

IN THIS ISSUE

ACTIVITIES

1. Executive Committee for 2008-2011
2. International Conference on Climate Change and Hydrology
3. National Water Week 2009
4. Journal of Hydrology and Meteorology

FEATURES – NEWS

- A. INSAT satellite receiving station and DMDD system
- B. Dry and warm winter 2009 in Nepal
- C. Dry and warm winter in the Kathmandu Valley
- D. Disaster situation 2009 in Nepal

OBITUARY

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ACTIVITIES

1. Executive Committee for 2008-2011

According to the rules and regulation (BIDHAN) of SOHAM – Nepal, the election was held in September 2008 (Bhadra 2065), for the new executive committee. The new unanimously elected executive committee for the period of the three years (2008-2011) consists of the following members.

Executive Committee 2008-2011

Mr. Kiran Shankar Yogacharya	Chairperson
Mr. Jagat Kumar Bhusal	Vice - Chairperson
Mr. Dhiraj Pradhananga	General Secretary
Mr. Dharmendra Rajbhandari	Secretary
Ms. Sarojani Pradhan	Treasurer
Mr. Tek Bahadur Chhetri	Member
Mr. Shiva Prasad Nepal	Member
Mr. Ngamindra Raj Dahal	Member
Mr. Suresh Marahatta	Member
Mr. Deepak Paudel	Member
Prof. Dr. Bidur P. Upadhyay	Ex-officio member

2. International Conference on Climate Change and Hydrology

SOHAM-Nepal, Department of Hydrology and Meteorology (DHM) and UNESCO jointly organized the International Conference on Hydrology and Climate Change in Mountainous Areas, from 15 to 17 November 2008, at the Everest Hotel, Kathmandu. The conference was supported by several organizations and institutions including IHP Nepal National Committee, National Trust for Nature Conservation (NTNC), Real Time Solutions, Tribhuvan University, RECHAM Consult, and The Small Earth Nepal (SEN). The conference had three major objectives: 1) Review the available technology in the field related to climate change and its impact on snow, glaciers and hydro-meteorological processes; 2) Assessment of the impact of sediment on water resources, environment, biodiversity and socio-economy; 3) Develop a mechanism for research and capacity building on understanding of hydrological system of mountainous areas.

Altogether seven technical sessions were conducted on the three day conference. The sessions were categorized as: 1) Climate change impacts and adaptation; 2) Snow and glacier hydrology; 3) Sedimentation and mass wasting; 4) Hydrological modeling; 5) Hydrological extremes and early warning systems; 6) Water induced disaster management; 7) Climate change and biodiversity. In addition, a special technical session on Floods in Nepal was incorporated during the conference.

56 Abstracts from both national and international institutions were received for the conference which were published and distributed to the participants (Figure 1). Out of which 32 oral presentations and 1 poster presentation were carried out. More than 150 participants attended the conference. The participants and presenters were from Bangladesh, Germany, Iran, Israel, Italy, Malaysia, Nepal, Poland, Russia, and Thailand. Some of the attractions of the conference were four keynote addresses and participation of two ministers and three Constituent Assembly Members. During the closing ceremony, Kathmandu Declaration 2008 was adopted.



Figure 1: Abstracts published during the Conference



International Conference on Climate Change and Hydrology

3. National Water Week 2009

World Water Day (WWD) and World Meteorological Day (WMD) in 2009 were celebrated in Nepal in an integrated and collaborative approach. SOHAM Nepal, International Hydrological Program (IHP) Nepal and Water and Energy Commission Secretariat (WECS), Government of Nepal jointly organized National Water Week 2009 (NWW-2009) to commemorate WWD and WMD in collaboration with over 50 organizations, including government, non-government, professional societies, and youth clubs. The week long program NWW-2009 was celebrated nationwide from 18 to 23 March, 2009 with the national theme "Water, Climate and Our Life; Merging Interests, Creating Synergies". The main objective of the program was to make aware and sensitize the water and climate issues to the policy makers, development planners, bureaucrats, environmentalists, researchers, advocacy groups, students and the society as a whole and illustrate the need and generate a thrust on proper management of water resource.



