in the mountain belts, is being spared by the effects of impending global warming in recent decades. Glaciers are melting, plains inundating, and vegetation zones shifting, while the food scarcity is looming around- all at once and at alarming and unprecedented rate. Obviously, nations around the world are much alarmed seeking measures of adaptation and/or mitigations. For its fragile mountain ecosystem and widespread poverty, Nepal is among the most vulnerable countries to the climate change. Its institutional capacity to adapt this vulnerability is yet to strengthen.

Knowledge is *sin qua non* to cope up with the challenges posed by climatic factors. All around the globe, scientists, managers and policy makers are generating information. These, however, are inadequate and scattered that demands persistent efforts in building our knowledge system based on empirical data as well as indigenous wisdom and managing them for effective storage and dissemination. There also lacks coordination in between working institutes on climate change and issues related to this matter. Addressing this weaknesses and gaps to deliver required knowledge and information, establishment of a dedicated institute is, thus, not only relevant but an essential requirement.

Nepal Climate Change Knowledge Management Center (NCCKMC) has been established at the Nepal Academy of Science and Technology in partnership with the Government of Nepal- Ministry of Environment (GoN-MoE). The NCCKMC Project is a part of the expanded process of National Adaptation Program of Action (NAPA) for Climate Change in Nepal (2008-2010), which is being supported by DANIDA (Embassy of Denmark), Department for International Development (UK), Global Environment Facility (GEF) and United Nations Development Program Nepal (UNDP). On August 27, 2010, a Letter of Agreement was inked between NAST and GoN-MoE, which formally facilitated in launching the project.

The initial phase of the project (September- December 2010) providing NAST with a grant fund of US\$ 30,000 (NPR22,32,000.00) aimed at enhancing public access to climate change information through the establishment of climate change information center. The Center is to carry out the following long-term activities relating to the climate change and its impacts:

- Documentation, research, training and capacity development;
- Facilitate access to information;
- Provide policy and development planning advisory services;
- Formulate and implement strategies to sustain the Center; and
- Spearhead the establishment of regional centers.

## Nepal Climate Change Knowledge Management Center

### *Mission*

To serve as a dedicated institutional arrangement for managing climate change knowledge in Nepal.

### *Goal*

To serve as a platform for coordinating and facilitating the regular generation, management, exchange and dissemination of climate-related knowledge and capacity building services to a multi-stakeholder climate change community of practice in Nepal.

### *Vision*

To establish a strong and effective knowledge management centre which will ensure the production and dissemination of climate change knowledge information in the country, strengthen the capacity of various stakeholders by providing them with the required information to respond to challenges posed by climate change.

### *Objectives*

- i. To enhance public access to climate change and related information in order to build their capacities to address the challenges posed by climate change.
- ii. To strengthen collaborative and inter-disciplinary climate change research in Nepal.
- iii. To facilitate interface between scientific research and policymaking, decision making processes and development planning.

### *Services*

- Conduct an inventory of available collection at the climate change resource centers.
- Coordinate with a network of climate change knowledge providers and users.
- Organize learning events that encourage knowledge sharing and awareness raising.
- Popularize and/or translate materials/ documents into local language.
- Develop focal points for climate change.
- Providing clearing house service for climate change related research and dissemination.
- Build capacity of different institutions professionals through training/ workshop/ research grants/ fellowship visiting experts program etc.
- Regular update new research to address knowledge gap.
- Provide advisory services for policy and development planning.
- Organize workshop, forums and other interaction program.
- Facilitate access to climate change related data and information on climate change.

## INAUGURATION



On November 29, Prime Minister Mr Madhav Kumar Nepal inaugurated the Nepal Climate Change Knowledge Management Center (NCCCKMC) amidst a special gathering at Nepal Academy of Science and Technology. Marking the Center as an important base to advance the climate study and also to bring awareness on its impending impacts to the livelihood and ecosystem as a whole, the Prime Minister who is also the Chancellor of the Academy, expressed his happiness for the initiation of the Center as a process of NAPA and thanked all

the supporting organizations, DANIDA, UK DFID, GEF and UNDP Nepal. On his remarks in the Visitor's Book, the Prime Minister has written (the inception of the Center as) *good beginning, all the best*.

Present during the inauguration were State Minister for Science and Technology Mr Indra Prasad Dhungel, Vice Chancellor of NAST Professor Dr Surendra Raj Kafle, NAST Secretary Professor Dr Prakash Chandra Adhikary, Academicians and Government Officials of Nepal. From NAPA team, Ms Anupa Lamichhane was present on the occasion.

## PROJECT MANAGEMENT

For the smooth operation of the Project NCCCKMC, NAST formed a Project Monitoring Committee at the coordination of its Vice Chancellor Professor Dr Surendra Raj Kafle. The committee included the Secretary of NAST Professor Dr Prakash Chandra Adhikary, Academician Dr Madan Lall Shrestha, Faculty Chief (Technology) Dr Chiranjivi Regmi and Division Chief (Planning) Mr Shekhar Shah as Members, and Faculty Chief (Science) Dr Dinesh Raj Bhujju as Member Secretary.

Likewise, a Joint Management Committee was formed by the Ministry of Environment and Nepal Academy of Science and Technology in order to oversee implementation, including fund disbursement and procurement. The composition of the management is as follows:

Chair : National Project Director of NAPA and Joint Secretary of MoE  
Co-Chair : Chief, Faculty of Science, NAST

Members:

- Chief, Planning Division of NAST
- Representative, NAPA Project Team/MoE
- Representative, UNDP Nepal
- Representative, DFID Nepal Office

## Project Team

To carry out the activities of the Project NCCKMC and look after the day-to-day affairs, NAST appointed its Science Faculty Chief Dr Dinesh Raj Bhuju as the Team Leader and Ms Ramila Shrestha Raut as its Deputy Team Leader. Dr Bhuju is an ecologist by training with a wide experience of scientific research including climate change and science popularization in Nepal. Ms Raut, Chief of the Promotion Division, is a senior official at NAST with master's degrees in science and also in library and information. Similarly, two experienced staff of the Academy, Mr Bhoj Raj Adhikary and Mr Pradeep Dhodari, were also appointed to look after the managerial and communication-networks of the Center respectively. These officials were to work on part-time basis.

NAST also appointed Academician Dr Madan Lall Shrestha as the Consulting Expert for the Project NCCKMC. A climate expert Dr Shrestha is former Director General of Department of Hydrology and Meteorology.

NCCKMC recruited three full-time staff, viz. two Assistant Researchers and one Office Assistant. The Center published a public notice of vacancies in a national daily on Sept 16, 2010 and the applicants were selected on the basis of their merit and interviews. A committee also including a NAPA representative took the interviews and recommended the candidates for appointment. The newly appointed staff started working from October 1, 2010. The appointed staffs were as follows:

TABLE 1. PROJECT STAFF AT NEPAL CLIMATE CHANGE

SN	Name	Qualification	Responsibility
1	Mr Ashok Thapa	MS in Library and Information Science	Assistant Researcher Library and Information
2	Ms Manju Sapkota Shrestha	MSc in Environmental Science	Assistant Researcher Environment and Climate Change
3	Mr Umesh Adhikary	+2 (Management)	Office Assistant

## PROJECT ACTIVITIES

### Room Allocation & Facilities

For the NCCKMC, the NAST provided with a room (area:149.35 sqm) in its newly built research laboratory at its premises in Khumaltar, Lalitpur, which is easily accessible by public transport at Saat-Dobato cross-road in ring-road. Situated in the south-west corner in the

ground floor of the building, the Center is quiet with enough day-light and easy to get to the visitors. Ms Anu Shrestha, an interior designer affiliated with a reputed company, was consulted for lay-out design of the room. Keeping view the available budget, a medium size with 20-person capacity was selected. Following furniture and amenities were procured from a local supplier for the room.

TABLE 2. FURNISHINGS AT NCCKMC

SN	ITEM	SET/NUMBER
1	Books racks	Seven
2	Sofa	One Set (5-seats)
3	Reading Tables	Three
4	Working Tables	Two
5	Tea Table	One
6	Meeting Table	One
7	Chairs	19
8	Curtains (Vertical Blank)	Four Windows
9	Carpet (Floor)	Main Entrance
10	Plants & Metal Vase	15

Beside the above mentioned items, most required office machineries were also procured. They were: i) Photo Copy Machine (one), ii) Desk-top Computers (six, for official use and visitors), and Printer (one). Similarly, two maps (Nepal and World), and globe (one) were also bought for display in the Center.

## Acquisition of Resource Materials

During the period (Sep-Dec, 2010), over 1,200 tiles of book and booklets, reports, thesis etc. were collected. Many of the collections were received as complimentary from various research organizations such as Inter-governmental Panel for Climate Change (IPCC), International Center for Integrated Mountain Development (ICIMOD), Institute for Social and Environment in Transition- Nepal (ISEWT-N), World Wildlife Fund Nepal, and Small Earth Nepal. The Center also received books and reports from individual experts. The



Ideal Model School provided a show-piece of South Asia for display in the Center. Over 125 books in digital form were also collected and made available for the users by the Center.

TABLE 3. COLLECTION OF RESOURCE MATERIALS AT NCCKMC

SN	CATEGORY	NUMBER
1	Books	700
2	Booklets	75
3	Thesis/Dissertation	35
4	Reports	25
5	Journals	40
6	Brochures	35
7	Periodicals	20
8	Calendars	12
9	Maps	9
10	CDs	60
11	Others	159

For publicity, the Center has produced an introductory brochure, both in English and Nepali. It prepared book-marks containing the address of the Center on one side and essential information on climate change on the other side.

NCCKMC started providing its services to the users from the beginning of November, 2010.

## Visits and Contacts

During the period, the project staff visited various organizations in Kathmandu to develop rapport and also to collect essential materials on climate change issues. NCCKMC sent letters to various organizations in Nepal and abroad informing about the establishment of the Center and requesting to provide with climate related publications and other materials.

TABLE 4. MAJOR INSTITUTIONS VISITED BY NCCKMC STAFF

SN	Institution	Date	Remarks
1.	International Center for Integrated Mountain Development (ICIMOD)	Oct	<ul style="list-style-type: none"> <li>• Discussion on collaboration and keeping in mailing list for exchange of publications</li> <li>• 36 items of related literature are received with 2 CDs</li> <li>• General introduction about INVENIO (a open source software of Library Management)</li> </ul>
2.	Center for Constitutional Dialogue (CCD)	Oct	<ul style="list-style-type: none"> <li>• Discussion on lay-out and services of resource centers</li> <li>• Some brochures were collected</li> </ul>
3.	WWF Nepal Program	Oct	<ul style="list-style-type: none"> <li>• Collection of the recent issues publication and documents.</li> </ul>
4.	Institute for Social and Environment in Transition-Nepal (ISET-N)	Oct	<ul style="list-style-type: none"> <li>• Books acquired</li> <li>• Collection of the recent issues publication and documents</li> </ul>



5.	Book Distributors 1> Mandala 2> Ratna 3> Bhrikuti 4> Ekata	Oct	<ul style="list-style-type: none"> <li>Collection of climate change related books</li> <li>25 books were purchased</li> </ul>
6	Central Departments of Tribhuvan University (Botany, Environmental Sc, Hydrology & Met, Geography, Geology, Library & Information Sc) at Kirtipur	Nov	<ul style="list-style-type: none"> <li>Information delivery and rapport for cooperation</li> </ul>
7	Small Earth Nepal	Nov	<ul style="list-style-type: none"> <li>Collection of climate change related materials</li> </ul>
8	Dept of Hydrology & Meteorology	Nov	<ul style="list-style-type: none"> <li>Collection of climate change related information</li> </ul>
9	College for Applied Sciences	Nov	<ul style="list-style-type: none"> <li>Information delivery and rapport for cooperation</li> </ul>

TABLE 5. LIST OF CORRESPONDENT INSTITUTES

SN	ORGANIZATION	CONTACT ADDRESS
1	Overseas Development Institute (ODI) London	Lindsey Jones Research Officer - Climate Change Adaptation and Water Policy Climate Change, Environment and Forestry Programme/ Water Policy Programme 111 Westminster Bridge Road London SE1 7JD; UK Tel: +44 (0) 20 7922 8226 Mobile: +44 (0)7776089746 Email: <a href="mailto:L.jones@odi.org.uk">L.jones@odi.org.uk</a> Web: <a href="http://www.odi.org.uk">www.odi.org.uk</a>
2	International Institute for Environment and Development (London)	Jessica Ayers <a href="mailto:jess.ayers@gmail.com">jess.ayers@gmail.com</a> ; <a href="mailto:Jessica.ayers@iied.org">Jessica.ayers@iied.org</a>
3	Asian Development Bank	Mr. Barry J. Hitchcock Country Director Asian Development Bank Kathmandu, Nepal
4	UNDP Asia-Pacific Regional Centre 3rd Floor, UN Service Building Rajdamnern Nok Avenue, Bangkok, Thailand Tel.: +66 (0) 2288 2644 Fax: +66 (0) 2288 3032 URL: <a href="http://asia-pacific.undp.org">http://asia-pacific.undp.org</a>	Gernot Laganda Regional Technical Advisor Climate Change Adaptation
5	World Resources Institute Washington DC	Aarjan Dixit Research Analyst Email: <a href="mailto:adixit@wri.org">adixit@wri.org</a> +1 (202) 729-7878
6	Office of the Regional Director & Representative UNEP/ROAP, UN Building, 2nd Floor Block A Rajdamnern Avenue, Bangkok 10200, Thailand Telephone: +662-2816101 (DL), +662-2881893 (w/ voicemail) Fax: +662-2803829 or +662-2881057	Young-Woo Park Regional Director & Representative for Asia and the Pacific

7	Stockholm Environmental Institute Deputy Director and Asia Centre Director 15th Floor, Witthayakit Building Chulalongkorn University 254 Chulalongkorn Soil 64 Phyathai Road Pathumwan Bangkok 10330, THAILAND	Dr. Li Lailai Email: <a href="mailto:lailai.li@sei.se">lailai.li@sei.se</a> Copy Dr. Sabita Thapa <a href="mailto:sabita.thapa@sei.se">sabita.thapa@sei.se</a>
8	Intergovernmental Panel for Climate Change	
9	Global Change Impact Studies Centre (GCISC) National Centre for Physics (NCP) Complex Quaid-i-Azam University Campus Islamabad, Pakistan Tel: 92-51-2077458 Fax: 92-51-2077385	Mr Muhammad Munir Sheikh Head, Climatology Section Global Change Impact Studies Centre (GCISC) E-mail: <a href="mailto:munir.sheikh@gcisc.org.pk">munir.sheikh@gcisc.org.pk</a> , <a href="mailto:mmunirsheikh@yahoo.com">mmunirsheikh@yahoo.com</a>

## Interacted with Young Climate Researchers



On 18 November, NCCKMC conducted an interaction program with the young climate researchers at the seminar hall of NAST Research Lab. The objective of this was to acquaint the young climate researchers with the facilities of NCCKMC and seek their perspectives on climate change and its impacts on various aspects. At the outset, Dr Dinesh Raj Bhuju gave a brief introduction of the Center and its purposes. There were over 35 participants representing the countries in South Asia. The young researchers actively interacted

on the topic of materials collection and knowledge dissemination from the center to the worldwide users. A participant from Bangladesh handed over his publication on climate change for the use in the Center.

