

Swiss Agency for Development and Cooperation SDC



Department of Science & TechnologyMinistry of Science & Technology
Government of India

NMSHE NATIONAL MISSION FOR SUSTAINING THE HIMALAYAN ECOSYSTEM

A REPORT

State Media Workshop on

Climate Change Reporting

Darjeeling, May 10 - 12, 2018









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Jointly organized by Indian Himalayas Climate Adaptation Programme (IHCAP) under Swiss Agency for Development and Cooperation (SDC), Centre for Media Studies (CMS) and Department of Science and Technology (NMSHE)

Venue: Central Heritage Resort & Spa, Darjeeling

About Indian Himalaya Climate Adaptation Programme (IHCAP)

(Strengthening Capacity on Climate Science and Adaptation in the Indian Himalayas)

Indian Himalayas Climate Adaptation Programme (IHCAP) is a project under Global Programme Climate Change and Environment (GPCCE) of the Swiss Agency for Development and Cooperation (SDC). In India it is anchored under the Framework Agreement on Scientific and Technical Cooperation (2003) between the Government of India and Government of Switzerland and is being implemented as a bilateral cooperation programme with Department of Science & Technology. The IHCAP builds on capacity and knowledge enhancement related to three pillars—scientific and technical knowledge cooperation between Indian and Swiss scientific institutions; adaptation measures for vulnerable communities; and mainstreaming adaptation policies for improved action in the Indian Himalayan Region. www.ihcap.in

About Centre for Media Studies (CMS)

Established in 1991, CMS is a not-for-profit, multi-disciplinary development research and facilitative think-tank. It endeavors to work towards responsive governance and equitable development through research, advocacy and capacity building in social development, environment, communication, media, transparency and governance issues at local and national policy levels. Its flagship programme in environment sector is VATAVARAN, a leading international festival of environmental films.

Find more details at: www.cmsindia.org

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Summary

A three-day media workshop to promote climate change reporting was organized in Darjeeling, West Bengal from May 10 to May12, 2018 by the Indian Himalayas Climate Adaptation Programme (IHCAP) of the Swiss Agency for Development and Cooperation (SDC) and Centre for Media Studies (CMS) in collaboration with the Department of Science Technology and Higher Education, Government of West Bengal.

The objective of the workshop was to brainstorm and share experiences on environment reporting with a special focus on climate change. The three–day event revolved around sensitisation of media persons in the area of Climate Change and to engage media persons in dialogue on climate change adaptation.

The workshop was inaugurated by Mr. Amar Singh Rai, member of the West Bengal legislative assembly from, Darjeeling in the presence of Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal; Dr. Mustafa Ali Khan, Team Leader, IHCAP; and Ms. Annu Anand, Head, Advocacy, Centre for Media Studies.

Inaugurating the workshop, Mr. Amar Singh Rai shared his experience about climate change and how it has affected the life of people in the hilly regions. "In the past, Darjeeling used to get so cold during winters that people migrated to the plains. Nowadays the town is witnessing erratic rainfalls, frequent landslides and dry winters which is leading to shortage of water," he said

Mr. Rai emphasized the need to research and study these changes in the climate and take necessary precautions. "We need to carefully study climatic changes occurring in the Darjeeling hills and take appropriate measures for adaptation" he said.

He further added that certain vector-borne diseases were slowly emerging that were never heard of a few years ago. This, he said, may be due to rising temperature in the hills. "Environment scientists must find out the reasons behind it." He urged the media, civil society organizations and government officials to work together to sensitise and to create awareness on climate change as was is the need of the hour.

Dr. Mustafa Ali Khan, Team Leader, IHCAP gave an overview of IHCAP and its program in the Indian Himalayan Region. He mentioned about the on- going series of training workshop and fellowships program on climate change and adaptation

Addressing the need for these kind of workshops Ms. Annu Anand, Head, CMS Advocacy, said, "such workshops give participants a platform to interact with state level experts on climate change and it's various other aspects."

Mr. Dinesh C Sharma, Managing Editor, India Science Wire, speaking in the session on Media and Climate Change, elaborated on mitigation policies and adaptation strategies followed in the state and highlighted three most impacted areas -agriculture, water resources and livelihoods. Mr. Sharma shared the observed changing trends in climate in context of Darjeeling and West Bengal, and also some successful climate change adaptation stories. On the second day, the participants were taken to a field visit at Sitong in Kurseong District of West Bengal to understand how water security helped in rejuvenating natural springs and to know the balance of eco system as well as livelihood opportunities.