NWW-2009 Water Parade



Logo for NWW-2009

The water week was commenced on 18 March with Water Parade (*Jal Yatra*). Thousands of participants walked around Tundikhel on this auspicious day. Former Hon. Minister for MoEST, Mr Ganesh Shah, also participated in the Parade. The week long program was concluded with adoption of the Kathmandu Water Declaration 2009 during the formal closing ceremony on 23 March. The other program activities included media interaction and press releases, talks, documentary/movie shows, exhibition (*Pani Mela*) and workshops on water and climate related subjects and their linkage with food, health, livelihoods, and environment. Seven papers were presented in the WWD workshop (March 22) and four papers in the WMD (March 23). These programs were targeted to the national and local stakeholders, municipalities, environmental groups, youth groups, school and college students and general public. Several water and climate related books were released during the week. Moreover, informative documents on water and climate related issues were also published as a part of the activities. The program received support from more than 50 government and non-government organizations including UNESCO, WWF Nepal, UN Habitat, ICIMOD, AEPC, KMC, DHM, and DWIDP. Active Participation and support from the youth volunteers and youth organizations, coordinated by The Small Earth Nepal, were the important contribution to the successful completion of the program.

The activities received extensive media coverage including international media. The aim of the National Water Week was also achieved through the media highlights (TV, newspapers, Radio, FM, e-news) and their participation.

4. Journal of Hydrology and Meteorology

The annual Journal of SOHAM-Nepal - Journal of Hydrology and Meteorology, Vol. 6, 2009 has been published with the new editorial board. Eight papers have been included in the Journal. IHP-Nepal and UNESCO-Delhi supported for the publication cost.

Dr. Janak Lal Nayava	Chief Editor
1. Dr. Dilip Gautam 2. Prof. Dr. Lochan Pd Devkota	Co-Chief Editor
1. Dr. Arun Bhaktia Shrestha 2. Dr. Bhanu Neupane 3. Dr. Hari Krishna Shrestha 4. Mr. Kamal P. Budhathoki 5. Dr. Laxmi P. Devkota 6. Dr. Madan B. Basnyat 7. Dr. Mohsin Iqbal 8. Dr. Narayan P. Chaulagain 9. Dr. Nazrul Islam 10. Mr. Om R. Bajracharya 11. Dr. Sameshor Das 12. Prof. Dr. U.C. Mohanty	Editors (in alphabetical order)

Call for Papers

The Chief Editor, Journal of Hydrology and Meteorology announces submission of abstracts and papers within the deadline given below. We accept unpublished journal papers related to the scope of the Journal. The main focus of the Journal is the weather and water related issues in the Himalayan regions. It also intends to include relevant areas like climate change, atmospheric and water pollution, floods, droughts, desertification, glaciology and many others. Next issue of the Journal (Vol. 7, No. 1) will be published in August 2010.

Important Dates:

Last date of submission of abstract : October 31, 2009
Submission of Full Paper : December 31, 2009
Journal Publication : August 2010

Contact for further details:
chiefeditor:jhmc@gmail.com

FUTURE - NEWS

A. INSAT satellite receiving station and DMDD system

According to bilateral cooperation between Nepal and India, Indian National Satellite (INSAT) meteorological data receiving station and Digital Meteorological Data Dissemination (DMDD) system was established in January 2009, in Kathmandu. INSAT is a series of multi purpose Geo-stationary satellite of India. Kalpana-1, one of the Geo-stationary satellites of the INSAT satellite system launched on September 12, 2002 and located at 74 degree East longitude, is the satellite whose data are received in Nepal.



INSAT satellite receiving station situated at Meteorological Forecasting Division

DMDD is a system under which meteorological data, INSAT imaginary and prognostic charts are disseminated at regular intervals through the INSAT satellite. The data thus received can be plotted by values or contours on a specific image. The satellite images are received in visible, infrared and water vapor band. Meteorological Forecasting Division of DHM is utilizing the data, analyzed charts and images received from Kalpana-1 for the purpose of aviation and weather forecasting.

