

National Media Consultation and Kullu Field Visit in Print



IHCAP-CMS

National Media Consultation on Climate Change Reporting
at New Delhi & Kullu
from
September 21-24, 2019

Research House, Saket Community Centre, New Delhi, India- 110017

Phone: +91-11-2685 1660; 26864020 Fax: +91-11-2696 828

Email: info@cmsindia.org

Website: www.cmsindia.org

4-day climate change reporting prog begins

By Our Reporter

New Delhi: Sept 21. A four-day sensitization programme on eNational Media Consultation on Climate Change Reporting in the Himalayas at New Delhi and Kullu of Himachal Pradesh had commenced on Saturday.

Centre for Media Studies (CMS), New Delhi, under the Indian Himalayas Climate Adaptation Programme (IHCAP) of the Swiss Agency for Development and Cooperation (SDC) and Department of Science and Technology (DST), Government of India organized this national media consultation programme.

The first day of the national media consultation programme was attended by Annu Anand, Director Advocacy of CMS; Marylane Crettaz, Head Swiss Cooperation Office and Counsellor of the Embassy of Switzerland in India; Dr Akhilesh Gupta, Adviser/Scientist G, Head SPLICE and Climate Change Programme, Department of Science and

Technology, government of India; Dr Mustafa Ali Khan, Team Leader of IHCAP; Dr Anamika Barua, Associate Professor of the IIT Guwahati; Dr Braja Kumar Singh, Deputy Director of the Directorate of Environment, government of Manipur; Majid Farooq, Nodal Officer of the Climate Change Centre of Jammu and Kashmir; Dinesh C Sharma, Managing Editor of India Science Wire; and Dr S S Randhawa, Principal Scientific Officer, State Centre for Climate Change, Shimla & Shimpy Khurana, Communications Officer, IHCAP.

The experts precisely stressed on the Indian Himalayan Region which is one of the most vulnerable mountain systems in the world. Jammu and Kashmir is the third most flood-prone state in the country while Assam and Mizoram states rank the highest in terms of Composite Vulnerability Index, the experts informed. They added, if effective measures are taken in time, it may be possible to prevent further degradation of the ecosystem.

Climate vulnerability map of India coming soon

Authored By : [Dinesh C Sharma](#)

[India Science Wire](#) Posted By : [priyad](#)

Posted Date : Sat, 2019-09-28 16:27

Link: <https://www.indiawaterportal.org/articles/climate-vulnerability-map-india-coming-soon>

DST and SDC working together to develop pan-India climate vulnerability assessment map, to help communities and states better prepare for climate change.



Dr. Akhilesh Gupta, head of the climate change programme at DST. Image source: India Science Wire

New Delhi, September 27 (India Science Wire): Rising sea levels, increasing number of extreme weather events, urban floods, changing temperature and rainfall patterns - such impacts of climate change are being felt in many parts of India, and not just in the coastal areas or hilly regions.

To prepare communities and people to meet the challenge arising out of such changes, information specific to a state or even district is needed because such impacts of climate change are not uniform. In order to meet this need, a pan India climate vulnerability assessment map is being developed.

The map is being developed under a joint project of the Department of Science and Technology and the Swiss Agency for Development and Cooperation (SDC).

"Such a climate vulnerability atlas has already been developed for 12 states in the Indian Himalayan Region, using a common framework. Now this methodology will be extended to non-Himalayan states so that we can have a national level climate vulnerability profile for India. The atlas is expected to be ready by the middle of 2020," announced Dr. Akhilesh Gupta, head of the climate change programme at DST while speaking at a national media consultation on climate change in New Delhi.

Dr. Gupta said using a common methodology for assessing vulnerability was critical for comparison and for planning adaptation strategies. It also helps in identifying what makes a state or district vulnerable to climate change.

The vulnerability map for hilly states, released in March this year, showed that while all the Himalayan states are vulnerable, Assam and Mizoram are the most vulnerable among them. The map for the Himalayan region, developed in consultation with states, has details up to the district level. The national map will also do the same, as vulnerability within a state may differ from one region or district to another. A common set of indicators will be used vulnerability profile and ranking of 650 districts all over the country.

Dr. Gupta said the climate change research programme of DST was being implemented as part of the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and National Mission on Strategic Knowledge for Climate Change (NMSKCC). Among the priority areas identified for research are glaciology, climate modeling, urban climate, extreme events and Himalayan ecosystem studies. In all, there are climate change cells in 25 states in the country, with centres of excellence also being established at the state level for capacity building.

Climate risk is the interplay of hazard, exposure and vulnerability. While the occurrence of natural hazards such as landslides, droughts and floods is projected to go up, their impact depends on the level of exposure to people and infrastructure in areas that could be adversely affected, or to places where people's livelihoods are sensitive to changing climates.

"Vulnerability is the propensity to be adversely affected and can be measured in terms of both biophysical as well as socioeconomic factors. Addressing vulnerability can help reduce risk to climate change," explained Dr. Anamika Barua of IIT Guwahati, who led the vulnerability assessment project for the Himalayan region.

Among the socio-economic and demographic factors that determine vulnerability are population density; percentage marginal farmers; livestock to human ratio; per capita income; number of primary healthcare centres; and percentage of women in the overall workforce. Similarly, sensitivity of agricultural production is captured by indicators like percentage area under irrigation; yield variability; and percentage area under horticulture crops.

Dr. Mustafa Ali Khan (Indian Himalayas Climate Adaptation Programme) said some states had already started using the vulnerability assessment report, particularly while revising state climate action plans and developing adaptation projects. Mizoram has launched a state wide public awareness campaign on the basis of the assessment, while West Bengal has developed a decision support system for prioritizing springshed management project sites using the climate vulnerability map as an input.

The consultation was organised by DST, IHCAP and Centre for Media Studies (CMS).