## Climate Talk

On 19 November, a special talk program was organized by NCCKMC. Professor Dr. Rafiqul Islam, a guest speaker from Bangladesh made a presentation on *Prospects of Collaborative Research on Energy and Environment in the Context of Climate Change with South Asia and Europe*. The theme of the presentation was that the people should recycle the carbon dioxide rather than the sequestration of carbon. He said, intensive research was ongoing on the deposition of carbon; however, still waiting for the results. About 25 persons including scientists, researchers of NAST and University students participated in the talk.

## Mobile Library

Nepal Climate Change Knowledge Management Center (NCKMC) spearheaded a three-week long Mobile Library for Climate Change Awareness (MLCCA) covering 25 districts out of 75 in the country. The campaign was inaugurated by the Vice Chancellor of Professor Dr Surendra Raj Kafle amidst a special function at Amar Singh Higher Secondary School in Pokhara on Dec 17, 2010. The first of its kind in Nepal, the campaign hired a bus and travelled over 3,500 km of mountainous roads in Nepal and reached the climate message from Kanchanpur to Kakadbhitta, the western and eastern borders of Nepal respectively. During its campaign, the ML team organized programs in 25 districts, viz. Kaski (Pokhara), Shyangja (Waling), Palpa (Burtung), Rupandehi (Butwal), Dang (Lamahi), Banke (Kohalpur), Kanchanpur (Mahendra Nagar), Doti (Silgadhi), Dadeldhura (Amargadhi), Kailali (Dhangadhi), Bardiya (Katarnia), Kapilvastu (Chanauta), Nawalparasi (Rambapur), Chitwan (Bharatpur), Makawanpur (Hetauda), Bara (Pathlaiya), Rautahat (Chapur), Morang (Biratnagar), Jhapa (Kakadbhitta), Sunsari (Haripur), Saptari (Bhardah), Siraha (Lahan), Dhanusha (Dhalkewar), Mahottari (Bardibas), and Sarlahi (Lalbandi).

In the program, over 60 schools and local clubs/libraries got actively involved and direct beneficiaries were over 12,000 people, mainly the school children and the teachers. In Pathlaiya Rautahat, the ML team organized the program among a special group of deaf students, while in Haripur Sunsari, the participating students included flood victim children.







The mobile library programs were organized at the premises of public schools and coordinated by local schools, mostly the school principals. Such schools were informed in advance and requested for coordination by NCKMC. The coordinating schools would inform their teachers and students and arrange program. They would also inform nearby schools to send their students in quiz contest where required.

The campaign contained three major programs, viz. (i) exhibition of self-explanatory posters on climate change and landscape photographs, (ii) school level climate quiz, and (iii) climate talk and interaction with the students, teachers and general public. Organizations such as ICIMOD, Small Earth Nepal (SEN) and WWF Nepal have provided with books, booklets and posters for display and also for distribution. The landscape photographs of Changing Himalaya, produced by ICIMOD, have catching eyes of many visitors. The MLCCA also organized climate quiz in at five major spots, where nearby high schools actively took part in the completion. The winner schools were given prizes of educational materials such as microscope, models of human systems, and the winner students were given stationary such as copies, instrument box, maps and pencils.

The target group of the programs was mainly the high school students, who could bring multiplier effects in disseminating the information. Besides explaining them about climate change with the help of posters and photographs, the team members organized climate talk and interaction

with the students. In many instances, teachers and media people were also found taking keen interest and participating actively in the program. Where available, the team also organized



Interaction with deaf students



Climate talk & interaction

TABLE 6. PROGRAMS ORGANIZED BY MOBILE LIBRARY OF NCCKMC

DATE	DISTRICT PLACE	VENUE & CONTACT	DIRECT BENEFICIARIES	REMARKS
16 <sup>th</sup> Dec	Departure from Kathmandu			Dr Dinesh Bhuju, Mr Bhojraj Adhikary, Mr Mahendra Kapali, Mr Ashok Thapa, Mr Narayan Gaire, Mr Umesh Adhikary ----- Mr Omni K Acharya, Mr Om Baral ----- Driver Mr Ajay Lama Helper Mr Vijay
17 <sup>th</sup> Dec	Kaski Pokhara	Amar Singh Higher Secondary School Chairman Mr Biswo Prakash Lamichhane Principal Mr NR Poudel Science In-charge: Dr Eliyama Jones	400	Inauguration amidst a special gathering by NAST VC Prof. Dr SR Kafle ----- 8 schools in quiz contest ----- Radio Discussion: Radio Barahi TV Show:
18 <sup>th</sup> Dec	Shyanjya Waling	Conference Hall of FNCCI and Waling Bazaar Principal Mr Dhruva Sharma	150	Radio Discussion: Radio Annapurna ----- Information distributed to the participants of IT Workshop; Flexes displayed on bus in bazaar -----
	Palpa Bartun	Tea Shop Chairman of School Management Committee Janpriya Secondary School	25	Interaction with visiting graduate students and local people at tea shop
19 <sup>th</sup> Dec	Rupandehi Butwal	Kalika Higher Secondary School Principal Mr Ghana Shyam Pathak	600	Program organized coinciding Golden Jubilee of Kalika HS School ----- 7 schools in quiz contest ----- Radio Discussion: Radio Namaste, Radio Janjagaran TV Show: Buddha TV, Lumbini TV
20 <sup>th</sup> Dec	Dang Lamahi	Adarsha Higher Secondary School Principal Mr Shashidahr Gyawali	400	Students of Grades 8,9,10 are participated

21 <sup>st</sup> Dec	Banke Kohalpur	Gyanodaya Public Library Librarian Ms Tulasi Devi Dhakal	150	Specially children are oriented
22 <sup>th</sup> Dec	Kanchanpur Mahendra Nagar	Mahendra Nagar Higher Secondary School Principal Mr Shiva Dutta Joshi Prof. TK Bhatta	850	Students of Mahendra Nagar HSS and Radiant HSS students participated ----- Live commentary by Mahakali FM TV coverage by New 24
23 <sup>th</sup> Dec	Doti Silgadhi	Padma Public Mukti Narayan Higher Secondary School Chairman Mr Siddha Nath Joshi	500	Climate Talk to Grade IX students Climate Quiz: 6 schools Chief Guest CDO Mr BP Parajuli
24 <sup>th</sup> Dec	Dadeldura Amargadi	Mahendra Adarsha Namuna Higher Secondary School Principal Mr Gajendra Joshi	350	Climate Talk and Orientation to students, teachers and media; ----- Radio Discussion: Radio Sudur Awaj, Radio Amargadhi
25 <sup>th</sup> Dec	Kailali Dhangadhi	Sharada Higher Secondary School Principal Ms Bimala Pant	650	Climate Talk to students, teachers; exhibition ----- Radio Discussion: Kantipur FM
	Bardiya Katarniya	Drama Bhakta High School Principal Mr Nain Singh Tharu	650	Climate Talk to students, teachers; exhibition
27 <sup>th</sup> Dec	Kapil Bastu Chanauta	Shree Rastiya Higher Secondary School Asst. Principal Mr Narayan Belbase	700	Students queued to observe the displays and exhibition
27 <sup>th</sup> Dec	Nawal Parasi Rambapur	Rambapur Higher Secondary School Principal Mr Rama Kant Upadhyaya	500	
28 <sup>th</sup> Dec	Chitwan Bharatpur	Shree Chitwan Higher Secondary School Principal Ms Rampyari Pradhan Sharma	500	Exhibition, Climate Talk Quiz 8 schools; Volunteers of SEN Ms Sangita Maharjan and Mr Jeeban Panthi joined the program; Ms Ramila Raut, Ms Manju Sapkota and Mr Sudip Pandey join the team; Mr NP Gaire, Mr M Kapali and Mr A Thapa return Kathmandu
29 <sup>th</sup> Dec	Makawanpur Hetauda	Shree Sramik Higher Secondary School Principal Mr RP Sah	350	Exhibition and orientation organized for special group of deaf students and explained with the help of interpreters
	Bara Pathlaiya	Shree Nepal Rastriya Community Secondary School Mr Surendra P Chaurasia	175	
	Rauthat Chapur	Shree Janjyoti HS School Principal Mr Y P Yadav	700	
		Shree Deaf School Interpreters Ms Sita Khatiwada and Ms Renu Kumari	32	

30 <sup>th</sup> Dec		Arrived in Biratnagar		Stayed at MM Polytechnic School
31 <sup>st</sup> Dec	Morang Biratnagar	Shree Adarsha HS School Principal Mr Rama Nath Bhattarai	900	NAST Secretary Prof. Dr PC Adhikary participated the program; Chief Guest: Regional Education Director Mr Hira Prasad Dhakal Mr Quiz contest: 9 schools
1 <sup>st</sup> Jan	Jhapa Kakarbhitta	Kakarbhitta Club Chairman Mr Balibir Rai	70	
2 <sup>nd</sup> Jan	Sunsari Haripur	Shree Koshi Janata Secondary School Principal Mr Trilochan Yadav	700	School included Koshi flood victim children at Haripur
	Saptari Bhardah	BP Smarak Secondary School Principal Mr Prakash Gupta	800	
	Siraha Lahan	Shree Laxman Lalita Kushwaha HS School Principal Mr Shiv Shanker Mahato; Math Teacher Mr Upendra Mahato	90	
3 <sup>rd</sup> Jan	Dhanusha Dhalkewar	Shree Mahendra HS School Principal Ram Dayal Mahato	300	Curfew in Sarlahi; Technical problem in bus; Reached Hetauda late night
	Mahottari Bardibas	Nawa Chitij HS School Principal Mr Mohan Khatri Chhetri	700	
	Sarlahi Lalbandi	Shree Janjyoti HS School Principal Mr Umesh Lal Das	500	
4 <sup>th</sup> Jan		Departure from Hetauda Arrived Kathmandu		
5 <sup>th</sup> Jan		Welcome Program at NAST		
	Total Districts: 25 (out of 75 in Nepal)	Total participating schools, libraries and local clubs (direct beneficiaries): 60	11742	Traveled about 3,500 Km from western border Kanchanpur to eastern border Kakarbhitta

discussion over radio (FM) and television stations. Local reporters of print media were found reporting the event with priority, many of them have brought out the stories as well.

On their return, the staff organization of NAST organized a welcome program in appreciation of the service furnished by the Mobile Library.

TABLE 7. CLIMATE QUIZ CONDUCTED BY MOBILE LIBRARY

DATE	DISTRICT VENUE	Coordinating School	PARTICIPA- TING SCHOOL	REMARKS
17 <sup>th</sup> Dec	Kaski Pokhara	Amar Singh Higher Secondary School	8	Winner: Amar Singh HS School (Group A) Runner: Amar Singh HS School (Group B) Runner up: Shree Chandi Sec School
19 <sup>th</sup> Dec	Rupandehi Butwal	Kalika Higher Secondary School	8	Winner: Sidhartha Boarding School Runner: Deep HS School Runner up: Butwal Sec School
23 <sup>th</sup> Dec	Doti Silgadhi	Padma Public MN Higher Secondary School	6	Winner: Maglek HS School Runner: Delpeshower HS School Runner up: Padma Public HS School
28 <sup>th</sup>	Chitwan	Shree Chitwan Higher Secondary School	7	Winner: Laxmi Ma.Vi Runner: Balkumari HS School Runner up: Naya Kiran HS School
31Dec,20 10	Biratnagar	Shree Adarsha HS School	9	Winner: Pokhariya H.S.S. Runner: Satya Narayan H.S.S. Runner up: Radha Krishna S.S.

TABLE 8. INTERACTION/DISCUSSION WITH RADIO &amp; TV

DATE	DISTRICT	MEDIA	ANCHOR/PROGRAM	PARTICIPANT
17 <sup>th</sup> Dec	Kaski Pokhara	Radio Barahi FM  Gandaki TV	Mr Ramesh Pant <i>Harit Sansar</i>	Dr DR Bhuj  Dr DR Bhuj Mr Krishna Lamsal
18 <sup>th</sup> Dec	Kaski Pokhara	Annapurana FM	Mr Dipendra Shrestha <i>Bihani Chintan</i>	Dr DR Bhuj Mr Krishna Lamsal
19 <sup>th</sup> Dec	Rupandehi Butwal	Radio Namaste  Radio Jagaran  Lumbini TV Buddha TV	Mr Mukti Gaire <i>Samaya Shandarv</i> Mr Binod Pariyar Bishesh Prasanga  Mr Khem	Dr DR Bhuj Mr GS Pathak  Dr DR Bhuj
21 <sup>st</sup> Dec	Bhaktapur	Bhaktapur FM	Ms Jasmine Diwakar	Dr DR Bhuj
22 <sup>nd</sup> Dec	Kanchanpur Mahendra Nagar	Mahakali FM News 24		
24 <sup>th</sup> Dec	Dadeldura Amargadi	Radio Sudur Awaj  Radio Amargadi	Mr Ram Dharmi <i>Sarokar</i>  Mr Keshav and Ms Gauri Nepali <i>News Express</i>	Dr DR Bhuj
26 <sup>th</sup> Dec		Kantipur FM <i>Kanchanpur Diary</i>	Mr Chitranga Thapa	Dr DR Bhuj



## NCCKMC Visitors

During the project period, 67 readers visited the Center.