B. Dry and Warm Winter 2009 in Nepal

Winter (December 2008-February 2009) is the driest season compared to other seasons in Nepal, amounting about 3-5% of total annual rainfall. Winter rainfall is generally higher in the western parts of the country and gradually decreases towards south-east (Figure 2). Normally, the winter rainfall varies from about 40 mm in the south-east to above 140 mm in the western parts of the country. This year the entire country received little or no rainfall during the winter (Figure 3). After 2006, the driest winter in Nepal (Figure 4), 2009 winter is another dry winter. Only a few spells of isolated rainfall was recorded in the western parts in February and in the mountainous regions in December. Four out of 35 stations broke all the previous lowest rainfall records, additional eleven has similar rainfall as previous lowest record, and seven out of eleven aforementioned stations recorded similar lowest rainfall as in 2006 (Table 1). In 2006, twelve stations broke previous lowest rainfall record. It is also noteworthy that eleven stations recorded zero rainfall in 2009 while in 2006 thirteen stations recorded zero rainfall. The entire country received much below normal rainfall (Figure 5). The rainfall was zero to only 70% of the normal winter rainfall. Like in 2006, this winter was also remarkable for two reasons. Firstly, it has a longer dry spell since the third week of October. Secondly, this deficit in rain extended to the larger part of the country. Most parts of the country recorded below 50% of normal winter rain (Figure 5).

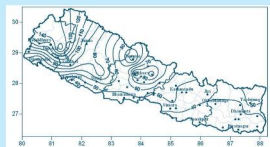


Fig. 2: Winter normal rainfall (mm)

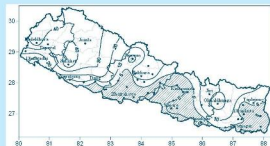


Fig.3: Winter rainfall (mm) in 2009 (Shaded areas = zero or less than 5 mm precipitation)

Table 1: Winter rainfall (mm) in 2009

S. No	Station Name	Lowest record	Date	(Dec 2008-Feb 2009)	
				Total	Percentage of winter normal
1	Dadeldhura	29.2	1972	47.5	36.2
2	Darchula	41.0	2006	39.6	27.1
3	Dhangadhi	0.0	2006	7.6	11.1
4	Mangalvan	25.1	1999	32.5	23.3
5	Dinawal	15.1	2006	31.0	25.2
6	Jumla	12.9	2006	37.6	42.7
7	Datlekh	11.3	2006	41.6	43.3
8	Surkhet	3.8	1960	48.0	49.9
9	Nawalpasi	0.5	2006	8.3	23.0
10	Dang	0.0	2006	5.3	9.2
11	Janoms	0.0	1967, 1989, 2006	2.1	8.6
12	Baglung	0.0	1972, 1976	0.0	0.0
13	Kusma	5.0	1999	3.0	4.4
14	Bhairahawa	0.0	2006	1.5	3.3
15	Khudiabazar	4.0	1967	14.9	15.6
16	Pokhara	5.3	2006	12.3	15.5
17	Gorkha	1.1	1960	0.0	0.0
18	Lumle	16.4	2006	17.7	17.6
19	Rampur	0.1	2006	0.1	0.2
20	Itaulda	0.0	1999	0.0	0.0
21	Simara	1.4	1974	1.0	2.4
22	Nuwakot	0.0	1964, 1969, 2006	0.0	0.0
23	Dhading	0.0	1979, 1988, 1993	0.0	0.0
24	Kathmandu	0.0	2006	0.0	0.0
25	Nagarjot	0.0	2006, 2006	0.0	0.0
26	Janakpur	0.0	1999, 2006	0.0	0.0
27	Okhaldhunga	0.0	1999, 2006	27.0	70.9
28	Chainpur	0.0	1948, 2006	2.3	6.3
29	Dhankuta	0.0	1950, 1951, 1955, 1956, 1957, 1964, 2006	0.0	0.0
	Dharan	0.0	1948, 1951, 1960, 1963, 1964, 1965, 1971, 1981, 1999, 2006	7.5	18.9
30					
31	Biratnagar	0.0	1999, 2006	0.0	0.0
32	Taplejung	5.1	1955	8.0	14.3
33	Phlani	0.0	1977	0.0	0.0
34	Bhim	0.0	1999	0.6	1.4
35	Kankai	0.0	1999	1.2	3.1

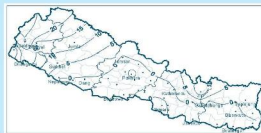


Fig. 4: Winter 2006 rainfall (mm)



Fig. 5: Percentage of normal rainfall in winter 2009

Western disturbances, the upper air westerly troughs (low pressure system), are the main rain bearing weather systems in winter. This year, the frequency of western disturbances was less than normal. Secondly, those western disturbances also did not pass over Nepal, and moved north-eastward towards Tibet, slightly affecting only northwestern parts of Nepal. These two are the main causes for dry winter this year in Nepal.