(India Science Wire)

DownToEarth

Govt to launch climate vulnerability map of India soon

A common set of indicators will be used for vulnerability-profiling and ranking of 650 districts all over the country

Link: <https://www.downtoearth.org.in/news/climate-change/govt-to-launch-climate-vulnerability-map-of-india-soon-66985>

By [Dinesh C Sharma](#)

Last Updated: Saturday 28 September 2019



📷 Photo: Rejimon Kuttappan

Rising sea levels, increasing number of extreme weather events, urban floods, changing temperature and rainfall patterns are the impacts of climate change being felt in many parts of the country and not just coastal areas or hilly regions. For preparing communities and people to meet the challenge arising out of such changes, information specific to a state or even district is needed because such impacts of climate change are not uniform. In order to meet this need, a pan India climate vulnerability assessment map is being developed.

The map is being developed under a joint project of the Department of Science and Technology (DST) under the Union Ministry of Science and Technology and Swiss Agency for Development and Cooperation (SDC).

“Such climate vulnerability atlas has already been developed for 12 states in the Indian Himalayan Region, using a common framework,” said Akhilesh Gupta, head of the climate change programme at DST, while speaking at a national media consultation on climate change in New Delhi on September 27, 2019.

“Now this methodology will be extended to non-Himalayan states so that we can have a national level climate vulnerability profile for India. The atlas is expected to be ready by the middle of 2020,” Gupta announced. Gupta said using a common methodology for assessing vulnerability was critical for comparison and for planning adaptation strategies. It also helps in identifying what makes a state or district vulnerable to climate change.

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Climate risk is interplay of hazard, exposure and vulnerability. While the occurrence of natural hazards such as landslides, droughts and floods is projected

to go up, their impact depends on the level of exposure such as presence of people and infrastructure in areas that could be adversely affected or climate-sensitive livelihood of people.

“Vulnerability is the propensity to be adversely affected and can be measured in terms of both biophysical as well as socio-economic factors. Addressing vulnerability can help reduce risk to climate change,” explained Anamika Barua of Indian Institutes of Technology Guwahati, who led the vulnerability assessment project for the Himalayan region.

Among the socio-economic and demographic factors that determine vulnerability are population density; percentage marginal farmers; livestock to human ratio; per capita income; number of primary healthcare centres; and percentage of women in the overall workforce. Similarly, sensitivity of agricultural production is captured by indicators like percentage area under irrigation; yield variability; and percentage area under horticulture crops.

According to Mustafa Ali Khan from Indian Himalayas Climate Adaptation Programme, some states had already started using the vulnerability assessment report, particularly while revising state climate action plans and developing adaptation projects. Mizoram has launched a state wide public awareness campaign on the basis of the assessment, while West Bengal has developed a decision support system for prioritizing springshed management project sites using the climate vulnerability map as an input. **(India Science Wire)**

Poly-houses help India's farmers survive erratic weather

Link: <https://www.thethirdpole.net/en/2014/10/07/poly-houses-help-indias-farmers-survive-erratic-weather/>

Small and marginal farmers in India's Himachal Pradesh state are supplementing their income from vegetable production thanks to poly-houses that regulate temperature and other climatic conditions

(Photo by Greenpeace)

Nivedita Khandekar, October 7, 2014



Hilly terrain and increasingly uncertain climatic conditions have restricted agricultural development in India's hill state of Himachal Pradesh. But increased demand for vegetables due to rapid urbanisation and growing tourism have come as boon for the state, which is now pushing poly-houses (also known as polytunnels) to help farmers, particularly small and marginal ones, tide over climate changes with an assured vegetable crop, even off-season.

A poly-house works on the concept of a greenhouse that lets in light and traps heat inside. But instead of glass, it is made from polythene sheets or flexible plastic sheets.

Marginal and small farmers are the group most affected by the vagaries of nature. But the use of poly-houses for growing vegetables – promoted by the state government by offering subsidies – has increased their yield in a given cycle and also helped them harvest vegetables in three cycles each year. These small land holdings are mostly located on hill slopes near where the farmers live.

According to state government records, small and marginal farmers (with up to two hectares of land) comprise 87% of total land holdings. Medium farmers (with 2-10 hectares of land) form about 13% and large land holding farmers are only about 0.4%.

A poly-house – built as part of the state government’s ‘precision farming practices’ project – helps the farmers protect crops or vegetables from sudden hailstorms or excessive rains and erratic temperature changes. Even in harsh winters, poly-houses help farmers earn from off-season cultivation. The state has received assistance from National Bank of Agriculture and Rural Development (NABARD) for this scheme.

Jagdish Chandra, a farmer from Kandbari village near the town of Palampur, is one of those who has benefited from poly-houses. Chandra, who owns about four hectares of land, installed two poly-houses (one 105 square metres and another 250 square metres) in 2009 when the subsidy was offered for the first time. Five years later, he is happy to have shifted to the modern technique which has increased his yield by more than 70%.

“Depending on natural rain, I used to get two crops but the second was not always assured. Now I get three crop cycles in a year,” Chandra said, showing the vegetables inside his poly-house right next to his home.

He grows capsicum, tomato, bitter gourd, radish, beans and coriander using drip irrigation. The process is completely organic. “We need to keep check on the temperature inside the poly-house. If it is too warm inside, then we have the sprinkler to cool down the temperature. At other times, when it is cooler outside and warmer inside, all we do is simply open the door,” he added.

His small village has four more farmers using poly-houses to grow vegetables.

The state-government run Precision Farming Development Centre (PFDC) at Solan helps by designing poly-houses and offering training to farmers. It also provides farmers with technical assistance during the actual crop cycle. When the government offered subsidies for poly-houses for the first time in 2009, the centre trained only about eight-10 farmers per year. In 2013, this number increased to more than 50 farmers per year.