TABLE 9. INTERACTION/DISCUSSION WITH RADIO & TV

SN	Date	Name	Address
1	18 <sup>th</sup> Nov 2010	Abhimanyu Magrati	Nepal
2	,,	Khashing Chandra Rai	Nepal
3	,,	Subhasis Mohnaty	India
4	,,	Subash Duwadi	Nepal
5	,,	Salik Ram Neupane	Nepal
6	,,	Sameera Zaib	Pakistan
7	,,	Kareff Rafisura	Nepal
8	,,	Ramesh Gautam	Nepal
9	,,	Rajan Subedi	Nepal
10	,,	Jadhav Ramanand	India
11	,,	Nisha Shakya	Nepal
12	,,	Tahera Akter	Pakistan
13	,,	Samia Shamim	Bangladesh
14	,,	Kanchan Ojha	Nepal
15	,,	Achyut Parajuli	Nepal
16	,,	Govinda Lamichhane	Nepal
17	,,	Mohan Chand	Nepal
18	,,	Dilli Ram Bhattarai	Nepal
19	,,	Nisha Amatya	Nepal (SEN)
20	,,	Sudarshan Rajbhandari	Nepal (SEN)
21	,,	Faisal Akbar	Bangladesh
22	,,	Shamimul Islam	Bangladesh
23	,,	Arun Prasad Bhattarai	Nepal (SEN)
24	,,	Sachin Pant	Nepal
25	,,	Krish D Hengaju	Nepal
26	,,	Pranav Pokharel	Nepal
27	,,	Mithun Bista	Nepal
28	,,	Achala Gupta	India
29	,,	Simmi Rana	India
30	,,	Gopal Khanal	Nepal
31	,,	Nurul Kabir	Bangladesh
32	,,	Mohammad Abdur Rahim	Bangladesh
33	21 <sup>st</sup> Nov 2010	Mohammad Anifur Rahman	Bangladesh
34	,,	Md. Masum billah	Bangladesh
35	,,	Madan K. Suwal	Nepal
36	,,	Narayan D Gaire	Nepal
37	,,	Avash Poudel	Nepal
38	6 <sup>th</sup> Dec 2010	Mitsushi Kanlide	Japan
39	,,	Dr Jagadish C Baral	Nepal
40	29 <sup>th</sup> Nov 2010	Madhav K Nepal (Prime Minister)	Nepal

41	,,	Indra P Dhungel (Minister)	Nepal
42	,,	Anupa Lamichhane	Nepal
43	,,	Prof Dr Ram Man Shrestha	Nepal
44	,,	Prof Dr Mangala Devi Manandhar	Nepal
44	,,	Prof Dr Ganga Shrestha	Nepal
45	,,	Prof Dr Jib Raj Pokharel	Nepal
46	2 <sup>nd</sup> Dec 2010	Mohan Singh Lama	Nepal
47	3 <sup>rd</sup> Dec 2010	Dr Dibya S. Malla	Nepal
48	,,	Madan Gautam	Nepal
49	10 <sup>th</sup> Dec 2010	Dr Mark Watson	UK
50	,,	Dr Colin Pendry	UK
51	,,	Dr. Anil K Anal	Thailand
52	14 <sup>th</sup> Dec 2010	Prof Stephen Blackmore	UK
53	,,	Prof Hideaki Ohba	Japan
54	15 <sup>th</sup> Dec 2010	Steve Adkins	Australia
55	,,	Dr Udo Schichbojj	German
56	,,	Dr Kalidas Shethi	Massachussetts
57	20 <sup>th</sup> Dec 2010	Bikram Dhimal	Nepal
58	22 <sup>nd</sup> Dec 2010	Imelda Abanquez	
59	26 <sup>th</sup> Dec 2010	Pratibha Duwal	Nepal
60	3 <sup>rd</sup> Jan 2011	Snehalata Sainjoo	
61	,,	Pradip Shrestha	Nepal
62	4 <sup>th</sup> Jan 2011	Prof Madan Koirala	Nepal
63	6 <sup>th</sup> Jan 2011	Dr Linda Smita	
64	9 <sup>th</sup> Jan 2011	Achut Parajuli	Nepal
65	,,	Giri Raj Khatri	Nepal
66	10 <sup>th</sup> Jan 2011	Anish Sharma	Nepal
67	11 <sup>th</sup> Jan 2011	Rajiv Ghimire	Nepal

## Center Sustainability

NCKMC with the support of NAPA at MoE, developed two project proposals and submitted. The first proposal was prepared for Elsevier Grant and a program proposal amounting US\$ 50,000 (for one year activities) has been submitted. The second proposal entitled Support to Strengthening the Nepal Climate Change Knowledge Management Center Project has been submitted to Climate and Development Knowledge Network (CDKN) based in Pakistan. It amounts US\$ 100,000 for one year program, activities. Both the proposals are under screening at present.

## Educational Material Production

**Introductory Brochure.** NCKMC has produced its introductory brochure both in English (2,000) and Nepali (10,000). The Nepali version of the introduction was distributed mainly during the mobile library campaign. Similarly, Book Marks were developed and produced (5,000 copies). It contains short introduction of NCKMC on one side in English with photograph and on the other side information on climate change with basic data in Nepali

language. An article on the climate change and knowledge management in Nepali has been prepared, while a public note (*Jankari Patra*) containing important information and data for general public is in progress.

**Climate Quiz.** NCCKMC team has prepared a set of over 100 question answers for quiz contest. The materials are mainly based on climate change science and related information.

**Flex and Photographs.** A total of 23 flexes have been prepared and printed for display. These contains information on climate change, its causes and possible impacts. The information is based on college level books and are in English, which the team is planning to translate in Nepali. ICIMOD has provided with a complimentary set of 13 large photographs showing landscape change in time series in the Himalaya.

## MS Thesis

NCCKMC has awarded a thesis grant to Mr Bijay Kumar Pokharel, who will be preparing an MS thesis on the Bibliographic Review of Media Coverage on Climate Change from 2001 to 2010. Mr. Pokharel is an MS student at the Central Department of Library and Information Science, Tribhuvan University, Kirtipur. The thesis will include six major broad-sheet newspapers of Nepal, viz. the Gorkhapatra, the Kantipur, the Nepal Samacharpatra, the Rising Nepal, the Kathmandu Post, and the Himalayan Times.

## ACKNOWLEDGEMENTS

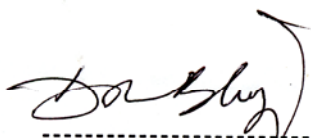
The project of Nepal Climate Change Knowledge Management Center has been launched by Nepal Academy of Science and Technology (NAST) with the assistance of Ministry of Environment, Government of Nepal as a part of National Adaptation Program of Action for Climate Change. The program is supported by Embassy of Denmark (DANIDA), Department for International Development (UK DFID), Global Environment Facilities (GEF) and United Nations Development Program (UNDP) Nepal. The NCCKMC/NAST thanks to all the institutions and individuals who have generously supported and provided with materials to the Center. The Center is thankful to all those schools and local communities who cooperated in organizing Nepal's first Mobile Library for Climate Change Awareness.

## Nepal Climate Change Knowledge Management Center

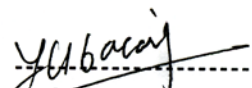
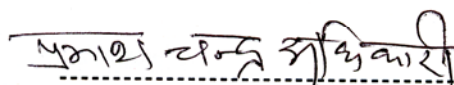
Nepal Academy of Science and Technology  
In partnership with Ministry of Environment

### FINANCIAL REPORT

ITEM	EXPENSES (NPR)	COMMITTED (NPR)
Furniture (chairs, tables, shelves, racks) & Minor Refurbishment	410,382.00	360,000.00
Collection (book, report) Purchase and Acquisition	209,334.73	140,000.00
Journal Subscription		175,000.00
Preparation of Metadata and Digitization of Catalogue	117,500.00	35,000.00
Computers	228,547.00	
Photocopier	130,000.00	
Printer	49,720.00	
Supplies	55,094.00	110,000.00
Logistics and Transportation	145,200.00	
Publicity & Outreach with Knowledge Providers & Users	25,350.00	
Learning Events and Meetings	261,033.50	
<b>Total</b>	<b>1,632,161.23</b>	<b>820,000.00</b>



Dr Dinesh R Bhujju  
Project Coordinator

  
Subaraj Pandey  
Accountant

Prof. Dr Prakash C Adhikari  
Secretary

  
Balmurti Pandit  
Senior Account Officer

# Annex I

## Purchased book on NCCKMC

Ac. No.	Title	Author	Publisher	Date of Pub.	Price
1	Global Climate & Sustainable Development	Dr. Sujata K. Dass	Isha Books, Delhi	2004 AD	Rs. 2560
2	Weather & Climate Modeling	Ed.S.V. Singh Swati Basu T.N. Krishnamurti	New age international P. Ltd. Delhi	2003 AD	Rs.1450
3	Principles of Pale climatology	Thomas M. Cronin	Columbia University Press New York	1893 AD	Rs.3400
4	Flexibility in Climate Policy	Tim Jackson, Katie begg, Stuart parkisson	Earthscan Publication Ltd. london	2001 AD	Rs.1272
5	Elemental Geo system	Robert W. Christopherson	Prentice Hall Englewood cliffs, New Jersy	1995 AD	Rs. 4500
6	Atmosphere, Weather and climate	Roger G. Barry, Richard J. Chorley	Routledge, London	1968 AD	Rs 5700
7	Global Challenge	Alistair McNaught, Michael Witherick	Longman	2001 AD	Rs. 2550
8	Global Warming	Douglas Long	Viva Books P. Ltd.	2005 AD	Rs.632
9	Introducing Global Issue	Michael T. Sanrr, D.Neil Snarr	Viva Books P. Ltd.	2007 AD	Rs.1592
10	Climatology and Oceanography	D.S. Lal	Sarda pustak Bhawan, Allahabad	2010 AD	Rs.480.00
11	Global Warming (there is still time to act)	Alok Bhattacharya	Rupa Co.	2008 AD	Rs.568
12	Fixing Climate (the Story of climate science)	Robert Kunzig & Wallace Broecker	Green profile	2009 AD	Rs.568
13	Surviving the Century(Facing climate chaos & other global challenges)	Herbert Girardet	Earthscan	2008 AD	Rs.1288

14	Environment and Climate Change,	Prof.(Dr.) Sawalia Bihari Verma DR. Anand Bhusan Sharan Dr. Sunil K. Verma	Pentagon press, Delhi	2009 AD	Rs.1761.20
15	Global Climate Change:Beyond Copenhagen	A.N. Sakar	Pentagon Earth	2010 AD	Rs.1700.00
16	Global Crises, Global Solutions	Bjorn Lomborg	The Press Syndicate of the University of Cambridge, US	2004 AD	Rs.2528.75
17	Global Environmental Governance	James Gustave Speth Peter M. Haas	Island Press	2007 AD	Rs \306.00
18	Global warming and Climate Change(International Legal process)	T.K. Dhawan	Mohini Publishers and Distributers	2010 AD	Rs.945.20
19	Global Warming: Looking Beyond Kyoto	Earnesto Zedillo	Pentagon Press, U	2009 AD	1081.20
20	Global Warming and Environment	Vishwa jit Gupta	S.S PublishersDelhi	2006 AD	Rs.884.00
21	Global Warming and Environmental laws	H.V. Jadhav Dr. S.H. Purohit	Himalaya Publish House	2007 AD	Rs.510.00
22	Green Globe Yearbook	Helge Ole Bergesen Georg parmann	The Fridjof Nansen Institute	1994 AD	Rs.1217.20
23	The Global Environment (Institution, Law and Policy)	Norman J. Vig Regina S. Axelrod	Earthscan Publication Ltd.	1999 AD	Rs.539.75
24	General Climatology(Fourth Edition)	Howard J. Critchfield	PHI Learning pvt. ltd	2009 AD	Rs.312.00
25	Climatology	D.S. Lal	Sarda Pustak Bhawan Allahabad	2010 AD	Rs.384.00
26	Vegetation, Water, Humans and the Climate	Ed.Pavel Kabat, Martin Claussen & at. Al. (10)	Springer	2004	169.95 (Euro)

27	Renewable Energy & Climate Change	Volker Quaschnig	WILEY & IEEE	2010	\$ 95
28	A Compendium on Environment Statistics 1998 Nepal	His Majesty's Government National Planning Commission Secretariat CBS, Ktm.	His Majesty's Government National Planning Commission Secretariat CBS, Ktm.	1998	Rs. 300
29	Climate Change Mitigation and European Land-use Policies.	Ed. W. Neil Adger Davide Pettenella and Martin Whitby	Center for Agriculture and Biosciences International	1997	Pd75.00
30	Distributional Impacts of Climate Change and Disasters( concepts and Cases)	Ed. Matthias Ruth and maria E. Ibararan	Edward Elgar Publishing Limited	2009	Pd59.95
31	Global Biochemical Cycles in the Climate System	Ed. Ernst- Detlef Schulze Martin Heimann	Academic Press	2001	\$137.00
32	Anthropogenic Climate change	Ed Hans von Storch And Gotz Floser	Springer-Verlag Berlin Heidelberg	1999	Euro139.95
33	Climate Variation, Climate Change, and Water Resources Engineering	Ed jurgen D. Garbercht, ph.D. Thomas C. Piechota, Ph.D.,P.E.	American Society of Civil Engineering	2006	\$67.00
34	Global Warming and Climate Change(Past, Present and Future)	Dr. S.K Agrawal	S.B Nangia APH Publishing Corporation, Delhi	2010	Rs895.00
35	Flexible Mechanisms for an Efficient climate Policy(Cost saving Policies and Business Opportunities)	Karl Ludwig Brockmann . Marcus Stronzik (Eds.)	Center for European Economic Research (ZEW)  Mannheim, Germany	2000	Euro44.95
36	Global Warming and Global Cooling Evolution of Climate on Earth	O.G. Sorokhtin, G.V. Chilingar and L.F. Khilyuk	ELSEVIER	2007	\$181.00

37	Carbon Sinks and Climate Change( Forest in the Fight Against Global Warming)	Colin A.G. Hunt	Edward Elgar Publishing Limited UK	2009	Pd59.95
38	Man-Made Climate Change(Economic aspects and policy options)	O. Hohmeyer . K. Rennings(Eds.)	Center for European Economic Research	1997	Euro82.95
39	Fundamental of weather and Climate	Robin McIlveen	Oxford University Press	2010	Pd34.99
40	Climate Change in Contrasting River Basins(Adaption Strategies for Water, Food and Environment)	Ed. J.C.J.H.Aerts and P.Droogers	CABI Publishing UK	2004	Pd59.00
41	Adapting Building and Cities for Climate Change(A 21 <sup>st</sup> Century Survival Guide)	2 <sup>nd</sup> Ed Sue Roaf David Crichton and Fergus Nicol	ELSEVIER and Architectural press	2005 1 <sup>st</sup> 20092 <sup>nd</sup>	\$57.95
42	Global Climate Change and pedogenic Carbonates	Ed. Rattan Lal John M. Kimble H. Eswaran B.A. Stewart	LEWIS Publisher UK	2000	Pd50.99
43	Changing Climate, Changing Economy	Ed. Jean-Philippe Touffut	Edward Elgar Publishing Limited UK	2009	Pd19.95



## Annex II

### Media Coverage

THE HIMALAYAN TIMES, THURSDAY, DECEMBER 2, 2010

## Global treaty on climate change/under thick cloud

• Japan refuses to help extend Kyoto Protocol accord beyond 2012 • LDCs to be the worst hit

Ramesh Prasad Bhushal  
Cancun, December 1

Japan has said it won't help extend the Kyoto Protocol accord to curb greenhouse-gas emissions after it expires in 2012, saying instead that a new global agreement is necessary to combat climate change.