Apart from drier period, this winter was marked by unusually high temperature, especially during the day time (Figure 6). The entire country remained warmer than normal. The maximum temperature in some places was even 6°C above normal. In many stations, new highest January maximum temperature was recorded. Similarly, the minimum temperature also remained largely above normal (Figure 7).

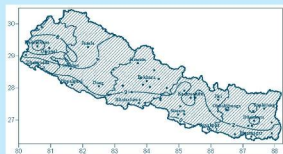


Fig. 6: Winter maximum temperature (°C) anomaly, 2009

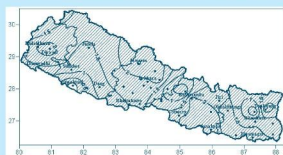


Fig. 7: Winter minimum temperature (°C) anomaly, 2009
(Hash areas = above normal temperature)

C. Dry and warm winter in the Kathmandu Valley

2009 winter was another one of the longest and driest winter in the Kathmandu Valley after 2006. Kathmandu Airport did not record any rainfall during the three months of this winter (Table 2). The dry spell brought a lot of hardships to the Public. Water level in most of the rivers decreased due to the prolonged dry spell. The wells, tube wells and ancient waterspouts (Dhunge Dharaa) started drying in the Katmandu Valley. This created drinking water scarcity in the valley. Both the maximum and minimum temperature were much higher than normal (Table 2). Seasonal maximum temperature was 4.2 °C warmer while the minimum temperature was 2.2 °C warmer than normal. February remained much warmer with maximum temperature 5.5 °C above normal. In summary, this winter was drier and considerably warmer than normal.

Table 2: Winter – 2009 over Kathmandu

	Dec(Previous Year)	Jan	Feb	Winter-2009
Precipitation (mm)				Precipitation (Dec-Feb) Total
This winter	15.1	13.7	17.5	46.3
	0	0	0	0
Maximum Temperature (°C)				Avg. Max of Dec-Feb
This winter	19.5	18.1	20.3	19.3
	22.2	22.6	25.8	23.5
Departure from the normal	2.7	4.5	3.5	4.2
Minimum Temperature (°C)				Avg Min of Dec-Feb
This winter	3.1	2.1	3.8	3.0
	6.0	3.8	5.9	5.2
Departure from the normal	2.9	1.7	2.1	2.2

Source: Climate Section (DHM)

D. Disaster Situation 2009 in Nepal

(Contributed by Deepak Paudel)

Nepal, one of the Hindu Kush Himalayan countries, suffered a lot from severe drought for about six months in 2008/2009. This drought due to only few spells of isolated rainfall or no rainfall is blamed for severe disease epidemic and cholera in the mid-western districts of Nepal. About 339 people lost their lives till 20 August 2009. The detailed assessment including causes and effects of these diseases has yet to come.

Similarly, the adverse effect of this year's monsoon rainfall is also significant. Cloudburst has resulted into the debris flow and landslides particularly in mountain watersheds in Far-eastern, Western and Mid-western regions. Likewise, the plain regions of Eastern and Western parts of the country were also significantly affected by floods this year. As a result of such severe floods and landslides, 72 human lives were lost, a large number of people were affected and thousands of families were displaced. Moreover, 10 people are still missing and physical properties equivalent to millions of rupees were lost (table 3).

The impacts of hydro-meteorological hazards have been increasing in the recent years due to climate change. Thus, disaster risk reduction (DRR) should be integrated in climate change adaptation. For this, DRR strategic framework should be addressed in the context of climate change.

Table 3: Disaster Impacts from 2 July to 20 August, 2009

Affected districts	52
Deaths	401
Missing	10
Injured	25
Displaced families(HH)	5400
Affected families(HH)	11730
Household damaged:	
Completely	943
Partially	834

Source: NRCS/DPNet-Nepal

OBITUARY



Mr. Suresh Maharjan, life member of SOHAM-Nepal and lecturer of Tribhuvan University, passed away on May 13, 2009 at the age of 48.

He was a dedicated member of our society and profession. SOHAM-Nepal prays for eternal peace to the departed soul and expresses deep sorrow and extends heartfelt condolence to the bereaved families and friends.