Saving water

“Poly-houses help reduce evaporation. Farmers can thus use sprinkler and/or drip irrigation and save water,” said R.S. Spehia, assistant professor at PFDC.

Scientist H.R. Sharma has dispelled fears poly-houses use excessive water – as has been the case with rose cultivation using poly-houses especially in plains.

“We are talking about poly-houses in the hills. Here temperatures are lower (compared to plains) and hence evaporation is less. Moreover, we promote poly-houses with drip irrigation, which further lessens the water use,” Sharma, who is principal scientist at the Regional Horticulture Research and Training Station at Mashobra in Shimla, said.

The state government provides as much as 80% of the costs while the farmer needs to pitch in the remaining 20%. The subsidy includes a water harvesting system with the poly-house, explained a government official.

“Productivity...especially for ‘poly-house suitable crops’ such as capsicum, tomato, peas, beans, cucurbits etc. have shown significant increase,” Spehia said.

For example, production of tomatoes increased by 15% comparing 2007-09 and 2010-12. The production of beans and cucurbits increased by 13% during the same period.

By December 2013, 13,500 poly-houses had been constructed. An area of 147 hectares had been covered under protective cultivation. This far exceeds state government targets. In February 2013, chief minister Virbhadra Singh had said during his budget speech: “I propose Rs 100 crore (about US\$16 million) to popularise farming inside poly-houses to augment farmers’ incomes. The target is set for constructing 4,700 poly-houses.”

“We have been recommending naturally ventilated poly-houses of bamboo, locally available, which can be used with certain modifications to cut the initial investment,” Spehia said.

Link: <https://www.dailypioneer.com/2019/pioneer-exclusive/digital-bid-to-save-3m-himalayan-springs.html>

Digital bid to save 3m Himalayan springs

ARCHANA JYOTI ■ NEW DELHI

The Government will soon undertake a mega exercise of demarcation and mapping of around three million springs in the Indian Himalayan Region on the GPS platform. The move is aimed at conserving these aquifers to gear up for a likely water scarcity in future.

A pilot project will be kicked off from Uttarakhand's Tehri district soon as the Union Jal Shakti Ministry is exploring various technologies, including that of the ISRO, to carry out the project.

Over 50 million people are dependent on the spring water for their livelihood in the IHR, said Mustafa Ali Khan, team leader of the Indian Himalayas Climate Adaptation Programme, at an event organ-

ised by the Centre for Media Studies (CMS) recently.

The 12 States under IHR include Uttarakhand, Himachal Pradesh, Meghalaya, Manipur, Mizoram, Sikkim, Nagaland, Tripura, Arunachal Pradesh and now Union Territory Jammu and Kashmir. Two partial hilly States Assam and West Bengal are also included.

"We are exploring various technologies like that of the space agency to conduct the task which would need massive human resources. We are working on the technology to be deployed for mapping these springs," said an official from the Ministry.

The move follows a NITI Aayog report released in August 2019. "The Himalayan springs are drying up primarily due to changes in land use, ecological



degradation and the so-called developmental activities. These have depleted aquifers in the mountains," says Himanshu Kulkarni, convenor of Pune-based Advanced Center for Water Resources Development and Management.

For instance, with almost 64% of the cultivable area in the Himalayas fed by natural springs, they are often the only source of irrigation in the region.

"Spring discharge is reported to be declining due to degradation and erratic trends in precipitation," the document observed stressing an urgent need to restore, revive and sustain springs. "Lack of knowledge, understanding and awareness on springs has further compounded the problem while also inducing elements of conflicts and haphazard development. Land-use changes, rapid urban expansion and

growing commercial consumption are affecting forests and impacting spring water availability," it noted.

Currently, National Remote Sensing Centre (NRSC), ISRO at Hyderabad monitors the status of all the water bodies in the country using satellite images and provides water spread area information on a fortnightly basis. However, water springs in the Himalayan region are out from its ambit.

Rather, all surface water features like reservoirs, tanks, lakes, ponds, rivers and streams in the plains are included. Due to presence of cloud cover, the daily processed data are time-composited and fortnightly water spread information is made available through Bhuvan Geo-spatial Platform.



पार्वती वैली और बंजार में जलवायु परिवर्तन पर दो दिवसीय कार्यशाला

Shimla News - जलवायु परिवर्तन को लेकर कुल्लू घाटी में दो दिवसीय कार्यशाला का आयोजन किया गया। जिसमें देश भर के विभिन्न राज्यों...

Bhaskar News Network Sep 26, 2019, 07:20 AM IST

Aani News - two day workshop on climate change in parvati valley and banjar

जलवायु परिवर्तन को लेकर कुल्लू घाटी में दो दिवसीय कार्यशाला का आयोजन किया गया। जिसमें देश भर के विभिन्न राज्यों से आए करीब 45 पत्रकारों ने भाग लिया।

इस कार्यशाला में फील्ड विजिट के दौरान पार्वती वैली के शाट, धार्मिक व पर्यटक नगरी मणिकर्ण के अलावा बंजार का फील्ड विजिट किया गया। कार्यशाला का उद्देश्य जलवायु परिवर्तन अनुकूल पर पत्रकारों को विशेषज्ञों और क्षेत्र की यात्रा द्वारा इंटरैक्टिव प्रस्तुतियों के साथ उन्मुख करना था।

आयोजन में देशभर के विभिन्न राज्य से आए हुए पत्रकार, पर्यावरण विभाग के विशेषज्ञ व सेंटर फॉर मीडिया स्टडी की टीम सहित आपदा से प्रभावित लोगों के साथ किसान-बागवान भी उपस्थित रहे। कार्यशाला का मुख्य उद्देश्य पर्यावरण परिवर्तन से हो रही आपदाओं के बचाव व कृषि में आए भारी बदलाव के बारे में जनता को जागरूक करना है।