The third day of workshop concluded with a panel discussion on bridging the gap between media, scientist and civil societies. Panellists included Mr. Manu Moudgil, Senior Environment Journalist, Mr. Vivek Chhetri, Senior Correspondent, Telegraph, Dr. Mustafa Ali Khan, Team Leader, IHCAP, Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal and Mr. Neeraj Kumar, Team Leader, Rajarhat PRASARI, Darjeeling.



Inaugural Session, May 10, 2018

The three-day media workshop was inaugurated by Mr. Amar Singh Rai, MLA, Darjeeling, in the presence of Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal; Dr. Mustafa Ali Khan, Team Leader, IHCAP; and Ms. Annu Anand, Head, CMS Advocacy, Centre for Media Studies.

All the guests were honoured with mementos followed by lighting of the ceremonial lamp.

Ms. Annu Anand, Head, CMS Advocacy, introduced the guests and welcomed the participants. She mentioned that because of poor coverage on climate change and environment in the mainstream media, there was very little awareness about the issue. Training program and workshops like these are designed to promote and sensitize media to spread awareness and give the right message about climate change. She further briefed the participants that the objective of the workshop is to improve qualitative reporting on climate change in the media.

Dr. Mustafa Ali Khan, Team Leader, IHCAP gave an overview of IHCAP and its program and also mentioned about the ongoing series of training workshop and fellowships on climate change and adaptation. Dr. Khan highlighted the erratic rainfall which the hilly region of West Bengal has been experiencing in the recent past. This has resulted in frequent landslides thereby causing road blockage which leads to economic loss in the region.

Citing the production of tea in the region, Dr. Khan says, "There is a significant decrease of tea production in the region and this can be attributed to the changing trends in the climate. It has also affected the livelihood of the people in the region."

Dr. Khan commended the West Bengal Government's Jharnadhara programme, which is being implemented with support from Gorkhaland Territorial Administration for revival of springs in Darjeeling and Kalimpong.

Addressing the participants and the guest, Mr. Amar Singh Rai, MLA, Darjeeling said, "Darjeeling like the rest of the world has been facing the challenges of climate change. In the past, Darjeeling used to get so cold during winters that people migrated to the plains". Mr. Rai emphasized on the need to research and study these changes in climate trends and take appropriate measures for adaptations.

He further added that certain vector-borne diseases were slowly emerging that were never heard of a few years ago. This, he said, may be due to climate change. "Environment scientists must find out the reasons behind it". He urged the media, civil society organization and government officials to work together to sensitise and to create awareness on climate change as it is the need of the hour.

Addressing the media participants, Mr. Rai said that, media is the strongest form of communicating such issues for creating awareness amongst the public as well as the government. He also thanked CMS and IHCAP for organising the workshop in Darjeeling and urged the participants to make full use of the opportunity and work together to sensitise and create awareness on climate change.

Overview of State Action Plan on Climate Change and adaptation with focus on the Himalayan region

The first part of technical session began with the participants gathering to engage in presentations on various topics by senior thematic experts, scientists and policy makers.

Media and Climate Change

Mr. Dinesh C Sharma, Managing Editor, India Science Wire, moderated the first session, where he briefed the participants on the course of the workshop.

The session began with a presentation by Mr. Sharma on media and climate change. He highlighted the changes in temperature and an overall view of climate change with reference to Northeast India and the hilly regions of West Bengal in particular. Mr. Sharma added that there has been a rise in temperature of around 0.89 °C from the past century (from 1901 – 2012). This can be mainly attributed to anthropogenic activities. He further said that in the North East region, the rise in temperature with from 1970s to 2010s ranges from 1.8 to 2.1 °C. In addition, Mr. Sharma remarked that the hilly region of West Bengal has seen steady rise of minimum temperature by 1.5 degree in the 37-year period, as per date given in the (SAPCC).

Mr. Sharma also shared some climate change trends in the region like the decline in size and quality of citrus fruits like mandarin orange due to rising minimum temperature during flowering of citrus trees and on the reduced productivity of Darjeeling tea due to increase in extended drought periods. The increase in winter temperature is affecting potato and wheat cultivation in the region and degrading the quality of seeds.