The Kyoto treaty is "outdated" because it only regulates 27 per cent of global emis-

sions, Kuni Shimada, special adviser to Japanese Environment Minister Ryu Matsumoto, said yesterday in an interview at United Nations climate talks in Cancun, Mexico.

The Kyoto Protocol was the outcome of the global meeting on climate change in Japan in 1997. It binds 37 developed nations and the European community to cut emissions from 1990 levels by a collective 5.2

per cent through 2012.

Japan is against placing its emission reduction target under the protocol.

Japan's move will please the USA, which has not ratified the Kyoto protocol and has been against extending it. Developing countries like India and China are not included in the treaty.

Efforts are underway to forge consensus among 192

countries to extend the protocol with stiffer targets to lower the greenhouse-gas emissions.

The civil society, NGOs and government delegates have condemned Japan's move. "We are shocked to hear such things from Japan, whose baby Kyoto Protocol is. This has put the climate change treaty under a thick cloud," Lim Li Lin, legal and environment adviser ,The Third World Network, told

The Himalayan Times.

The developed nations want to bring rapidly growing economies like India and China under the treaty's ambit and have been demanding that they should come up with clear targets to reduce greenhouse-gas emissions.

Lin of TWN alleged that Japan and USA had teamed up to derail the Kyoto protocol.

The least developed coun-

tries and African group have sought an extension to the treaty, so has the European Union.

"It is unlikely that something will happen instantly. Apparently, the world will be without a global treaty for a long time," said Batu Krishna Uprety, key negotiator from Nepal, which is a member of the Least Developed Countries group that comprises 49 nations.

२ राजधानी  
बुधबार, २२ मंसिर २०६७

## सूचना व्यवस्थापन केन्द्र स्थापना

राजधानी समाचारदाता  
काठमाडौं, २१ मंसिर

नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान (नास्ट)मा जलवायु परिवर्तन सूचना व्यवस्थापन केन्द्र स्थापना गरिएको छ ।

जलवायु परिवर्तनको विषयमा जानकारी उपलब्ध गराउने उद्देश्यले सो केन्द्र स्थापना गरिएको हो ।

नास्टले जलवायु परिवर्तनको प्रभावको जानकारी दिन र यसलाई सार्वजनिक चासोको विषय बनाउन केन्द्र स्थापना गरिएको केन्द्रका प्रमुख डा. दिनेश भुजुले बताए ।

जलवायु परिवर्तनका कारण हिमाली क्षेत्रमा तापक्रम वृद्धि हुँदा हिमालहरू पग्लिँदै गएको, हिमतालहरू फुट्ने अवस्थामा

पुगेको, पानीका मुहान सुक्दै गएको र उत्पादित बालीनालीमा पनि प्रभाव परेको बताइन्छ ।

डानिडा, डीएफआईडी, जीईएफ, तथा यूएनडीपीको सहयोगमा स्थापित यस केन्द्रलाई पहिलो चरणमा तीन महिनाका लागि ३० हजार अमेरिकी डलर (करिब २२ लाख रुपैयाँ) बजेट छुट्याइएको छ ।

जलवायु परिवर्तनका बारेमा बृहत्तर जानकारी दिन स्थापना गरिएको केन्द्रले पहिलो चरणमा २० जिल्लामा घुम्ती पुस्तकालय सञ्चालन, विद्यार्थीहरूसँग हाजिरीजवाफ प्रतियोगिता, सञ्चारकर्मीसँग अन्तर्विज्ञान र स्थानीय बासिन्दसँग छलफल गर्ने केन्द्र प्रमुख डा. भुजुले बताए ।

## CLIMATE CHANGE

# Mobile library campaign kicks off

Himalayan News Service  
Kathmandu, December 16

Nepal Academy of Science and Technology (NAST) today started the mobile library campaign, which will travel across the nation in the next three weeks.

The team led by NAST Vice Chancellor Prof SR Kifle left for Pokhara today to launch the campaign, which will start tomorrow. "It is the first time such a massive campaign has been initiated from a government institution," said Dr Dinesh Raj Bhujju, Chief, Science Faculty, NAST.

The team will take library materials, climate lectures and interaction programmes to the grassroots.

The mobile library will stop at fifteen different places where it will disseminate information on climate change.

According to NAST, the Climate Change Mobile Library Campaign is one of the activities of Nepal Climate Change Knowledge Management Centre (NCCKMC). Entrusted to NAST, NCCKMC will serve as centre for providing climate change knowledge management and learning support

to policymakers, researchers, students, and the general public.

The mobile library journey that began from Kathmandu will halt at Pokhara, Dang, Rupandehi, Banke, Bardiya, Kailali, Dhangadi, Doti, Kanchanpur, Nawalparasi, Chitwan, Makwanpur, Rautahat, Biratnagar, Sunsari and Jhapa.

"Programmes are too Capital-focused and there is need to educate people at the local level. So, being a national academy for science and technology, we have initiated the campaign," added Bhujju.

The Kathmandu Post January 9, 2011

# Experts all praise for climate change management centre

## POST REPORT

KATHMANDU, JAN. 18

**N**EPAL Climate Change Knowledge Management Centre, established in December last year by the government as a conduit for research and literature on climate change in Nepal, will help generate and disseminate ideas on climate change to people, experts said.

Being under National Academy of Science and Technology (NAST) the centre will facilitate scientific research on climate change. NAST aims to initiate a "bottom-up advocacy campaign" through the centre, said Dinesh Raj Bhujju, chief of NAST's sci-

ence faculty. The centre has so far collected more than 1,000 books and booklets from India and other countries. The centre is also trying to reach out to ordinary Nepalis interested in climate change issues.

A team from the centre visited 25 districts with a

## FIGHTING CLIMATE CHANGE

mobile library to create massive awareness a month ago.

"The centre will come up with more attractive programmes in its second and third phases," said NAST's Bhujju.

The centre—the result of joint effort of NAST and Ministry of Environment (MoE)—is part of an extended process of

National Adaptation Programme of Action (NAPA) in Nepal (2008-2010), which is supported by DANIDA, DFID, GEF and UNDP-Nepal.

"The centre aims to serve as a platform to coordinate and facilitate management, exchange and spread information on climate-based issues," said Bhujju.

"Talks on climate change should not be only limited in urban areas as its impact is more visible on rural and poor people. The topography of the Himalayas as well as poor economy makes us more prone to the disaster compared to many other countries that are at climate change risk," he said.



# जलवायु परिवर्तन शिखर सम्मेलन

## हरित जलवायु कोष स्थापनामा सहमति

क्यानकुन, २५ मंसिर : मेक्सिकोको क्यानकुन सहरमा जारी जलवायु सम्मेलनमा जलवायु परिवर्तनको असर न्यूनीकरणका लागि मिलेर काम गर्ने सहमति भएको छ। बोलिभियाले भने यसमा असहमत हुन सकेन।

सहमतिअनुसार जलवायु परिवर्तनको असर न्यूनीकरणका लागि गरिब मुलुकलाई सहयोग गर्ने विशेष कोष 'ग्रिन क्लाइमेट फन्ड' अर्थात् हरित वातावरण कोष अर्थात् स्थापना गरिनेछ। यस कोषमा आगामी सन् २०२० भित्र एक सय अर्ब अमेरिकी डलर जम्मा गरिनेछ। उक्त रकम गरिब मुलुकको वातावरणीय सुधारका लागि खर्च गरिनेछ।

'जलवायु परिवर्तनका क्षेत्रमा नयाँ अन्तर्राष्ट्रिय युगको सुरुआत भएको छ', सम्मेलनको अन्त्यमा मेक्सिकोको विदेशमन्त्री प्याट्रिसिया एस्पिनोजाले भनिन्। सम्मेलनमा गरिब र धनी मुलुकबीच निकै तातो बहस भएको थियो। 'हामी निर्णयमा पुग्यौं', क्यानकुन सम्मेलनको छलफल सत्रकी अध्यक्ष मागिरट

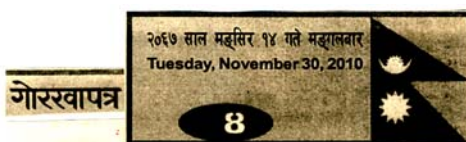
मुकाहानाना सांगावेल्ले भनिन्। उनी जिम्बाबेकी राजदूत हुन्। बोलिभियाका प्रतिनिधिले सम्मेलनको यस सत्रलाई बहिष्कार गरेका थिए। सम्मेलनमा धनी र गरिब मुलुकले कार्बन उत्सर्जनका लागि चाल्नुपर्ने कदमबारे सन् २०११ मा विस्तृत छलफल गर्ने भएपछि हाललाई मिलेर काम गर्ने सहमति भएको हो। यस सहमतिमा क्योटो अभिसन्धि लागू गर्ने मात्र सहमति भएको छ।

क्योटो सन् २०१२ मा समाप्त हुँदैछ। उक्त अभिसन्धिमा धनी मुलुकले मात्र कार्बन उत्सर्जनमा कटौती गर्नुपर्ने उल्लेख छ। यस सहमतिमा सन् २०१२ पछि पनि क्योटोलाई लम्ब्याउने वा समाप्त गर्ने भन्नेबारे केही उल्लेख छैन। गतवर्ष कोपनहेगनमा भएको दुई साता लामो सम्मेलनसमेत त्यसै समाप्त भएकाले यसपटकको सम्मेलन पनि त्यसै खेर गए जलवायु वार्ता बन्द हुनसक्ने आशंका थियो। यस सहमतिको लागि आयोजक मुलुक मेक्सिकोले मध्यस्थकर्ताको भूमिका निर्वाह गरेको छ। प्रारम्भिक सहमतिअनुसार

गरिब मुलुकलाई वायु तथा सौर्य ऊर्जाको प्रयोगमा धनी मुलुकले सहयोग गर्ने उल्लेख छ। बनजंगलको संरक्षणमा गरिब मुलुकलाई धनीले सहयोग गरी बाढी, पहिरो तथा महासागरको सतहमा भएको वृद्धि न्यूनीकरणमा सहयोग गर्ने सहमति भएको छ। गरिब मुलुकहरूले आफ्नो बनजंगलका लागि धनीले ठूलो धनराशि सहयोग गर्नुपर्ने माग राख्दै आएका छन्। यसैगरी, बनजंगललाई व्यावसायिक खेतीका रूपमा विकास गर्नुपर्ने उनीहरूको माग छ। बोलिभियाका राजदूतले भने पुँजीवादी मुलुकले ल्याएको यस प्रस्तावलाई आफ्नो मुलुकले अस्वीकार गर्ने बताए। धनी मुलुकले सन् १९९० का तुलनामा सन् २०१७ भित्र कार्बन उत्सर्जनलाई आधा पार्नुपर्ने आफ्नो अडान रहेको बोलिभियाका राजदूत पाब्लो सोलोनले बताए। 'बोलिभियाको असहमतिलाई पनि फुट नोटका रूपमा राखिनेछ', संरक्षणवादी संस्था प्राकृतिक स्रोत रक्षापरिषद्का अधिकारी ज्याक स्मिडले भने।

प्रस्ताव निर्णयार्थ राख्दै कुनै पनि मुलुकले विरोधमा हात नउठाएकाले प्रस्ताव पारित भएको उनले बताए।

गरिब मुलुकहरूले आफ्नो अर्थतन्त्रको मेरुदण्डका रूपमा कृषिलाई लिँदै आएका छन्। कृषि फार्मबाट सबैभन्दा बढी कार्बन निष्कासन हुने वैज्ञानिकहरूको तर्क छ। तर गरिब मुलुकले भने सबैभन्दा पहिले खान पाउनुपर्ने तर्क गर्दै आएका छन्। बितेका दुई शताब्दीमा धनी तथा औद्योगिक मुलुकले उत्सर्जन गरेको कार्बनका कारण हाल विश्वको जलवायु परिवर्तन चक्रलाई असर पारेको पनि वैज्ञानिकहरूले बताएका छन्। धनी मुलुकले लाभका लागि गरिब मुलुकलाई विपत्तिको सिकार बनाएको गरिब मुलुकहरूको आरोप छ। जलवायु परिवर्तनका कारण माल्दिभ्स डुब्दै गएको छ भने बंगलादेश पनि यसको मारमा फसेको छ। हिमालय तथा ध्रुवीय क्षेत्रमा हिउँ पग्लिने क्रम बढेकाले अर्को शताब्दीमा एसियालगायका क्षेत्रमा खानेपानीको हाहाकार हुने वैज्ञानिकहरूको तर्क छ। —रोयटर्स



## नास्टलाई अनुसन्धानमूलक बनाउन प्रमको आग्रह

ललितपुर, मङ्सिर १३ गते। नेपाल विज्ञान तथा प्रविधि प्रज्ञाप्रतिष्ठान (नास्ट) को ३०औँ शताब्दीमा आर्थिक २०६७/६८ को कार्यक्रम सञ्चालनका लागि रु. ११ करोड ६९ लाख ७० हजारको बजेट पारित गरेको छ। प्रधानमन्त्री एवं नास्टका कुलपति माधवकुमार नेपालको अध्यक्षतामा सोमबार यहाँ सम्पन्न सभाले नास्टको लागि सरकारबाट प्राप्त अनुदान रु. १० करोड ३० लाख, विदेशीय स्रोतबाट रु. ३२ लाख र अन्य स्रोतबाट रु. एक करोड बजेट पारित गरेको हो।

यस्तै सभाले नास्टबाट विज्ञान तथा प्रविधिका क्षेत्रमा उत्कृष्ट योगदान दिने व्यक्ति-संस्थालाई प्रोत्साहित गर्दै जाने उद्देश्यबमोजिम आर्थिक २०६७/६८ को प्रज्ञाप्रतिष्ठान विज्ञान तथा प्रविधि प्रज्ञापुरस्कार एकेडमीलाई, प्रविधि प्रवर्द्धन पुरस्कार दुईजना र नैसर्गिक विज्ञान प्रतिष्ठान पुरस्कार चारजनालाई प्रदान गर्ने निर्णय गरेको छ।