विशेषज्ञों द्वारा बताई गई पर्यावरण परिवर्तन पर महत्वपूर्ण जानकारी को मीडिया के माध्यम से जनता तक पहुंचाने व उन्हें जागरूक करने के लिए विज्ञान व प्रौद्योगिकी मंत्रालय भारत सरकार द्वारा इस तरह के कार्यक्रम किए जाते हैं। कुल्लू घाटी में भी इसके लिए फील्ड विजिट किया गया। जिसमें सीएमएस की निदेशक अनु आनंद, पर्यावरण विभाग के दूनी चंद ठाकुर डिप्टी कोऑर्डिनेटर क्लाइमेट सैल हिमाचल प्रदेश व देशभर से आए हुए पत्रकारों के साथ जिला कुल्लू के पत्रकारों ने भी भाग लिया



Flash-flood prone Kullu's Parvati valley in Himachal Pradesh awaits alert warning system

Kullu's Parvati Valley identified as risk hot spot

Monday, 30 September 2019 | Archana Jyoti | Kullu

Link: <https://www.dailypioneer.com/2019/india/flash-flood-prone-kullu-s-parvati-valley-in-himachal-pradesh-awaits-alert-warning-system.html>

The writing is on the wall: Kullu's Parvati Valley, a tourist destination in Himachal Pradesh, has been identified as a major risk hotspot for monsoon flood, landslides, cloudburst mishaps and potential glacial lake outburst floods (GLOFs) in the Indian Himalayan Region (IHR).

But the Centre continues to look the other way as a Rs 20 crore proposal for early warning system with last mile connectivity to community is gathering dust with Union Environment Ministry since 2015. The installation of the EWS as a preparedness measure is one of the main recommendations of the IHCAP (Indian Himalayas Climate Adaptation Programme) of the Swiss Development Agency for Development and Cooperation. The EWS has to be implemented in cooperation with the Central Government's Department of Science and Technology (DST) while the Union Environment Ministry has to fund the project.

The recommendation followed a study conducted in the wake of the big cloud burst tragedy that struck in 1994 in the region where Parvati river, a tributary of Beas river flows. At least 27 died while several were left injured.

The EWS aims at warning the population in Parvati Valley and adjoining areas inhabited by around 1,600 villagers and frequented by tourists regularly.

DC Thakur, a senior official from Department of Environment and Science & Technology, HP said: "The proposal is pending with the Union Environment Ministry since 2015." He asserted that Parvati Valley in the IHR is at high risk of floods due to developmental pressures, changes in land holding pattern in terms of urbanisation and tourism besides impacts of climate change and extreme events.

Considering the geographical position of the locality we cannot avoid disasters but intervention measures need to be taken to ensure minimum loss to life and property, he said.

The locals too voiced their concern demanding timely intervention measures. "Even though cloud bursts with such severity have not occurred in the last 25 years, there is no guarantee that it would not happen in the future," apprehended inhabitants of Shaat and Ladari villages of the Valley. In fact, they said matter-of-factly that the 1994 cloudbursts provided a demonstration of what could be expected in the future and the need for preparedness to deal with such a situation.

The memory of the devastation refuses to go away. Kamal Chand, ex-sarpanch of Ladari village recalled, "It was all over in a few minutes. The water level in the river rose 40 to 50 feet high on that fateful day."

Many lives would have been saved had the people been alerted about the disaster that day, he told a group of journalists during a field visit to the valley as part of a media workshop organised by the Centre for Media Studies (CMS), an advocacy group under the IHCAP recently.

Shaat village resident, Mohinder Singh and Hemraj, both survivors, minced no words as they said that the Government had not done much to improve resilience of the locals against future hydrological-disasters, if any.

According to the IHCAP assessment, the GLOF will increase across all blocks of Kullu, with Parvati Valley emerging as the most vulnerable one. According to it, atleast 66 floods have taken place since 1965. The flood assessment for Kullu district indicates variation in hazard levels for different catchment areas.

"The occurrence of floods is not expected to decrease and its consequences could become even worse in view of the ongoing climate changes and increasing demographic pressure," as per the study.

It has stressed on capacity building and specialised training of communities on appropriate response mechanism, including identification of shelters and evacuation path.

Annu Anand, Director (Advocacy) from the CMS pointed out that it was important that issues of climate change whose impacts are being felt across the Indian Himalayas affecting the livelihood, water availability and biodiversity in the region, needs to be highlighted. "Hence, sensitization and training to media is necessary to take the right messages about climate change to people as well as policy makers and motivate them to take action at all the requisite levels," she added



Climate change compels Himachal farmers to forsake apple farming



Padam farmer of Banjar with pomegranate

Link: <http://www.ifp.co.in/page/items/61707/climate-change-compels-himachal-farmers-to-forsake-apple-farming>

By Babie Shirin

IMPHAL | Sep 26

Due to climate change, farmers of Banjar town in Kullu district of Himachal Pradesh have shifted their traditional cultivation of apple to pomegranates. The town has been identified as an agricultural vulnerability hot spot, based on quantitative assessment and farmers' perception as per the Indian Himalayas Climate Adaptation Programme (IHCAP).

Three years ago, when production of apples decreased, farmers of Banjar shifted to other fruits like plums etc, but due to rising temperatures they further shifted to pomegranate cultivation, said farmer, Padam while interacting with this IFP reporter during a field visit to the valley as a part of media workshop organised by Centre for Media Studies under the IHCAP.

The farmers further expressed that overall apple production in the Himalayan region decreased between the year 1982 and 2005. This is due to increase in temperature which has further caused a reduction of total chilling hours in the region, they said.

It is said that a decline of more than 9.1 units per year has occurred in the last 23 years. With increasing temperature, the area for production may have to be shifted to higher altitudes. Earlier, apple could be grown at 3500 feet, now it has gone up to 5000 feet, as per sources.