Furthermore, more elaborate understanding on writing a climate story was explained by Mr. Sharma where he said that journalists must appreciate that climate change is not an event but a process. He said that the challenge in climate change reporting is to link changes occurring at the local level with the larger discussions on climate change.

National Mission for Sustaining the Himalayan Ecosystem

Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal presented an overview of the National Mission for Sustaining the Himalayan Ecosystem.

Ms Dutta started her presentation by sharing a brief about the National Action Plan on Climate Change (NAPCC). The policy document advocates strategies that promote, the adaptation to climate change and further enhancement of ecological sustainability in the light of sustainable development.

Briefing about the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) which is the only site specific mission of NAPCC, Ms. Dutta mentions that it aims to scientifically assess the vulnerability of the Himalayan region to Climate Change in physical, biological and socio-cultural context.

NMSHE also aims to build and support capacities at the central and state levels to assess Climate Change and formulate adequate response measures to the challenges in the Himalayan region.





Ms. Dutta also briefed the participants about the directives, scope and objectives and the components of the NMSHE project and the methodology adopted for the program in order to enhance the capacity of the stakeholders and to build resilience towards adaptation of climate change.

Furthermore, Ms Dutta shared the major thrust areas of Darjeeling Himalayan Region which included biodiversity conservation, eco tourism, green energy, green infrastructure, tea industry, orchid and spices, floriculture, horticulture and medicinal herbarium, sustainable water resource management and water budgeting, food security, crop insurance, crop diversification and crop rotation, soil conservation, health security and hygiene, safe housing, waste management.

Trends in climate change in the hilly areas of West Bengal

Dr. Sanjib Bandyopadhyay, Dy. Director General of Meteorology & Scientist, Regional Meteorological Centre, Government of India presented the Trends in Climate Change in the hilly areas of West Bengal.

Dr. Bandyopadhyay began his presentation by giving a brief about how Climate Change affect all sectors and countries. He also briefed the participants about how the Indian Meteorological Department is providing services to different sectors in observing, communicating and forecasting weather services.

Part of his presentation also referred to the Global Framework for Climate Services (GFCS) which enhance the development, delivery, and use of climate information in decision making. The Framework provides a platform for understanding and responding to the climate information needs of the broad user community. Five target user groups have been recognized as GFCS priority areas for developing climate services in all countries. The need and importance of the National Framework for Climate Services was also indicated by Dr. Bandyopadhyay.

The participants were also given a glimpse of the changes in temperature in West Bengal annually, during winters, summer, monsoon and post monsoon periods. It was observed here that the projections suggest greater than 30% increase (relative to present climate) in both summer monsoon and winter monsoon in future climate in response to increased GHG emissions in future climate; Increase in heavy rainfall events were projected that could further elevate climate-related vulnerability over Indian subcontinent; SM (WM) could be more wet (dry) in future due to the increment in longer active (break) spells.

These observations suggests the need for profound adaptation measures and better policy making in future. In conclusion, the annual warming is mainly contributed by the winter and post-monsoon seasons. The monsoon season temperatures do not show significant trend.

Impact of Climate Change with focus on the Hilly region of West Bengal

The second technical session focussed on the impact of climate change in the hilly region of West Bengal with the participants gathering to engage in presentations on various topics by senior thematic experts, scientists and policy makers.

Ms. Shimpy Khurana, Communication Officer, IHCAP moderated the second session, where she briefed the participants on the course of the workshop.

Impact of climate change on Darjeeling tea plantation

Mr. Prahalad Chetri, Project Director Darjeeling Tea Research Association, Darjeeling and Mr. Mrityunjay Choubey, Senior Scientific Officer, Tea Board of India talked about the impact of climate change on Darjeeling tea plantation.

Mr. Choubey in his presentation mentioned that as climate change is threatening the tea industry with unprecedented high temperature, excessive rainfall, coupled with major shifts in other meteorological parameters in comparison with long term observations have further complicated the tea production process.

Darjeeling tea plants experiences various types of climatic conditions in Darjeeling hills such as low temperature, low soil moisture in winter foggy climate, high humidity and low levels of solar radiation. Tea grows best under high and evenly distributed rainfall. In the tropics, it needs at least 1,500 mm rain per year with a dry season of less than 3 months. Tea can be grown from the lowlands to 1500-2000 m elevation above sea level.