यसरी पुरस्कार प्राप्त गर्नेमा क्रमशः विज्ञान तथा प्रविधि प्रज्ञापुरस्कार नेसनल जुनिसिएड फुड हाइजिन रिसर्च सेन्टरका डा. दुर्गादेव जोशी, प्रकृति संरक्षण पुरस्कार राष्ट्रिय प्रकृति संरक्षण कोषका पूर्वकार्यकारी

निर्देशक विश्वनाथ उप्रेती, प्रज्ञाप्रतिष्ठान विज्ञान तथा प्रविधि प्रवर्द्धन पुरस्कार वीर अस्पतालका डा. सुधांशु केसी, युवा विज्ञान तथा प्रविधि पुरस्कार त्रिभुवन विश्वविद्यालय केन्द्रीय वनस्पति विभागका डा. सन्देश भट्टराई, त्रिभुवन विश्वविद्यालय शिक्षण अस्पतालका डा. प्रकाश अधिकारी, डा. टीपक पुडासैनी, डा. गोकर्ण गौतम, त्रिचन्द्र क्याम्पस भूगर्भ विभागका डा. सुनिलकुमार दिवेदी रहनुभएको छ।

त्यसैगरी तेस्रो विश्वविज्ञान प्रतिष्ठान पुरस्कार विश्वविद्यालय जापानका डा. प्रोसा सिंह, डा. मनेज थापा, डा. रवीन्द्रप्रसाद ढकाल र त्रिचन्द्र केन्द्रीय प्राणीशास्त्र विभागका डा. महेश्वर महर्जनले प्राप्त गर्नुभएको छ। सो अवसरमा सभालाई सम्बोधन गर्दै प्रधानमन्त्री नेपालले जनआकाङ्क्षाबमोजिम स्थापित नास्टले अनुसन्धानमूलक काम गरी जनमानसमा राम्रो प्रभाव पार्न सक्नुपर्ने बताउनुभयो।

उहाँले नीति क्षेत्रसित सहकार्य र अन्य स्रोतहरूसमेतको व्यवस्था गरी अनुसन्धानात्मक कार्य अगाडि बढाउन आग्रह गर्नुभयो। उहाँले नास्ट र निजी क्षेत्रबीचको समन्वय अभिवृद्धि गर्न सकेमा विज्ञानप्रविधिको क्षेत्रमा थप विकास गर्न सकिने

बीबी ४ पृष्ठमा

विश्वास पनि व्यक्त गर्नुभयो।

सोही अवसरमा विज्ञान तथा प्रविधि राज्यमन्त्री एवं नास्टका सहकुलपति इन्द्रप्रसाद ढुङ्गेलले नास्टबाट सञ्चालित कार्यक्रमहरू सराहनीय भएको उल्लेख गर्दै यसलाई सम्बन्धित सबै निकायबीच समन्वयका साथ अघि बढ्न आग्रह गर्नुभयो। नास्टका उपकुलपति प्रा.डा. सुरेन्द्रराज काफ्लेले नास्टको क्रियाकलापलाई अझ बढी प्रभावकारी र सशक्त रूपले देखावटी बनाउन आफूहरू प्रयासरत रहेको बताउनुभयो।

यसैबीच सोमबार प्रधानमन्त्री नेपालले नास्ट र वातावरण मन्त्रालयको राष्ट्रिय अनुकूलन योजना कार्यक्रमको सहकार्यमा नास्ट परिसर, खुम्लुटारमा स्थापना गरिएको नेपाल जलवायु परिवर्तन सूचना व्यवस्थापन केन्द्रको उद्घाटन गर्नुभयो।

सो अवसरमा प्रधानमन्त्री नेपालले जलवायु क्षेत्रमा रहेका जल्दोबल्दा समस्यालाई समाधान गर्नेतर्फ केन्द्रबाट सहयोग पुऱ्याउन आग्रह गर्दै केन्द्रलाई नमुना सूचनाकेन्द्रको रूपमा विकास गरी नेपालको मात्र नभई साकै क्षेत्रकै अगुवा केन्द्र बनाइनुपर्ने आग्रह दिनुभयो।



## नास्टको प्राज्ञसभा सम्पन्न

# साढे ११ करोडको बजेट स्वीकृत, पुरस्कार घोषणा

### नेपाल समाचारपत्र

काठमाडौं

नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान (नास्ट) को ३०औं प्राज्ञसभा प्रधानमन्त्री एवम् नास्टका कुलपति माधवकुमार नेपालको अध्यक्षतामा मंगलबार सम्पन्न भएको छ।

सभाले आर्थिक वर्ष २०६७/०६८ का कार्यक्रम सञ्चालन गर्नका लागि नेपाल सरकारबाट प्राप्त अनुदान १० करोड ३० लाख रुपियाँ, वैदेशिक स्रोतबाट ३२ लाख रुपियाँ र अन्य स्रोतबाट १ करोड ७ लाख ३२ हजार रुपियाँ गरी जम्मा ११ करोड ६१ लाख ७० हजार रुपियाँको कार्यक्रम बजेट स्वीकृत गरेको छ।

यस्तै, सभाले नास्टबाट विज्ञान तथा प्रविधिको क्षेत्रमा उत्कृष्ट योगदान दिने व्यक्ति-संस्थालाई प्रोत्साहित गर्दै जाने उद्देश्यवमोजिम आ.व. २०६६/०६७ सालको प्रज्ञा प्रतिष्ठान विज्ञान तथा प्रविधि प्रज्ञा पुरस्कार एक जनालाई, प्रकृति संरक्षण पुरस्कार एक जना, विज्ञान तथा प्रविधि युवा पुरस्कार पाँच जना, प्रज्ञा प्रतिष्ठान विज्ञान तथा प्रविधि प्रवर्द्धन पुरस्कार दुई जना र तेस्रो विश्वविज्ञान प्रज्ञा प्रतिष्ठान पुरस्कार चार जनालाई दिने निर्णय गरेको छ।

यसरी पुरस्कारका लागि छनोट हुनेमा विज्ञान तथा प्रविधि प्रज्ञा पुरस्कारतर्फ नेसनल जुनोसिस एन्ड फूड हाइजिन रिसर्च सेन्टरका डा. दुर्गादत्त जोशी

हुनुहुन्छ। उहाँलाई पशुबाट मानिसमा सर्ने रोग तथा भाइरल इन्सेफलाइटिसबारे विस्तृत अध्ययन-अनुसन्धान गरी निदान, उपचार तथा रोकथाममा विशेष योगदान पुर्‍याएबापत पुरस्कार प्रदान गर्ने निर्णय गरिएको नास्टले जनाएको छ।

त्यस्तै प्रकृति संरक्षण पुरस्कार राष्ट्रिय प्रकृति संरक्षण कोषका कार्यकारी पूर्वनिर्देशक विश्वनाथ उप्रेतीलाई नेपालमा जैविक विविधता संरक्षण र संवर्द्धनका लागि संरक्षित क्षेत्रहरूको स्थापना, संरक्षण तथा व्यवस्थापनमा प्रमुख भूमिका निर्वाह गरी अमूल्य योगदान पुर्‍याउनुका साथै नेपालको प्रकृति संरक्षणको अभियान र सफलतालाई अन्तर्राष्ट्रिय स्तरमा समेत पुर्‍याउन उल्लेखनीय योगदान पुर्‍याएबापत प्रदान गर्ने निर्णय भएको जनाइएको छ।

प्रज्ञा प्रतिष्ठान विज्ञान तथा प्रविधि प्रवर्द्धन पुरस्कार बीर अस्पतालका डा. सुधांशु केसीलाई कलेजोजन्य रोगको अध्ययन-अनुसन्धान गरी सोको रोकथामका लागि प्रचारप्रसारमा योगदान पुर्‍याएबापत, फाउन्डेसन फर स्टटेनेबल टेक्नोलोजिका सानुकाजी श्रेष्ठलाई खेर जाने वस्तुबाट वैकल्पिक इन्धन बनाउने उपयुक्त प्रविधि विकास गरी प्रचारप्रसारमा योगदान पुर्‍याएबापत प्रदान गर्ने निर्णय भएको जनाइएको छ।

युवा विज्ञान तथा प्रविधि पुरस्कार क्रमशः त्रिभुवन विश्वविद्यालय केन्द्रीय वनस्पति विभागका डा. सन्देश भट्टराईलाई हिमाली क्षेत्रमा वनस्पतिको

परम्परागत ज्ञानलाई वैज्ञानिक अध्ययन-अनुसन्धान गरी योगदान पुर्‍याएबापत, त्रिभुवन विश्वविद्यालय शिक्षण अस्पतालका डा. प्रकाश अधिकारीलाई नाक, कान, घाँटीका रोगहरूको विस्तृत अध्ययन अनुसन्धान गरी तिनको निदान, उपचार तथा रोकथाममा मद्दत गरी योगदान पुर्‍याएबापत, योन्सी विश्वविद्यालय दक्षिण कोरियाका डा. दीपक पडासैनीलाई काठमाडौं उपत्यकामा भू-सतहभूजिकको औजोनसम्बन्धी अनुसन्धान गरी सोको प्रदूषणको रोकथामका लागि योगदान पुर्‍याएबापत, होक्काइडो जापानमा अनुसन्धानरत डा. गोकर्ण गौतमलाई गर्भवती होलेस्टाइन गाईमा प्रजननसमस्यासम्बन्धी अध्ययन-अनुसन्धान गरी योगदान पुर्‍याएबापत र त्रिचन्द्र क्याम्पस भूगर्भ विभागका डा. सुनीलकुमार द्विवेदीलाई अफ्रो-अरेबियन क्षेत्र र एनाटोलियन क्षेत्रको टेक्नोनोक्स र स्ट्रेस सञ्चित तथा त्यसबाट उत्पन्न हुन सक्ने भूकम्पीय जोखिमको 'न्युमेरिकल मोडेलिङ' प्रविधिको अध्ययन-अनुसन्धानका साथै प्रयोग गरी योगदान पुर्‍याएबापत प्रदान गर्ने निर्णय भएको जनाइएको छ।

### प्रमबाट उद्घाटन

यसैबीच प्रधानमन्त्रीले वातावरण मन्त्रालयको राष्ट्रिय अनुकूलन योजना कार्यक्रमको सहकार्यमा नास्टपरिसर खुमलटारमा स्थापना गरिएको नेपाल जलवायु परिवर्तन सूचना व्यवस्थापन केन्द्र उद्घाटन गर्नुभएको छ।



# वातावरणमन्त्रीद्वारा हिमाल जोगाउन आग्रह

पिताम्बर सिग्देल

कानकुन (मेक्सिको), २३ मंसिर : जलवायु परिवर्तनसम्बन्धी संयुक्त राष्ट्रसंघीय सोह्रौं विश्व सम्मेलन (कोप १६) मा नेपालका तर्फबाट परणमन्त्री ठाकुरप्रसाद शर्माले बिहोबार सम्बोधन गरेका छन्। जलवायु परिवर्तनका असरसँग जुध्न नेपाललाई विशेष सहयोगको खाँचो रहेको मन्त्री शर्माले बताए। जलवायु परिवर्तनका कारण नेपालका हिमाल संकटमा परेको भन्दै शर्माले हिमाल जोगाउन अन्तर्राष्ट्रिय समुदायसमक्ष सहयोगको अपिल गरे।

मन्त्री शर्माले नेपालमा जलवायु परिवर्तनका कारण हिउँ पगल्ने क्रम अकल्पनीय रूपमा बढेको विभिन्न अध्ययनबाट पुष्टि भएको बताए। अन्तर्राष्ट्रिय समुदायले हिमाली क्षेत्रमा आफ्नो ध्यान केन्द्रित नगरे तल्लो क्षेत्रमा बस्ने विश्वका करोडौं जनताका लागि खानेपानीको समेत अभाव हुने दाबी पनि उनले गरे।

जलवायु परिवर्तनका असरबाट अप्रतिष्ठित हुनका लागि सञ्चालन कार्यक्रम (नापा) तयार पारिएको जानकारी दिँदै मन्त्री शर्माले त्यसको कार्यान्वयनका लागि जुटिरहेको उल्लेख गरे। हिमाली देशका साझा समस्या एउटै मञ्चबाट उठाउने उद्देश्यले हिमाली सञ्जालको अवधारणा अघि बढाइएको जानकारी पनि उनले दिए। अति कम विकसित देशले थोरै कार्बनडाइअक्साइड उत्सर्जन गरे पनि धेरै असर भोगिरहेको बताउँदै उनले हरितगृह ग्यास उत्सर्जनमा कटौती गर्न प्रतिबद्धता आउनुपर्ने धारणा पनि शर्माले व्यक्त गरेका थिए।

सम्मेलनमा एक सय ९४ देशका मन्त्री तथा केही सरकारी प्रतिनिधि उपस्थित छन्। यसपटकको सम्मेलनमा आयोजक देश मेक्सिकोबाहेक कुनै पनि देशका राष्ट्रप्रमुख उपस्थित छैनन्। सम्मेलनमा नेपालसहित ६५ देशका मन्त्रीले सम्बोधन गरेका थिए।

यसैबीच वातावरण मन्त्रालयले बिहोबार नै कानकुनमा पत्रकार सम्मेलन आयोजना गरी नेपालले सम्मेलनमा उठाएका मुद्दाका बारेमा जानकारी गराएको छ। सम्मेलनस्थलमा आयोजित पत्रकार सम्मेलनमा वातावरणमन्त्री शर्मा, वन तथा भूसंरक्षणमन्त्री दीपक बोहोरा, राष्ट्रिय योजना आयोगका सदस्यद्वय डा. दिनेशचन्द्र देवकोटा र रामकुमार शर्मा पनि उपस्थित थिए।

पत्रकार सम्मेलनमा हिमालका अतिरिक्त अनुकूलन तथा रेड (रिड्यूसिङ इमिसन थ्रु डिफरेन्स) एन्ड डिग्रेटेसन) कार्यक्रमका बारेमा विशेष चासो देखाइरहेको जानकारी दिइयो। मन्त्री बोहोराले नेपालको वनजंगलले कार्बन उन्सर्जन नियन्त्रण गरिरहेको बताउँदै रेडले नेपाललाई विशेष फाइदा पुग्ने बताए। उनले जलवायु परिवर्तनका कारण दुर्लभ वन्यजन्तुमा परेको असर कम गर्ने कार्यक्रमको खाँचो पनि औल्याएका थिए।