Climate cell officer, Thakur expressed that research is going on to identify the variety of fruits or apples that could be produced at lower altitudes. A study was conducted by

IHCAP in different blocks of Kullu district, and Banjar town was identified as the most vulnerable valley. It highlighted the need for having a holistic approach in understanding climate risks and vulnerabilities for adaptation of planning and implementation.

Farmers of Banjar expressed that increase in temperature and decrease in winter rainfall and snowfall has reduced the number of chilling hours, leading to a decline in apple production in the region.

पार्वती व बंजार घाटी में जलवायु परिवर्तन पर दो दिवसीय कार्यशाला का आयोजन

6 days ago admin



करंट न्यूज़ ब्यूरो
आनी (कुल्लू)

विज्ञान व प्रौद्योगिकी विभाग भारत सरकार के तत्वधान व सेंटर फॉर मीडिया स्टडी द्वारा जलवायु परिवर्तन को लेकर कुल्लू घाटी में दो दिवसीय कार्यशाला का आयोजन किया गया।

जिसमें देश भर के विभिन्न राज्यों से आए करीब 45 पत्रकारों ने भाग लिया। इस कार्यशाला में फील्ड विजिट के दौरान पार्वती वैली के शाट, धार्मिक व पर्यटक नगरी मणिकर्ण के अलावा बंजार का फील्ड विजिट किया गया।

कार्यशाला का उद्देश्य जलवायु परिवर्तन अनुकूल पर पत्रकारों को विशेषज्ञों और क्षेत्र की यात्रा द्वारा इंटरैक्टिव प्रस्तुतियों के साथ उन्मुख करना था।

इस आयोजन में देश भर के विभिन्न राज्यों से आए हुए पत्रकार, पर्यावरण विभाग के विशेषज्ञ व सेंटर फॉर मीडिया स्टडी की टीम सहित आपदा से प्रभावित लोगों के साथ किसान-बागवान भी उपस्थित रहे।

कार्यशाला का मुख्य उद्देश्य पर्यावरण परिवर्तन से हो रही आपदाओं के बचाव व कृषि में आए भारी बदलाव के बारे में जनता को जागरूक करना था।

विशेषज्ञों द्वारा बताई गई पर्यावरण परिवर्तन पर महत्वपूर्ण जानकारी को मीडिया के माध्यम से जनता तक पहुंचाने व उन्हें जागरूक करने के लिए विज्ञान व प्रौद्योगिकी मंत्रालय भारत सरकार द्वारा इस तरह के कार्यक्रम किए जाते हैं।

कार्यशाला में सीएमएस की निदेशक अनु आनंद, पर्यावरण विभाग के दूती चंद ठाकुर डिप्टी कोऑर्डिनेटर क्लाइमेट सैल हिमाचल प्रदेश व देश भर से आए हुए पत्रकारों के साथ जिला कुल्लू के पत्रकारों ने भी भाग लिया।



No early warning system yet for Kullu's Parvati valley even 25 yrs after big cloud burst tragedy

Link: <https://www.indianewsstream.com/no-early-warning-system-yet-for-kullus-parvati-valley-even-25-yrs-after-big-cloud-burst-tragedy/>

The place in Shaat village of Parvati valley where water rose to 30 to 40 feet during the August 11, 1994 cloud burst .

By Naz Asghar

Sep 25, 2019



Kullu (Himachal Pradesh): Even Twenty five years after the cloud burst disaster that struck Parvati valley in this district of Himachal Pradesh, the people of the area are yet to get an early warning system(EWS).

The devastation caused by August 11, 1994 flash floods is still fresh in the minds of the survivors of the tragedy in Shaat and Ladari villages of the valley.

"It was all over in five minutes. Rather it is just matter of a minute in such events. The water level in the river rose to 40 to 50 feet high that fateful day, " says former sarpanch of ladari village Kamal Chand while recalling the terrifying flash flood resulting from a cloudburst high up in the mountains that reduced the whole villages to rubble, claiming 27 lives.

Many lives would have been saved if the people would have been alerted about the coming disaster that day.

Establishment of an EWS with last mile linkage to community is one of the main recommendation of the IHCAP(Indian Himalayas Climate Adaptation Programme) of the Swiss Development Agency for Development and Cooperation being implemented in cooperation with the Department of Science and Technology of the Indian Government.

"The proposal for Rs 20 crore project to set up the system has been sent to the Ministry of Environment, Forest and Climate Change way back in 2015, but it is yet to get its approval," Himachal Pradesh Government's climate cell officer DS Thakur told a group of journalists during a field visit to the valley as part of a media workshop organised by the Centre for Media Studies under the IHCAP this week.

Mohinder Singh of Shaat village, who was 16 years old in 1994 when the flashfloods hit his village, had a feeling that not much was done by the government after the tragedy that could match the enormity of the risk people of the area were exposed to." That day, the stormy gales of winds with high whistle-like sound that preceded the flashfloods were so powerful that trees and houses were blown away even before water could pound them. Words fail me to describe the horror," he says recalling the nature's fury which claimed the life of his two uncles and one sister.

"Though the compensation was given for the dead but no compensation was given for our land that degraded due to the flash floods," he said. Another survivor of the disaster Hemraj was also on the spot, but he was nine months old then. His parents perished in the flashfloods and he was brought up by his grandfather.

Three of the survivors of 1994 cloud burst in Parvati valley: (From left) Mohinder Singh, Hemraj and Kamal Chand.

As per IHCAP recommendation, the most urgent adaptation action that needs to be taken is to prepare the government agencies to alert and rescue people. This programme, in the context of Kullu, could be linked to Himachal Pradesh Disaster Management Authority. It also lays stress on capacity building and specialised training of communities on appropriate response mechanism, including the identification of shelters and evacuation path. Kullu being a hot spot for climate change impacts such as flood, a flood risk assessment of Parvati valley has been done in collaboration with IHCAP and proposals submitted to the Ministry of Environment and Forests.