The ideal temperature for growth is 18\(\text{I30}\) °C. Growth is limited by temperatures above 32\(\text{I35}\) °C and below 12\(\text{I13}\) °C. Strong winds, frequent frost, hail, and excessive rainfall are also detrimental to the production of high quality tea.

Mr. Choubey then explained the DTRDC experimental farm (mid elevation) and Sungma Tea Estate (High elevation), Darjeeling during 2012 to 2013 to study the impact of climatic variables on Pn and other physiological characteristics of Darjeeling tea clones and old china tea bush.

In the study, it was found that a rapid increase of temperature takes place during March and April owing to the warmer air from the plains. In May, the southerly winds reach the hills and causes increased precipitation which is at times are very high. November to February are almost rainless and the light showers which fall in December and March occur when shallow depressions are passing eastward over the plaint.

In Darjeeling, the extension growth stops at monthly mean maximum and minimum temperature of 18°C and 10°C respectively in November and it start flushing at the middle of March when maximum and minimum temperature exceed 20°C and 12°C respectively.

Effect of different weather conditions on physiological parameters in Darjeeling tea was also shared with the participants by Mr. Choubey.

Disaster management focussing on landslides

Dr. Pankaj Jaiswal, Director, Landslide Studies Division, GSI gave the presentation on the disaster management focussing on landslide. He began his presentation with a coverage from The Times of India which misinterpreted his quote giving out the wrong message.



He then started by explaining the meaning of the term "landslides" and its threats and described the challenges in predicting it. Dr. Jaiswal later explained the different ranges of landslides using the graph below and a unit of measure.

Landslides management framework with the ultimate goal to reduce landslides risk was also shared with the participants.

Dr. Jaiswal gave certain examples of identifying landslide prone area and mapping them. Landslides prone area can be identified by location, type of land, morphometry, cause trigger damage risk etc. He also mentioned that landslides monitoring required huge manpower and lot needs to be invested. He later gave a tour of the landslide inventory website (www.gsi.gov.in/Bhukosh). The website mentions "Darjeeling Hills have more than 1200 landslides and many are active and pose threat to life and property."

In conclusion Dr. Jaiswal mentioned that in order for timely warning of landslides, there is No out of-the-box system available that can fit for all situations. An effective EWS have four inter-related key elements: (1) risk knowledge; (2) monitoring, analysis and warning; (3) dissemination and communication of actionable warnings; and (4) preparedness for timely response.

Thus, 'top-down' approach is not always feasible. So, the ideal option to have 'bottom-up' approach - develop community based L-EWS (people-centric), where community, being the first responder to a disaster, can manage the risk by empowering themselves.

Spring shed management in the hilly districts of West Bengal

Mr. Saikat Pal, Secretary of Rajarhat PRASARI, a non-profit organization in West Bengal gave the presentation on the Spring Shed Management in the hilly districts of West Bengal.

Mr. Pal briefed the participants about the water scenario in Darjeeling and how the town is dependent on the lakes of South Senchal Lake, North Senchal Lake and Sindhap Lake. The lakes are fed by Jhoras/Dharas(springs). At present, during monsoon only 8 out of 26 jhoras feeding the lakes are seen alive while the rest are cut off, dried, having nil capacity to supplement storage.

Mr. Pal also briefed about the water scenario in the neighbouring district of Kalimpong. In both the districts, there is an acute shortage of water then the demand. This can be solved using watershed structures.

Few case studies of spring hed management (Jharnadhara) were also shared. Mr. Pal, later shared the future plans of springshed management, its way forward and the functioning with the help of dharasevaks.

Field Visit

Rejuvenating the spring in Sitong Approximately 40 participants gathered for a field visit to the village Sitong in the Kurseong district to witness the and understand how the water security help in rejuvenating the natural spring and to know the balance of eco system as well as enhance the livelihood opportunity.

Participants were briefed about the spring shed trenches. Mr. Neeraj Kumar, Team Leader, Rajarhat PRASARI, Darjeeling who was coordinating the field visit said, "such trenches are made at a distance of 10 – 15 feet around the vulnerable springs in the forests. Once rejuvenated, these springs would also replenish water supply to the streams or ponds situated in nearby villages". *Dharasevaks* also shared how rejuvenating the springs had helped them in irrigating their fields and for daily use.

Participants were also shown a spring which was rejuvenated by creating trenches on the uphill..

Media Roundtable

The third day of workshop concluded with a panel discussion. It aimed at bridging the gaps between the media and the different stakeholders for better climate change reporting.