योजना आयोगका सदस्य डा. देवकोटाले साना देशले उठाएका मुद्दामा विकसित देशले चासो दिने क्रम बढिरहेको बताए। वातावरण मन्त्रालयका सचिव डा. गणेशराज जोशीले जलवायु परिवर्तनका बारेमा नेपालले गत वर्ष कोपनहेगनमा राखेका विचारमा अडिग रहेको जानकारी दिए।

## जनदिशा

२०६७ मंसिर १४ मंगलबार  
2010 November 30, Tuesday

## जलवायु परिवर्तनसम्बन्धी साइकलयात्रामा दुई युवा

■ जनदिशा संवाददाता

कैलाली, १३ मङ्सिर

जैविक विविधताको संरक्षण तथा जलवायु परिवर्तनसम्बन्धी जनचेतना जगाउने उद्देश्यका साथ दुई युवाले कञ्चनपुरको गड्डाचौकीबाट महाकाली-मेची साइकलयात्रा सुरु गरेका छन्।

वन विज्ञान अध्ययन संस्थान पोखरा क्याम्पसमा अध्ययनरत कैलाली जोशीपुरका गोपाल खनाल र कञ्चनपुर भलारीका दीपेन्द्रनाथले सो यात्रा प्रारम्भ गरेका हुन्।

मङ्गलबारदेखि मेक्सिकोको क्यानकुन सहरमा हुने जलवायु परिवर्तनसम्बन्धी विश्व सम्मेलन (कोप-१६) र अन्तर्राष्ट्रिय जैविक विविधता वर्ष सन् २०१० को अवसर पारेर सुरु गरिएको सो यात्राको उद्घाटन सिद्धनाथ विज्ञान क्याम्पसका प्रमुख डा. भवानीचन्द्र ठकुरीले गरेका थिए।

तराईका २० जिल्लामा गरिने सो यात्राको पहिलो दिनको यात्रा कञ्चनपुरबाट सुरु भई कैलालीको अत्तरियासम्म गरिएको छ भने आज अत्तरियाबाट चिसापानीसम्म पुग्ने साइकलयात्री खनालले बताए।

यात्राले जलवायु परिवर्तन र वातावरणीय विनासको समस्या, बाघ, गैंडा, गिद्धलगायत दुर्लभ जैविक विविधता संरक्षण, वैकल्पिक ऊर्जाको प्रयोगलगायतका विविध विषयमा प्रोत्साहन गरिने जनाएको छ।

यात्राका लागि विश्व वन्यजन्तु कोष नेपाल, विश्व प्रकृति संरक्षण सङ्घ नेपाल, नेपाल पक्षी संरक्षण सङ्घ, केयर नेपाल, सामुदायिक वन उपभोक्ता महासङ्घ, नेपाल वन प्राविधिक संघ, नेपाल विज्ञान तथा प्रविधि प्रतिष्ठान, लिबर्ड, पश्चिमी तराई भू-परिधि विकास आयोजनाको सहयोग रहेको बताइएको छ।



## SAARC to be climate talks observer

Ramesh Prasad Bhushal  
Cancun, November 30

The 16th Conference of 194 Parties to the United Nations Framework Convention on Climate Change kicked off here today with a plea to commit and compromise for tackling climate change. As in the past, the speakers urged the countries to come up with specific and clear solutions to check degradation of the environment.

However, general opinion here is that the meeting is unlikely to come up with anything concrete. "I am not much hopeful. However, the meeting can be fruit-

ful in keeping negotiations on track after they were derailed in Copenhagen last year due to the interruption by world leaders," said Purusottam Ghimire, Chief Negotiator from Nepal.

Close to 15,000 participants, including government delegates from 194 Parties to the UNFCCC and representatives from business and industry, environmental organisations and research institutions, are attending the gathering in Cancun. Copenhagen had seen 30,000 participants.

"Climate change is an issue that affects life on a planetary scale. There are billions of human beings

expecting you to work for humanity," said Felipe Calderon, President of Mexico, addressing the opening session of the meeting.

It is learnt that 20 heads of government will be attending the closing session of the climate change talks on December 10. Last year's meeting in Copenhagen was attended by more than 120 heads of government.

The Copenhagen meet had failed to forge consensus on climate change treaty with specific target to reduce carbon emissions to lower global warming.

"Warming of the climate system is now evident from increase in global average

air and ocean temperature, widespread melting of snow and ice and rising global average sea-level," said Rajendra Kumar Pachauri, Chief of Inter-governmental Panel on Climate Change, a scientific body to assess climate change signs.

The meeting held shortly after the plenary session decided to provide South Asian Association for Regional Cooperation the status of observer organisation in the climate talks. The proposal from Bhutan as the chair of SAARC was supported by India and Pakistan. Climate change was a major agenda in the 16th SAARC meeting held in Thimphu in April.

## Cycling to raise awareness

KAILALI: Two youths have embarked on Mahakali-Mechi bicycle journey in a bid to increase awareness about biodiversity conservation and climate change. Gopal Khanal of Kailali and Dipendra Nath of Kanchanpur of

Kanchanpur, both students of Institute of Forestry (Pokhara), are on the cycle tour. The tour coincides the 2010 United Nations Climate Change Conference starting in Cancun of Mexico from Tuesday. (RSS)



# Climate talks end on optimistic note

*Unlike Copenhagen, leaders did not stymie talks this time*

Ramesh Prasad Bhushal  
Cancun, December 11

The two-weeks climate talks held in Cancun of Mexico ended with some hope.

Unlike last year's Copenhagen talks where more than 110 heads of government were blamed for derailing negotiations on a climate deal, the talks this time stayed on track.

"A new era in international cooperation in climate change has begun," said Mexican Foreign Secretary Patricia Espinosa who chaired the meeting.

Governments agreed to boost action to curb emission resulting from deforestation and forest degradation in developing countries with technological and financial support. "Governments have given a clear signal they are headed to-

wards low-emissions future, they have agreed to be accountable to each other for actions taken to get there, and have set it out in a way that encourages countries to be more ambitious over time," said Christina Figueres, Chief of UNFCCC-climate change wing.

The countries agreed to a total of \$30 billion as starting finance from industrialised countries to support climate action in the developing world up to 2012. They aim to raise \$100 billion in long term funds by 2020.

The major outcomes are: creation of Green Climate Fund; support for developing countries to adapt to climate-change impacts; and the foundations of systems that will protect forests and transfer climate-friendly technologies to developing nations.

Despite these, the big issue of carbon dioxide emission reduction (and legal commitments to make them real) has not been resolved but merely kept in play to be tackled at a later date," said Dr Saleemul Huq, senior fellow in the climate change group at the International Institute for Environment and Development, a UK-think tank.

Unlike Copenhagen, the talks moved smoothly here and major economies like the USA, China, Japan, India, Canada, Russia and European Union appreciated the document that came out after two weeks negotiations. "Cancun may have saved the process but it did not yet save the climate," said Greenpeace International Climate Policy Director Wendel Trio. "Some called the process dead, but governments have shown

they can cooperate and move forward to achieve a global deal."

At the beginning, Japan opposed a second commitment period for the Kyoto protocol whose first phase ends in 2012, pointing out that the treaty covers only 30 percent of global emissions because top polluters including China, India and the US are not part of it. The Kyoto protocol mandates developed countries to cut carbon dioxide emissions, but countries like China and India, which are now emerging economies are not in that net as they fall in the list of developing countries. Besides, the US has not signed the protocol.

Removing fear of the Kyoto Protocol's death, the countries agreed to move on track and keep on negotiating about the future of the protocol.

## जोरखापत्र

२०६७ साल मङ्सिर २६ गते आइतबार

## जलवायु परिवर्तनबाट उत्पन्न समस्या कम गर्न खर्चौं डलरको ग्लोबल फन्ड स्थापना गरिने

कानकुन, मङ्सिर २५ गते। मेक्सिकोको कानकुनमा जारी जलवायु परिवर्तनसम्बन्धी विश्व सम्मेलनका क्रममा यसको असरबाट उत्पन्न समस्यालाई कम गर्न गरिब राष्ट्रलाई क्षतिपूर्ति दिन खर्चौं डलरको ग्लोबल फन्ड स्थापना गर्ने विषयमा कुराकानी भएको समाचार छ।

दुई हप्तादेखि जारी सो सम्मेलनमा शनिबार यो फन्डको परिचालन गरी औद्योगिक राष्ट्रका तर्फबाट त्यसमा जम्मा गरिने रकमबाट जलवायु परिवर्तनको मारमा परेका गरिब राष्ट्रलाई क्षतिपूर्ति दिइने सम्बन्धमा पनि कुराकानी भएको थियो।

साथै क्योटो अभिसन्धिको अनुमोदनका लागि पनि कुरा

उठेको छ। जलवायु परिवर्तनको असर कम गर्नका लागि सहयोगीसिद्ध हुने यो अभिसन्धिको म्याद आगामी दुई वर्षमै सकिदैछ।

हामीले पछिल्ला केही दिनमा आएर निकै नै महत्वपूर्ण प्रगति हासिल गरिरहेका छौं- मेक्सिकोको विदेशसचिव प्याट्रिसिया एस्पिनोसाले भनिन्।

जलवायु परिवर्तनको असर कम गर्ने सम्बन्धी विश्वव्यापी कानून निर्माणका लागि विश्वले हामीलाई हेरिरहेको छ भन्दै संयुक्त राष्ट्रसङ्घीय

जलवायुसम्बन्धी प्रमुख टोड स्टर्नले त्यसतर्फको यात्रा अझै तय नभइसकेको भए पनि सम्मेलन प्रगतिउन्मुख नै रहेको

वताए।

गतवर्ष यसै समयमा डेनमार्कको कोपेनहेगनमा जलवायु परिवर्तनसम्बन्धी १५औं सम्मेलन भएको र यसले जलवायु परिवर्तनको असर कम गर्नका लागि कानून नै निर्माण गर्न भनेपछि परेको थियो।

अहिले पनि यस्तो कानून निर्माणका लागि कुराकानी उठिरहेको तर सहमति भने हुन नसकेको प्राप्ति समाचारमा उल्लेख छ।

यसपटक भने यस्तो ग्लोबल फन्डको स्थापना गरी यसको असरका कारण मारमा परेका राष्ट्रलाई क्षतिपूर्ति दिनका लागि सो फन्डको परिचालन गर्ने विषयमा कुराकानी भइरहेको बताइएको छ। एएफपी

# जलवायु परिवर्तन सम्बन्धी चेतना अभियानमा नाष्ट

● मधु आचार्य

हेटौडा, १८ पुस / नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान (नाष्ट)ले जलवायु परिवर्तन सम्बन्धी जानकारी गराउन सञ्चालन गरेको देशव्यापी अभियानको क्रममा बुधवार हेटौडामा कार्यक्रम गरेको छ।

'जलवायु परिवर्तन चेतनाका लागि घुम्ति पुस्तकालय' अभियानका साथ नाष्टको टोली पूर्व मेचीदेखि पश्चिम महाकालीसम्म जनस्तरमा चेतना अभिवृद्धि गर्न अग्रसर भएको हो।

गत पुस २ गते पोखराको अमरसिंह उच्च माविबाट औपचारिक उद्घाटन गरी अभियान शुरू गरेको अभियान व्यवस्थापन अधिकृत भोजराज अधिकारीले बताए। अभियान टोली कास्की, स्याङ्जा, पाल्पा, रुपन्देही, कपिलवस्तु, दाङ, बाँके, बर्दिया,



जलवायु परिवर्तन सम्बन्धी पोस्टर प्रदर्शनी अवलोकन गर्दै श्रमिक माविका विद्यार्थी तथा शिक्षकहरू । तस्वीर: विमल श्रेष्ठ

कैलाली, कञ्चनपुर, डोटी, डडेलधुरा, नवलपरासी तथा मकवानपुरको हेटौडा आइपुगेको हो। हेटौडा-४ करीमा रहेका

श्रमिक माध्यमिक विद्यालयमा नाष्टको टोलीले जलवायु परिवर्तन सम्बन्धी पोस्टर प्रदर्शनी, फोटो प्रदर्शनी, अन्तर्क्रिया तथा विज्ञहरुद्वारा अनुशिक्षण कक्षाहरू

समेत सञ्चालन गरेको थियो। अभियानबाट जलवायु परिवर्तन सम्बन्धी जनस्तरमा सचेतना अभिवृद्धि गर्नका साथै विद्यार्थी, शिक्षक तथा बुद्धिजीवीको धारणा बुझ्न प्रभावकारी भएको नाष्ट प्रवर्द्धन महाशाखा प्रमुख रमिला राउतले बताइन्।

जलवायु परिवर्तनको समस्याले नेपाललाई पनि असर

पार्ने बताउँदै नाष्टका वातावरणविद सुदिप पाण्डेले यस समस्या न्यूनीकरणमा आजै देखि विद्यार्थीलाई सचेत गराउन सके बढी प्रभावकारी हुने बताए।

नाष्टका विज्ञान संकाय प्रमुख डा. दिनेशराज भुजुको नेतृत्वमा संचालित अभियान टोली पूर्वक्षेत्र जाने क्रममा हेटौडा आएको हो। टोलीले विभिन्न विद्यालयमा

विद्यार्थीबीच विज्ञान र जलवायु परिवर्तन सम्बन्धी हाजिरीजवाफ प्रतियोगिता पनि सञ्चालन गरेको जनाएको छ। हालसम्म दशौं हजार विद्यार्थीलाई जलवायु परिवर्तनबारे जानकारी दिइएको नाष्टका वातावरण विद अञ्जु सापकोटाले बताइन्।

टोलीले हेटौडाबाट बारा, रौतहट, सर्लाही हुँदै मंगलबार भैरहामा पुगी कार्यक्रम समापन गर्नेछ। टोलीमा नाष्टका हरिराम श्रेष्ठ तथा उमेश अधिकारीको पनि सहभागिता छ। नाष्टले जलवायु परिवर्तन सम्बन्धी सम्पूर्ण जानकारी प्रदान गर्ने उद्देश्यले नेपाल जलवायु परिवर्तन ज्ञान व्यवस्थापन केन्द्र समेत सञ्चालन गरिरहेको छ।



# जलवायु परिवर्तनबारे सचेत गराउँदै नास्ट

पश्चिम नेपाल संवाददाता

महेन्द्रनगर, ७ पुस

नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान (नास्ट)ले जलवायु परिवर्तन र यसले पारिस्थिकी असरका बारेमा जनचेतना अभिवृद्धिको लागि जलवायु परिवर्तन घुम्ति पुस्तकालय मेची महाकाली अभियान २०६० कार्यक्रम अन्तर्गत बुधबार महेन्द्रनगरमा प्रदर्शनी गरिएको छ ।