The Adaptation proposals also relate to climate-resilient agri-horticulture and eco-based adaptation (Great Himalayan National Park). According to IHCAP assessment, the glacial lake outburst floods (GLOF) will increase across all blocks of Kullu, with Parvati valley emerging as the hot spot. Banjar was identified as a hot spot of agricultural vulnerability, based on both quantitative assessment and farmers' perceptions.

The journalists were also taken to Banjar valley, where farmers after facing damage of their apple crop for several successive years due to rising temperatures because of climate change, had to switch to cultivation of other fruits. Farmer Padam Singh said he had to shift cultivation of pomegranates in place of apples due to the changes in the climate .'

'Thirty years ago when the apple crop did not yield good results, we shifted to plum, but as temperature rose further, we have now taken to pomegranate cultivation. For apple,

you have to to a height of 5000 feet, while earlier apple could be grown at 3500 feet.” he said.

Climate cell officer Thakur said research was now directed towards developing such varieties that did not require that much height, and aim was to develop such varieties as required less space but yield more produce.

Also efficient use of water in irrigation was a big priority owing to depletion of water resources as a result of climate change.

Eighty year old woman resident of the village Godavri told journalists that rain and snow had both decreased in the valley during her life time. Supporting her observation, village sarpanch Naina Devi said the impact on the flow of river was quite visible.” Nandan to sookh hi gai hain(Rivers have almost dried up), she said.

Farmers in Banjar tehsil and other parts of Himachal Pradesh have also taken to vegetable production in poly houses as climatic uncertainties threaten their livelihood. By regulating temperature and other climatic conditions, polyhouses give them assured crops and in three cycles in a year. The Himachal Pradesh Government is promoting these poly houses which like a greenhouse, lets the light in but trap heat. Motilal Negi told the visiting journalists that besides simulating appropriate climatic conditions, the polyhouses were also saving their crop from pests.

Motilal Negi said that besides simulating appropriate climatic conditions, the polyhouses were also saving their crop from pests.

India News Stream

গাঁওকনেক্সন

Link: <https://www.gaonconnection.com/read/assam-most-vulnerable-to-climate-change-in-the-indian-himalayan-region-46381>

Assam most vulnerable to climate change in the Indian Himalayan Region

A recent scientific assessment of climate vulnerability in the Indian Himalayan Region has ranked Assam as the most vulnerable state and Sikkim as least

vulnerable to climate change. Overall, the entire region is under severe threat due to the changing climate

Nidhi Jamwal 3 Oct 2019

1,300 metres above mean sea level. Kullu, Himachal Pradesh. Padam Dev, a pomegranate farmer in Mamjiya village of Kullu district in Himachal Pradesh, has grown up hearing stories of his father and grandfather's apple orchards. He hasn't been able to grow even a single apple fruit in his orchard in Banjar block, about 170 kilometres (km) from the state capital Shimla. "Now there isn't enough winter chill and cold months to grow apple in my village," he told Gaon Connection. Over 2,000 km away, at an elevation of 2,500 metres above mean sea level, 92-year-old Til Bahadur Chhetri of Hee Patal village in West Sikkim is worried about the declining yield of his black cardamom (*Amomum subulatum*) crop.

"The rains have become erratic and temperatures are rising bringing in new pests," lamented Chhetri. Another 600-km away, 54 per cent surveyed springs in Meghalaya have reported reduced water discharge of up to 50 per cent, threatening the water security of the north-eastern state. Both villagers and water sector experts blame it on the changing rainfall pattern (coupled with some other factors). 92-year-old Til Bahadur Chhetri in West Sikkim is worried about the declining yield of black cardamom.

The Indian Himalayan Region, covering over 16 per cent of the India's geographical area and home to over 50 million people, is highly vulnerable to climate change impacts. To understand the extent of vulnerability, for the first time a scientific assessment of climate vulnerability of states in this region has been carried out using a common framework of indicators. Titled 'Climate Vulnerability Assessment for the Indian Himalayan Region Using a Common Framework', the assessment report maps and ranks all the 12 states in the region (only the hill districts of Assam and West Bengal) based on how vulnerable they are to climate change (see map: Vulnerability index and ranking of states in the Indian Himalayan Region). Map: Vulnerability index and ranking of states in the Indian Himalayan Region Source: Climate Vulnerability Assessment for the Indian Himalayan Region Using a Common Framework 2018-19. Assam is ranked number one on the climate vulnerability index followed by Mizoram and Jammu & Kashmir. Sikkim, as per the report, is least vulnerable to climate change in the Indian Himalayan Region. The vulnerability index values for all the 12 states have been arrived at using four broad, common indicators. These include socio-economic, demographic status and health; sensitivity to agricultural production; forest dependent livelihoods; and access to information services and infrastructure. Other sub-indicators include per capita income, percentage area irrigated, area under forests per 1,000 households and percentage area under open forests.

This scientific assessment has been carried out by the Indian Institute of Technology (IIT) Guwahati and IIT Mandi, in collaboration with the Indian Institute of Science, Bengaluru. It has received support of the Department of Science and Technology and the Swiss Development Corporation, which is implementing the Indian Himalayas Climate Adaptation Program (IHCAP).

"Till now the states carried out their own vulnerability studies using a varied set of indicators, which were not comparable. For the first time, we have used broad but common

indicators for mapping and ranking all the states in the Indian Himalayan Region," said Anamika Barua, associate professor, department of humanities and social science, IIT Guwahati. She is the principal investigator of the assessment report. "Whereas all the states in the region used the same set of indicators, they were free to give different weightage to the chosen indicators keeping in mind the ground situation in their respective states," she explained.