Panelist included Mr. Manu Moudgil, Senior Environment Journalist, Mr. Vivek Chhetri, Senior Correspondent, Telegraph, Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal and Dr. Mustafa Ali Khan, Team Leader, IHCAP.

The session was moderated by Mr. Manu Moudgil.

Mr. Moudgil told the participants that media persons need to be critical and should not always expect information to flow from officials. He also urged media participants to examine critically policies and strategies relating to climate change and point out shortcomings.

Mr. Vivek Chhetri mentioned that a proper research of the story should be done before filing it. However, because of short deadlines to file stories, little or no no research is done. Hence error occurs. During the discussion media participants also pointed out the lack of flow of information from the officials with regards to predicting to the weather. Later, the participants were briefed about certain government websites from where these information could be retrieved.

The workshop thus concluded with a group discussion among the participants on various story ideas and how journalists can cover it from a different perspective.

Certificates were later distributed to all the participants.



Feedback by participants

Over 40 media professionals participated in the three=day workshop with great enthusiasm and keenness. The feedback were mostly positive with regards to the planning and structure of the workshop. Participants found the workshop very informative especially on the ideas exchanging session in order for climate reporting.

The visit to the field site in Sitong was taken very well by the participants as it provided an opportunity to witness first -hand experience on the process of rejuvenating the spring water system.

Students of mass communication from North Bengal University who attended the workshop found it very useful as well as educational. They mentioned that the workshop helped them understand better about environment reporting and to deal with the challenges that come with it.

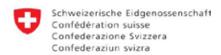
Some recommendations that were shared by the participants were since the Darjeeling region faces shortage of water, more sessions on water conservation and the impact of climate change on water resources would have helped further in the workshop.



Annex – Agenda



Department of Higher Education, Science and Technology and Biotechnology Government of West Bengal



Swiss Agency for Development and Cooperation SDC

Agenda for the

Media Workshop on Climate Change Reporting

May 10-12, 2018

DAY 1: May 10, 2018 (10:00 am to 04:30 pm)				
Venue— Central Heritage Resort & Spa, Darjeeling				
Program of Inaugural Session				
10:00 am to 10:30 am	Registration			
10:30 am	Arrival of the Chief Guest, Shri Amar Singh Rai, MLA, Darjeeling, West Bengal			
10:35 am	Welcome address and introduction of the workshop by Ms. Annu Anand, Head, CMS Advocacy, Centre for Media Studies (CMS)			
10:45 am	Overview on Climate Change and Objective of IHCAP program by Mr. Mustafa Ali Khan, Team Leader, IHCAP			
10:55 am	Lighting of lamp by Honourable MLA and other guests			
11:05 am	Address by Chief Guest, Shri Amar Singh Rai, MLA, Darjeeling, West Bengal			
11:25 am	Vote of Thanks by Ms. Annu Anand			
11:30 am	Tea Break			
Technical session I – Overview of State Action Plan on Climate Change and adaptation with focus on the Himalayan region (12:00 pm to 02:30 pm) Moderated by Mr. Dinesh C Sharma				
12:00 pm – 12:40 pm	Overview on Media and Climate Change	Mr. Dinesh C Sharma, Managing Editor, India Science Wire		
12:40 pm – 01:00 pm	Overview of State Action Plan on Climate Change (SAPCC)	Mr. Arnab Roy, IAS, Principal Secretary, (Environment), Government of West Bengal (TBC)		
01:00 pm – 01:20 pm	National Mission for Sustaining The Himalayan Ecosystem, an overview	Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal		
01:20 pm- 01:40pm	Trends in Climate Change in the hilly areas of West Bengal	Dr. Sanjib Bandyopadhyay, Dy. Director General of Meteorology & Scientist, Regional Meteorological Centre, Government of India		
01:40 pm- 02:00pm	Discussion by Moderator and Q & A Session			
02:00 pm – 02: 30 pm	Lunch Break			