महेन्द्रनगरस्थित स्थानीय महेन्द्रनगर उच्च माविमा प्रतिष्ठानले जलवायु परिवर्तनका विषयमा प्रदर्शनी सहित यसका बारेमा विद्यालयमा रहेका विद्यार्थीहरूलाई जानकारी गराएको छ । अहिले वायुमण्डलमा भइरहेको जलवायु परिवर्तनले पारेको असरका बारेमा जानकारी दिन पश्चिमाञ्चलको पोखराबाट सुरु गरिएको अभियान महाकालीसम्म पुगेको हो । अभियानले विभिन्न स्थानहरूमा गएर जलवायु परिवर्तनले पारिस्थिकी असरका बारेमा जानकारी गराएको छ । मुख्य गरी विद्यालयमा अध्ययन गरिरहेका विद्यार्थीहरू माँझ केन्द्रीत रहेर कार्यक्रम गरिरहेको अभियानमा सहभागी अशोक थापाले बताए ।

'हामीले पहिले विद्यालयमा अध्ययन गर्ने विद्यार्थीहरूलाई यसका बारेमा जानकारी गराउन सक्थौं भने धेरै सहज हुन्छ' उनले भने 'यस सम्बन्धी जानकारी पाएका विद्यार्थीहरूले आफ्नो टोल छिमेकमा समेत यसका बारेमा जनचेतना फैलाउँदै जानेछन ।' विश्वमा भइरहेको जलवायु परिवर्तनबाट नेपाल समेत प्रत्यक्ष प्रभावित भइरहेको अवस्थामा सबैलाई यसका बारेमा जानकारी गराउनका लागि देशभरि अभियानका रूपमा बढाइनुपर्ने नास्टको उद्देश्य रहेको जनाएको छ । नेपाल कमलौ प्रकृतिको पर्वतमाला र गरिविका कारण जलवायु परिवर्तनको मारबाट धेरै सताइने राष्ट्रहरूमा सुचिमा रहेको छ ।



नास्टले जलवायु परिवर्तनका विषयमा अध्ययन गर्नका लागि नेपाल जलवायु परिवर्तन ज्ञान व्यवस्थापन केन्द्रको समेत स्थापना गरेको छ । अभियान अन्तर्गत हाजिरी जवाफ प्रतियोगिता, फोटो प्रदर्शनी तथा अन्तरक्रिया समेत गर्दै आइरहेको छ । जलवायु परिवर्तन चेतनाका लागि मेची महाकाली घुम्ति पुस्तकालय कार्यक्रमको नेतृत्व नास्टका मुख्य वैज्ञानिक डा.दिनेश राज भुजुले गरेका छन भने उक्त टोलीमा भोजराज अधिकारी, महेन्द्र कलापी, नारायण गैरे, अशोक थापा र उमेश प्रसाद अधिकारी रहेका छन ।

पुस २ गतेबाट सुरु भएको उक्त कार्यक्रम पोखरा, स्याङ्जा, पाल्पा, बुटवल, दाङ, बाँके हुँदै कञ्चनपुरमा आयोजना गरिएको हो । यसपछि पुस ६ गते डोटी, १० गते डडेल्धुरामा कार्यक्रम गरिने भएको छ । यस्तै पुष ११ गतेबाट पूर्व नेपालका १० जिल्लामा उक्त कार्यक्रम आयोजना गरिने नास्टले जनाएको छ ।



## [ आजको सिर्जना/जलवायु परिवर्तन, असर र समाधान ]

पंकज दुंगा

'जलवायु' परिवर्तन भन्नाले जल र वायुको प्राकृतिक स्वरूप परिवर्तन हुनु हो। राष्ट्रिय र अन्तर्राष्ट्रियस्तरमा यो चिन्ताको विषय बनेको छ। जलवायु परिवर्तनका कारण पृथ्वीका हरेक जीवजन्तु र वनस्पतिको अस्तित्व संकटमा पर्दैछ। मानवजीवनमा आउने समस्यामध्ये जलवायु परिवर्तन यस्तो समस्या हो; जसले मानव, जीव, जनावर तथा सिंगो वातावरणमै नकारात्मक असर पुऱ्याइरहेको छ।

वायुमण्डलमा हावाका विभिन्न तह हुन्छन्। तीमध्ये ओजोन ग्यासको पनि एउटा तह हुन्छ। ओजोन तहले सूर्यबाट आउने परावैजनी किरण छेकेर त्यसलाई पृथ्वीमा भित्रन दिँदैन। साथै ओजोन तहले लामो 'वेभलेन्थ' भएका सूर्यका किरणलाई छोटो वेभलेन्थमा परिवर्तन गरेर मात्र पृथ्वीमा छिर्न दिन्छ, जुन जीवका लागि हानिकारक हुँदैन। तर, ओजोन तहलाई सीएफसी ग्यास, क्लोरोफर्म, नाइट्रोजन अक्साइड, नाइट्रोजन डायअक्साइड जस्ता हानिकारक ग्यासले विनाश गर्छन्। सीएफसी (क्लोरोफ्लोरो कार्बन) ले ओजोन ग्यासको ५० लाख परमाणु विनाश गर्छ। हरितगृह ग्यासले पृथ्वीको वायुमण्डलमा तहका रूपमा रहेर छोटो वेभलेन्थ भएको किरणलाई वायुमण्डलमा फिर्ता जान दिँदैन। फलस्वरूप पृथ्वीको तापक्रम बृद्धि हुन्छ। पहिलेपहिले हरितगृह ग्यासले पृथ्वीमा जीवहरूलाई ठिककुरा तापक्रममा राखे गर्थ्यो। तर, अठ्ठारौँ शताब्दीको औद्योगिक क्रान्तिपश्चात् हरितगृह ग्यासको मात्रा पृथ्वीमा बढ्न गयो र वायुमण्डलको तापक्रम पनि बढ्न थाल्यो। तापक्रम बढेको त हामीले अनुभव गरेका छौं।

अहिले उद्योगको मात्रा बढिरहेको छ, घरघरमा सीएफसी ग्यास निकाल्ने रेफ्रिजरेटरको संख्या पनि बढेको छ। तर, वैकल्पिक ऊर्जाको प्रयोग भने त्यति अवलगादो छैन। जलवायु परिवर्तन यस्तै कारणले उब्जिएको समस्या हो। यसका कयौँ



तस्विराहरु: उमा विश्व

## नकारात्मक असर धेरै

बैफाइदा छन्। कहिलेकाहीँ यो फाइदाकारी पनि रहेको पाइन्छ। **[ प्रयत्न ]** ध्रुवीय क्षेत्र या जाडो हुने ठाउँमा जाडो घटेको छ। फलफूल तथा तरकारी चिसो ठाउँमा पनि राम्ररी फलन थालेको पाइन्छ। झन् कहिल्यै औप नपावने काठमाडौँमा भर्खरै दुई वर्षदेखि औप पावन थालेको छ। त्यसैगरी फलफूलहरू छिट्टै पावन थालेका छन्। यी जलवायु परिवर्तनका सकारात्मक असर हुन्। नकारात्मक असरको कुरा गर्दा अहिले रोग फैलने क्रम बढेको छ। गर्मी बढेकाले रोगहरू बढी मात्रामा फैलिएको पाइन्छ; चराचुरुङ्गी पनि विस्तारै जाडो ठाउँतर्फ जाने गरेको पाइन्छ। समयमा पानी नपर्ने, पानी परे पनि कि

त अतिवृष्टि हुने कि त अल्पवृष्टि हुने गरेको छ। खडेरीले गर्दा बालीनालीमा त झनै प्रत्यक्ष असर गरेको छ। त्यसैगरी अतिवृष्टि भएको ठाउँमा बाढीपहिरो गएर भनमाल तथा जनधनको नास हुने गरेको छ। हाम्रो देशमा हिमालहरू नांग भएका छन्। केही दशकमा सबै हिमाल चट्टानसहित बल्ने वातावरणविद्हरूको अनुमान छ। बर्सेन हिउँ पर्ने ठाउँको उचाइ ५० मिटरले बढ्दैछ। समुद्रको तह बढेकाले गर्दा टापुहरू डुल्ने क्रम बढ्दो छ। बर्सेन केही मिटरले समुद्री सतह बढिरहेको छ। माल्दिभ्स, श्रीलंकाजस्ता देश डुल्ने खतरा बढेको छ। त्यसैगरी सुनामीले समुद्रछेउको बस्तीलाई

डुबाउने क्रम बढिरहेको छ। यस्ता विभिन्न प्राकृतिक प्रकोपले मानव, जीवजन्तु तथा सबै चीजलाई असर गरेको छ। जलवायु परिवर्तनको नकारात्मक असर कम गर्न हामीले वातावरणमा हानि नपार्ने ऊर्जा प्रयोग गर्नुपर्छ। जलविद्युत, सौर्य, बायोग्यासजस्ता ऊर्जा प्रयोग गर्नुपर्छ। जलविद्युत उत्पादन गर्न धनी राष्ट्रले गरिब राष्ट्रलाई सकेसम्म सहयोग गर्नुपर्छ; जसले गर्दा अन्य ऊर्जाको प्रयोग घटोस् र हरितगृह ग्यासको उत्पादनमा पनि रोक लागोस्। अझ सम्पूर्ण सवारीसाधन पनि विद्युतबाट चल्नुपर्छ। त्यसो गरेमा मात्र हाम्रो पृथ्वीमा मानव तथा जीवको आयु लामो हुन्छ र सफा पृथ्वी निर्माण हुन्छ।

## पृथ्वी नै स्वतन्त्रा

रुदेश प्रधान

**प्रदूषण**, धुलो, विभिन्न ग्यासले पृथ्वीको तापक्रम बढाउँदैछ। वातावरणमा परिवर्तन गराउँदै लागिरहेको छ। जलवायु परिवर्तनका विभिन्न कारण छन्। तीमध्ये मुख्य कारण हो, कलकारखाना एवं घरहरूबाट निस्कने विषाक्त ग्यास नाइट्रोजन अक्साइड, नाइट्रोजनमोनोअक्साइड, सल्फरडाइअक्साइड इत्यादि ग्यास अर्थात् हरितगृह ग्यास। यस्ता ग्यासले पृथ्वीको तापक्रम बढाइरहेको छ। जलवायु परिवर्तनले मानिसलाई ठूलो असर पुऱ्याइरहेको छ। यसले अल्प वर्षाजस्ता प्राकृतिक प्रकोप निस्क्याइरहेको छ। अल्प वर्षाले छालाको रोगका साथै खेतीमा पनि असर पुऱ्याउँछ। साथै यसको असर बिचवामा पनि देख्न सकिन्छ। तहिरामा फुल्ने सयपत्री

पहिल्यै फुल्ल थालेको छ। समय नै नपुगी फुलहरू फुल्ने गर्छन् र समय आउँदा ओइलाइसक्छन्। तराईमा फुल्ने औप, पहाडमै फुल्ने थालेको छ। त्यस्तै जलवायु परिवर्तनले विभिन्न जीवजन्तुमा ठूलो असर पारेको छ। जलचर र पानीमा बसोबास गर्ने माछा, भ्यामृताको फुललाई लाभ समर्थमा नै नष्ट पारिदिन्छ। साथै त्यसले जैविक विविधतामा पनि असर पुऱ्याउँछ। जैविक विविधता भनेको कुनै क्षेत्रमा फरकफरक प्राणी र वनस्पति पाइनु हो। त्यस्तै, जलवायु परिवर्तनले प्राकृतिक सुन्दरता पनि नष्ट पार्दै गइरहेको छ। मानवका अराजक क्रियाकलाप कम गरेको खण्डमा र हरितगृह ग्यास, प्रदूषण आदि नियन्त्रण गरेको खण्डमा मात्र जलवायु परिवर्तनको असर नियन्त्रण गर्न सकिन्छ। जलवायु परिवर्तनको असर नियन्त्रण गर्न सकेनौँ भने त्यसले सम्पूर्ण जीवजन्तुको जीवन नै खतरामा पार्न सक्छ।

## रोक्न प्रयास गरौं

श्रीकृष्ण धिताल

**जलवायु** परिवर्तन भन्नाले प्रकृति र वातावरणको सामान्य अवस्थामा परिवर्तन आउनु हो। प्रकृतिको सामान्य रचनामा आउने परिवर्तन घातक वा विनाशकारी हुनसक्छ। त्यही परिवर्तित वातावरणीय अवस्थाको मूल परिणाम नै जलवायु परिवर्तनको असर हो। जलवायु परिवर्तनको मूल कारक एवं खलनायक हामी मानिस नै हो। सूर्यको किरणबाट निस्कने विनाशकारी अल्ट्राभाइलेट रे अर्थात् परावैजनी किरणबाट पृथ्वीलाई ओजोन तहले बचाउँछ। मानिसले त्यही ओजोन तहको विनाश गरिरहेका छन्। औद्योगिक रसायन एवं विनाशकारी धुवौँको मुरलोले ओजोन तहको विनाश गर्छ। ओजोन विनाशक कारण पृथ्वीमा जलवायु परिवर्तनको

असर देखिन थालेको हो। जलवायु परिवर्तनका असर धेरै छन्। त्यसले मानिसलाई मात्र नभई सम्पूर्ण जीवमा नकारात्मक प्रभाव पारिरहेको छ। मूल असर ध्रुवीय क्षेत्रमा बढी देखिन्छ। पृथ्वीको बढ्दो तापक्रमले हिमाल पगिन्छ र समुद्री सतह बढ्छ। जलवायु परिवर्तनले जीवजन्तु र वनस्पतिको जीवनचक्रलाई पनि असरतुलित बनाइदिन्छ। उदाहरणका लागि जाडो मौसममा फल्ने तरकारी एवं फलफूल गर्मीमा फलन थाल्छ। यो असरतुलनको कारक हामी मानिस नै हो। त्यसैले सुधार गर्ने जिम्मा पनि हाम्रै हो। आचरण सुधार हो भने जलवायु परिवर्तनका असरबाट बच्न सबैप्रथम 'हरितगृह ग्यास' को उत्पादन कम गर्नुपर्छ। सुम्बा फाँटहरूमा वृक्षरोपण गर्नुपर्छ। गोबरग्यास, हावापानी, जैविक ग्यासजस्ता वैकल्पिक ऊर्जा प्रयोग गर्ने हो भने जलवायु परिवर्तनका असर कम गर्न सक्छौं।