The states have further prepared their own district level vulnerability profile using common indicators with different weights, she added. Climate vulnerability assessment of all 12 states in the Indian Himalayan Region has been carried out. Pic: Nidhi Jamwal Explaining the rankings, Mustafa Ali Khan, team leader with IHCAP said: "All the states in the Indian Himalayan Region are vulnerable to climate risks.

The vulnerability is a relative measure meaning states like Sikkim or Uttarakhand have low vulnerability when compared with Assam or Mizoram." Commenting on the assessment report, Akhilesh Gupta, adviser and head of climate change programme, Department of Science and Technology, Government of India said: "The recent report on climate vulnerability assessment is an important scientific document that assesses and maps vulnerability in all the states of the Indian Himalayan Region. We plan to extend this exercise of climate vulnerability assessment across the entire country.

"According to Khan, to understand vulnerability, it is important to understand hazard and exposure." Hazard includes events such as landslide or drought, etc. Exposure shows the number of people exposed to a particular hazard. Not all people exposed to a hazard are equally vulnerable." For instance, in case of a natural disaster, children or young women or poorest of the poor may be more vulnerable. Vulnerability assessment helps build suitable programmes, policies and adaptation measures. Vulnerability assessment helps build suitable programmes, policies and adaptation measures. Pic: Nidhi Jamwal Assam most vulnerable to climate change According to the climate vulnerability assessment report, there are various reasons (indicators) that make Assam highest vulnerable to climate change in the Indian Himalayan Region.

These include least area under irrigation, least forest area available per 1,000 rural households, second lowest per capita income; low percentage area covered under crop insurance and low MGNREGA [Mahatma Gandhi National Rural Employment Guarantee Act] participation. The report goes on to note that "lack of access to information and infrastructure puts this state into a situation where it would be extremely difficult to cope with any climate extremes".

In case of Mizoram, which is ranked number two on the climate vulnerability index, the assessment report identifies various drivers of vulnerability — highest yield variability; no area under crop insurance; largest area under open forests; and largest area under slope >30% as compared to other states. Mizoram also has the second lowest percentage area under irrigation and the third lowest road density among the 12 states included in the assessment study. Assam is ranked most vulnerable to climate change whereas Sikkim is least vulnerable.

Somewhat similar drivers of vulnerability are identified for Jammu & Kashmir — least road density; no area under crop insurance; low area under forests per 1,000 rural households; high percentage of marginal farmers; low percentage area under horticulture crops; low livestock to human ratio; and low percentage of women in the overall workforce. "Impacts of climate change are already being felt in the state. Both our annual mean maximum and annual mean minimum temperature is on a rise, but precipitation is on a decline," said Majid Farooq, scientist and state coordinator, state climate change centre, Government of J&K. This is not all. "The annual stream flows in our three main rivers — Indus, Chenab and Jhelum — is on a decline.

The area of Kolhoi glacier, which is a major source of fresh water supply to the Kashmir valley, has reduced from 112.33 square kilometre in 1911 to 94.44 square kilometre in 2014," he added. Nagaland, which is ranked seventh in the climate vulnerability index, also has no coverage under crop insurance, low percentage of farmers taking loans and low area under forests per 1,000 rural households. But, the state "has high per capita income, low population density, lowest prevalence of marginal farmers and highest women participation in the labour force that make the state relatively resilient", notes the assessment report. Tripura, ranked ninth, has the highest road density, lowest area under slope >30%, highest MGNREGA participation and lowest yield variability when compared to other states in the region. Similarly, Arunachal Pradesh, ranked tenth, has the least population density and the most densely available healthcare facility among all the 12 states.

It also has a relatively low percentage of marginal farmers and high women participation in labour force that reduces the overall vulnerability of the state. Sikkim, which is considered least vulnerable to climate change in the Indian Himalayan Region, "has the highest per capita income and the lowest area under open forests". The assessment report notes that "the drivers of vulnerability of different states in the IHR [Indian Himalayan Region] are diverse in nature.

Hence while formulating adaptation measures, there is no one panacea that can be applied to all the states." High women participation in labour force reduces the overall vulnerability of the state. District-level vulnerability assessment the scientific assessment of climate vulnerability has not remained at the states' level. All the 12 states in the Indian Himalayan Region have also prepared their own district-level vulnerability maps and ranked various districts on the basis of chosen indicators. These district-level maps are part of the 'Climate Vulnerability Assessment for the Indian Himalayan Region Using a Common Framework' report.

"Vulnerability assessment carried out at block or district level can depict the profile of vulnerability at the state level showing blocks and districts under different vulnerability categories such as low, medium and high vulnerability. Such information helps in the identification of priority blocks/districts for resource allocation, prioritising the allocation of adaptation funds and adaptation interventions," reads the report. In case of Assam, which is

ranked number one on climate vulnerability index, Dhubri district is most vulnerable to climate change and Sivsagar least.

In case of Mizoram, Siaha district is most vulnerable because it has "third largest steep slope coverage among all districts, is fourth in lack of forest cover and third in lack of person days generated under MGNREGA." Similarly, district-level assessment carried out in Jammu & Kashmir found Kargil district to be most vulnerable and Kathua to be least vulnerable to climate change (see map: District level vulnerability assessment in Jammu & Kashmir).

"Kargil has three major drivers of vulnerability — lowest per capita income, largest area under slope >30% than other districts and high infant mortality rate," informed Farooq. "We have also prepared social vulnerability index map and economic vulnerability index map of all the districts in the state," he added.

Now that all the states in the Indian Himalayan Region have prepared their climate vulnerability maps, they need to prepare a good adaptation framework incorporating the findings of vulnerability assessment. This is crucial because the Himalayan region is at a great risk of climate change. A 2010 study on the Himalayan region, commissioned by the Union ministry of environment, forest and climate change, has reported that minimum temperatures in the region are projected to rise by 1 degree C to 4.5 degree C, and the maximum temperatures may rise by 0.5 degree C to 2.5 degree C. Flash floods due to glacial lake outburst floods may lead to large-scale landslides.