	echnical session II - Impact of Climate Change with focu D2:30 pm to 04:30 pm) Moderated by Ms. Shimpy Khur				
02:30 pm – 02:50 pm	Eco Impact of Climate Change on Local Communities	Prof. (Dr.) Ranjan Roy, Department of Geography and Applied Geography, University of North Bengal, Siliguri			
02:50 pm – 03:10 pm	Impact of Climate Change on Tea Plantation	Mr. Prahalad Chetri, Project Director Darjeeling Tea Research Association, Darjeeling and Mr. Mrityunjay Choubey, Senior Scientific Officer, Tea Board of India			
3:10 pm- 3:30 pm	Disaster Management focussing on Landslide	Dr. Pankaj Jaiswal, Director, Landslide Studies Division, GSI			
03:30 pm – 03:50pm	Spring Shed Management in the hilly districts of West Bengal	Mr. Saikat Pal, Secretary, Rajarhat PRASARI			
03:50 pm – 04:15 pm	Discussion by Moderator and Q & A Session				
04:15 pm – 04:30 pm	TEA				
DAY 2: May 11, 2018 (8:00 am onwards)					
08:00 am	Assembly at Central Heritage Resort & Spa, Darjeeling				
	Departure for field visit				
	Field Visit: Sitong, Darjeeling- Coordinated by Mr. Neeraj Kumar, Team Leader, Rajarhat PRASARI, Darjeeling To understand how to ensure the water security with the help of rejuvenating the natural spring and To know the balance of eco system as well as enhance the livelihood opportunity				
01:30 pm to 02:30 pm	Lunch, Group Photograph and Informal Interaction				
	DAY 3: May 12, 2018 (10:00 am	to 02:00 pm)			
	Venue – Central Heritage Resort & Spa, Darjeeling				
Media Round Table on- Bridging the gap between media, scientist and civil societies (10:00 am to 02:00 pm) Moderated by Mr. Manu Moudgil, Senior Environment Journalist					
	Woderated by Wil. Walla Woddgil, Jelliol L	Mr. Manu Moudgil, Senior Environment			
		Journalist Mr. Vivek Chhetri, Senior Correspondent,			
10:00 am to 12.00 pm	Bridging the gap between media, scientist and civil societies	Telegraph Ms. Subrata B. Dutta, Senior Scientist, Department of Higher Education, Science & Technology and Biotechnology, Government of West Bengal			
12:00 pm to 12.30 pm	Experience sharing and story ideas on climate change				
12:30 pm to 12.45 pm	Presentation of certificates				
12:45pm to 01:45 pm	Lunch and departure				





Media Coverage

KALIMPONG NEWS

Link - http://kalimpongonlinenews.blogspot.in/2018/05/climate-changes need-to-monitor-in-hill.html

Climate changes need to monitor in hill areas, says experts



PR, KalimNews, Darjeeling May 10, 2018: "We need to carefully study climatic changes occurring

the Darjeelii Darjeeling, \ certain vector be due to cl urged the m create aware The worksh Programme Science and Higher Educ

on-climate-change-kicks-off-in-Darieeling

Three-day workshop on climate of

Three day workshop on c kicks off in Darieeling

Field visit coverage



सुदुङलाखामा कृषक तालि

रिनाक, ६० मई: सिकिम क्रमसिक से बादारा आज पूर्व जेतिका घोलीक है जिसित खाद प्रसम्पन गरिने विषयम एक दिवसीय पुरवक तालिय रास्त्रि गेर

तालियम यने उलाको मल (भर्मी कम्पास्ट) अवि प्रचेत आँपधि बनाउने तरिकामाधि

आल, रमारमा आहे रोग निवाण असि उपधारमारे पनि विस्तात स्थारा बताए साथै विरुदाया तार्व लाग्ने, उपधारमाधि पनि जानकारी दिएक विका की भारी सम्पोत्तर आनि हर्बन औषपिले हाझे बारी अनि अञ्चलाई लामदायक बनाउने तरिका रहेको बताउँदै प्रभागी सर्वाले जैविक योजनाताई अपि बदाउन हामी तप बपुणने आद्यान गरे।

वस वालियमा फनसिद्धमा रिताक क्षेत्र प्रभारी सन्तीष क्षेत्री, दलपचन्द्र सेत्र प्रभागी बीबी प्रधान, गिरो, अस्य निरोत्तासहित विरोधन शेषका फिल्ड कार्यकर्ता, वार्त पद्मायत शोधा क्षेत्री, पूर्व पत्नायत हेमलाल विशेसहित बार्डका

हिमालय दर्पण

परिवर्तनवारे मिडिया कार्यशाला



SIKKIM EXPRESS

Media workshop on climate change in Darjeeling







जलवायु परिवर्तन पर ध्यान देना जरूरी : अमर सिंह र