नारायणी

२०६७ पुष १५ गते

# चेतनाका लागि घुम्ती पुस्तकालय

नारायणी सन्वाददाता

लागि मानवीय दायित्व विषयमा छलफल भएको थियो ।

हेटौँडा/जलवायु परिवर्तन चेतनाका लागि बुधवार हेटौँडामा घुम्ती पुस्तकालय सञ्चालन भएको छ ।

पुस २ गतेदेखि शुरु भएको अभियान नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान (नाष्ट) ललितपुरले कार्यक्रम आयोजना गरेको हो ।

हेटौँडाको श्रमिक माविमा भएको कार्यक्रममा कक्षा ८, ९ र १० मा अध्ययनरत विद्यार्थीहरूसँग अन्तरक्रिया पनि भएको थियो । कार्यक्रममा मञ्जु सापकोटा, र सुदिप पाण्डेले सहजीकरण गरेका थिए । कार्यक्रममा जलवायु परिवर्तन, परिवर्तनबाट परेको असर, वातावरणीय प्रभाव, वातावरण संरक्षणका

Monday, January 3, 2011

सोमबार, १९ पुस २०६७

## हेटौँडा सन्देश

### जलवायु परिवर्तनको सन्देश बोकेर नाष्ट टोली हेटौँडामा

● सन्देश सन्वाददाता

हेटौँडा, १४ पुस विश्व कै चासो बनेको जलवायु परिवर्तन सम्बन्धि जानकारी दिने उद्देश्यले नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठानको टोली बुधवार हेटौँडा आइपुगेको छ ।

गत पुस २ गते पोखराबाट सुरु भएको देशव्यापी अभियानका क्रममा १५ औँ जिल्लाको रुपमा नाष्ट टोली हेटौँडा आइपुगेको हो । टोलीले हेटौँडा-४ कराँ स्थित श्रमिक उच्च माविमा अन्तरक्रियात्मक कार्यक्रम गरी विद्यार्थीहरूलाई जलवायु परिवर्तनसम्बन्धि जानकारी प्रदान गरेको छ ।

नाष्ट अन्तर्गतको नेपाल जलवायु परिवर्तन ज्ञान व्यवस्थापन केन्द्रले घुम्ती पुस्तकालयको नाम दिएर देशव्यापी अभियान सुरु गरेको नाष्ट प्रवर्द्धन महाशाखा प्रमुख रमिला राउतले बताइन् । टोलीले हरेक जिल्लाका एक सरकारी विद्यालयमा जलवायु परिवर्तनबारे जानकारीका लागि अन्तर्क्रियात्मक कार्यक्रम गरेको हो ।

टोलीमा नाष्टका मञ्जु सापकोटा, सुदिप पाण्डे र हरिराम श्रेष्ठ सहभागी छन् । नाष्टले जलवायु परिवर्तन सम्बन्धि जनचेतना फैलाउने उद्देश्यले देशव्यापी कार्यक्रम गरको सापकोटाले बताइन् ।

टोलीले विभिन्न सरकारी विद्यालयमा जलवायु परिवर्तन सम्बन्धि फ्लेक्स प्रदर्शनी तथा हाजिरीजवाफ प्रतियोगितासमेत सञ्चालन गरेको थियो ।

२०६७ साल पुस १५ गते विहीबार

हेटौँडा  
टुडे  
Hetauda Today National Daily

### जलवायु परिवर्तन चेतनाका लागि घुम्ती पुस्तकालय

हेटौँडा/मेचीदेखि महाकाली अभियान अन्तरगत जलवायु परिवर्तन चेतनाका लागि घुम्ती पुस्तकालय बुधवार हेटौँडामा सञ्चालन गरिएको छ ।

पुस २ गतेदेखि शुरु भएको अभियान अन्तरगत नेपाल विज्ञान तथा प्रविधि प्रज्ञा प्रतिष्ठान (नाष्ट)ललितपुरले कार्यक्रम आयोजना गरेको हो । हेटौँडाको श्रमिक माविमा आयोजित कार्यक्रममा कक्षा ८, ९ र १० मा अध्ययनरत विद्यार्थीहरूसँग अन्तरक्रिया समेत गरिएको थियो । कार्यक्रममा मञ्जु सापकोटा र सुदिप पाण्डेले सहजीकरण गर्नुभएको थियो ।

कार्यक्रममा जलवायु परिवर्तन, परिवर्तनबाट परेको प्रत्यक्ष-अप्रत्यक्ष असर, वातावरणीय प्रभाव, वातावरण संरक्षणका लागि मानवीय दायित्व विषयमा छलफल भएको थियो ।

- Update new research to address knowledge gap.
- Provide advisory services for policy and development planning.
- Organize workshop, forums and other interaction programmes.
- Facilitate access to climate change related data and information.

### OPENING HOURS

Sunday to Thursday 10.00 AM to 4.00 PM /  
Friday 10.00 AM to 3.00 PM

**Closed on public holidays**

### LOCATION



## NEPAL CLIMATE CHANGE KNOWLEDGE MANAGEMENT CENTRE



*in partnership with the Ministry of Environment*

Supported by



DANIDA



DFID



GEF



UNDP Nepal

## Nepal Academy of Science and Technology

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[www.nast.org.np](http://www.nast.org.np)



## Nepal Climate Change Knowledge Management Centre

### BACKGROUND

Climate change has been a global concern today. No habitat under-water, nor eco-tone in the mountain belts, is being spared by the effects of impending global warming. Glaciers are melting, plains inundating, and vegetation zones shifting, while the food scarcity is looming around- all at once and at alarming and unprecedented rate. Obviously nations are much alarmed seeking measures of adaptation and/or mitigations. For its fragile mountain ecosystem and widespread poverty, Nepal is among the most vulnerable countries to the climate change. Its institutional capacity to adapt this vulnerability is yet to strengthen.

Knowledge is sin qua non to cope up with the challenges posed by climatic factors. All around the globe, scientists, managers and policy makers are generating information. These, however, are inadequate and scattered that demands persistent efforts in building our knowledge system based on empirical data as well as indigenous wisdom and managing them for effective storage and dissemination. There also lacks coordination between working institutes on climate change and issues related to this matter. Addressing this weaknesses and gaps to deliver required knowledge and

information, establishment of a dedicated institute is, thus, not only relevant but an essential requirement.

Nepal Climate Change Knowledge Management Centre (NCKMC) has been created by a collaborative effort of Nepal Academy of Science and Technology and Ministry of Environment. The Centre is set-up under the expanded process of National Adaptation Programme of Action (NAPA) in Nepal (2008-2010), which is being supported by DANIDA, UK DFID, GEF and UNDP Nepal.

### GOAL

To serve as a platform for coordinating and facilitating the regular generation, management, exchange and dissemination of climate-related knowledge and capacity building services to a multi-stakeholder climate change community of practice in Nepal.

### MISSION

NCKMC is to serve as a dedicated institutional arrangement for managing climate change knowledge in Nepal.

### VISION

To establish a strong and effective knowledge management centre which will ensure the production and dissemination of climate change knowledge information in the country, strengthen the capacity of various stakeholders

by providing them with the required information to respond to challenges posed by climate change.

### OBJECTIVES

- ❖ To enhance public access to climate change and related information in order to build their capacities to address the challenges posed by climate change.
- ❖ To strengthen collaborative and interdisciplinary climate change research in Nepal.
- ❖ To facilitate interface between scientific research and policymaking, decision making processes and development planning.

### SERVICES

- Conduct an inventory of available collection at the climate change resource centers.
- Coordinate with a network of climate change knowledge providers and users.
- Organize learning events that encourage knowledge sharing and awareness raising.
- Popularize and/or translate materials/documents into local language.
- Develop focal points for climate change.
- Providing clearing house service for climate change related research and dissemination.
- Build capacity of different institutions professionals through training/ workshop/ research grants/ fellowship visiting experts program etc.



## CERTIFICATE OF APPRECIATION

**Nepal Academy of Science and Technology**  
**Nepal Climate Change Knowledge Management Center**  
an initiative in partnership with Ministry of Environment and  
Supported by  
DANIDA, UK DFID, GEF, UNDP Nepal

hereby appreciates the valued contribution of

.....

in organizing  
Mobile Library for Climate Change Awareness  
as a co-ordinator of the program  
held on Dec.  
in Nepal

**Dr Dinesh R Bhuju**  
Chief, Faculty of Science  
Team Leader/NCCKMC

**Purushottam Ghimire**  
Joint Secretary, Ministry of Environment  
and National Project Director, NAPA





**Nepal Academy of Science and Technology**  
**Nepal Climate Change Knowledge Management Center**  
In partnership with Government of Nepal, Ministry of Environment  
Supported by  
DANIDA, UK DFID, GEF, UNDP Nepal



## CERTIFICATE OF PARTICIPATION


This is to certify that Mr/Ms ..... of .....  
participated in *Climate Quiz* organized by Mobile Library for Climate Change Awareness on  
..... at ..... team.

He/she was member of ..... team.

  
**Dr Dinesh R Bhuju**  
Chief, Faculty of Science  
Team Leader/NCCKMC

Date

  
**Purushottam Ghimire**  
Joint Secretary, Ministry of Environment  
and National Project Director, NAPA



## Nepal Climate Change Knowledge Management Center

Nepal Climate Change Knowledge Management Center is set up at NAST in partnership with the Ministry of Environment and support of DANIDA, DFID UK, GEF and UNDP Nepal. With the mission to serve as a dedicated institutional arrangement for managing climate change knowledge in Nepal, NCCKMC is envisaged to become a platform for coordinating and facilitating the regular generation, management, exchange and dissemination of climate-related knowledge and build public awareness on climate change.

NCCKMC Mobile Library for Climate Change Awareness (Dec 17, 2010 - Jan 06, 2011) A nationwide campaign to build awareness on climate change and its impacts from Jhapa to Kanchanpur, Nepal

**NCCKMC**  
**Nepal Academy of Science and Technology**  
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### जान्ने पढ्ने कुरा

- छोटो समयको लागि कुनै ठाउँको वायुमण्डलको अवस्थालाई मौसम भनिन्छ ।
- लामो समय सम्मको औसत मौसमलाई जलवायु भनिन्छ । याम अनुसार हुने घटनाहरू जस्तै वर्षायाममा पानी पर्ने जाडो याममा बित्ने हुने जस्ता कुराहरूलाई जलवायु मान्न सकिन्छ ।
- सन् १९९० को दशक अहिलेसम्मको सबैभन्दा तातो दशक हो र सन् २००५ लाई सबैभन्दा गम्भीर वर्ष मानिएको छ ।
- सन् २५०० को अन्तसम्म पृथ्वीको औसत तापक्रम १.४ देखि ५.८ डिग्री सेल्सियसले बढ्ने अनुमान गरिएको छ ।
- नेपाल वर्षेनी ०.०६ डिग्री सेल्सियसको दरले तातो हुँदैछ ।

- विश्वभरी उत्पादन हुने हरितगृह ग्याँसको मात्रामध्ये केवल ०.०२५ प्रतिशत भागमात्र नेपालले उत्पादन गर्दछ ।
- पृथ्वी हाम्रो जुलुनामा ठूलो छ तर हाम्रो क्रियाकलापको कारण यसमा ठूलो प्रभाव पर्न सक्छ ।
- वैज्ञानिकहरूका अनुसार विश्वको कुल जंगलको एक तिहाई भाग जलवायु परिवर्तनका कारण प्रभावित हुन सक्छन् ।
- जलवायु परिवर्तन मानव सभ्यताका सबै पक्षहरूलाई असर पुर्‍याउँछ ।
- आउँदो शताब्दीमा समुन्द्री सतह केही इन्चदेखि ३ फिटसम्म बढ्ने हुनसक्छ ।
- नेपालमा २३०० भन्दा बढी हिमनदी तथा २०० भन्दा बढी हिमतालहरू छन् ।
- नेपालमा हिमाली क्षेत्रमा रोकका हिमताल मध्ये २० वटा कुनै पनि समय फुट्न सक्ने अवस्थामा छन् ।

- हामीले अहिलेदेखि नै प्रयास गर्ने हो भने भूमध्यस्थीय उष्णकटिबन्ध र जलवायु परिवर्तनको असर कम गर्न सकिन्छ ।
- क्योटो सन्धिपत्र एक काजुन वाध्यकारी दस्तावेज हो । यसले विकसित र औद्योगिक राष्ट्रहरूलाई हरितगृह ग्याँस उत्सर्जन कम गर्न निर्देशन र लक्ष्य दिएको छ ।

### जलवायु परिवर्तनका असरहरू

१. **जलस्रोत** : पानीको बँडोबँडामा परिवर्तन ; पानीको गुणस्तरमा कमी ; खडेरी/सुख्खायाम बढ्नु ; बाढी पहिरोको प्रकोपमा बृद्धि ।
२. **पृथ्वी** : खाद्यान्न उत्पादनको मात्रामा कमी ; सिचाईको माग बढ्नु ; फल तथा बाढी नाशक कीराहरूको प्रकोप बढ्नु ।
३. **औषिक विविधता** : आश्रय स्थलको ह्रास ; जलचरमा असर ; प्रजातिहरू लोप हुनु ।
४. **गैरखेती प्रयोग** : लामो समयसम्म खडेरी पर्नु र तातो हावा चल्नु ; बाढी-पहिरोमा बृद्धि ; ठूला जैविक तथा इरिबतासमा बृद्धि ।

५. **जलसंरक्षणा** : बाढी मृत्युदर ; वातावरणीय क्षरणमा बृद्धि ; बढ्दो बरसात सार्दै ।
६. **बलज्वरजल** : बनजङ्गलको क्षेत्र तथा संरचना परिवर्तन ; बनजङ्गल गहिरो जङ्गल पुग्नु ; सुख्खा र वन डडेलको प्रकोप । ; वन्यजन्तुको प्रजाति तथा वसस्थानमा ह्रास ।
७. **समुद्रको सतह** : समुद्रको सतहमा बृद्धि ; होवा समुन्द्री तट तथा टापुहरू डुब्नु ।
८. **गर्मीको रोगहरू** : तापक्रम तथा रोगहरूको प्रकोप बृद्धिबाट मृत्यु दर बढ्नु ; खाद्यान्न र खाने पानी आपूर्तिमा समस्या ; म्यानो र होथो क्षेत्रमा पाइने रोगहरू बित्ने र उच्च क्षेत्रमा पाइनु ; स्वास्थ्यसम्बन्धी रोगहरूको बृद्धि ; समुद्री बाढीले वरिपरिको पानी प्रदुषण ।