The increase in temperatures may lead to increasing morbidity due to heat stress. Flash floods due to glacial lake outburst floods may lead to large-scale landslides and affect food security. The same study of the environment ministry supports Padam Dev, a pomegranate farmer in Mamjiya village of Kullu, comment on disappearing apple orchards.

It notes that between 1982 and 2005, apple production in the Himachal region has decreased due to an increase in maximum temperature which has lead to a reduction in total chilling hours in the region — a decline of more than 9.1 units per year in the last 23 years.

It is clear that changes in temperature and precipitation will have serious and far-reaching consequences on climate-dependent sectors, such as agriculture, water resources and health in the Indian Himalayan Region. The science is clear. The vulnerability maps are ready. Will the policy-makers and bureaucrats act now?



पार्वती वैली व बंजार घाटी में जलवायु परिवर्तन, वातावरण जानने उमड़े देश भर के पत्रकार

SEPTEMBER 24, 2019 BY मेघ सिंह कश्यप

Link: <https://mbmnewsnetwork.com/kullu/219798/parvati-banjar-valley-of-kullu/>

भुंतर: विज्ञान व प्रौद्योगिकी विभाग भारत सरकार के तत्वाधान व सेंटर फॉर मीडिया स्टडी द्वारा जलवायु परिवर्तन को लेकर कुल्लू घाटी में दो दिवसीय कार्यशाला का आयोजन किया गया। जिसमें पार्वती वैली के शाट, धार्मिक व पर्यटक नगरी मणिकर्ण के अलावा बंजार का फील्ड विजिट किया गया। कार्यशाला का उद्देश्य जलवायु परिवर्तन अनुकूल पर पत्रकारों, विशेषज्ञों और क्षेत्र की यात्रा द्वारा इंटरैक्टिव प्रस्तुतियों के साथ उन्मुख करना था। इस आयोजन में देश भर के विभिन्न राज्य से आए हुए पत्रकार, पर्यावरण विभाग के विशेषज्ञ व सेंटर फॉर मीडिया स्टडी की टीम सहित आपदा से प्रभावित लोगों के साथ किसान-बागवान भी उपस्थित रहे।



कार्यशाला का मुख्य उद्देश्य पर्यावरण परिवर्तन से हो रही आपदाओं के बचाव व कृषि में आए भारी बदलाव के बारे में जनता को जागरूक करना है। विशेषज्ञों द्वारा बताई गई पर्यावरण परिवर्तन पर महत्वपूर्ण जानकारी को मीडिया के माध्यम से जनता तक पहुंचाने व उन्हें जागरूक करने के लिए विज्ञान व प्रौद्योगिकी मंत्रालय भारत सरकार द्वारा इस तरह के कार्यक्रम किए जाते हैं।

कुल्लू घाटी में भी इसके लिए फील्ड विजिट किया गया। जिसमें सीएमएस की निदेशक अनु आनंद, पर्यावरण विभाग के दूनी चंद ठाकुर डिप्टी कोऑर्डिनेटर क्लाइमेट सैल हिमाचल प्रदेश व देश भर से आए हुए पत्रकारों के साथ कुल्लू के पत्रकारों ने भी भाग लिया

संपूर्ण दैनिक अखबार
आपका फैसला



स्लाइडिंग से नहीं होगी क्षति नई तकनीक तैयार : ठाकुर

भुंतर, (मेघ सिंह कश्यप)। कुलु जिला में बादल फटने का सिलसिला कई वर्षों से शुरू है। सबसे पहला बादल जिला कुलु के पार्वती वैली स्थित शाट नाला में फटा था। शट नाले में बड़े-बड़े-बड़े पत्थर और पहर्वटियों में लगे मिट्टी के निशान उस संसर की याद

जलवायु विभाग के डिप्टी कोऑर्डिनेटर ने दी जानकारी

शामीणों को आज भी दिखाते हैं। जलवायु विभाग से आए हुए डिप्टी को-ऑर्डिनेटर कलाइमेंट सैल हिमाचल प्रदेश डीसी ठाकुर ने कहा कि स्लाइडिंग की रोक तो नहीं जा सकता, लेकिन इससे होने वाले नुकसान से बचा जा सकता है। इस तरह की टेक्नोलॉजी तैयार है, जो स्लाइडिंग आने से पहले सूचित कर देगी। सेंसर द्वारा भूमि में हल्की सी हलचल होने से संभरन बस जाएगा जिससे स्लाइडिंग होने से पहले सुरक्षित स्थान पर पहुंच कर जान-माल के नुकसान को बचाया जा सकता है। उन्होंने कहा कि इस तरह के सेंसर आईआईटी मंडी द्वारा कीटनेपी में रिसर्च के लिए लगाए

गए हैं, क्योंकि यह एरिया भी स्लाइडिंग प्रभावित है। जलवायु परिवर्तन स्टडीज की पार्वती यात्रा पर आए सेंटर फॉर मीडिया स्टडीज टीम, जलवायु विभाग के विशेषज्ञ व देश के विभिन्न क्षेत्र से आए हुए पत्रकारों के सामने शामीणों ने बाढ़ का दर्द बयान किया। खुसुरु शामीण कमल चंद ने बादल फटने की घटना बारे जानकारी देते हुए कहा कि 11 जुलाई 1994 को यहां बादल फटने से आई भयंकर बाढ़ ने 27 लोगों की जिंदगियां निगल ली थी। बाढ़ का रूप इतना भयंकर था कि नाले के चारों ओर से पहले सीटी बजने जैसी अलगाव आई, जो बहुत डरावनी थी। देखते ही देखते बाढ़ ने लोगों के सकारों व दुकानों सहित शट नाले पर बने पुल को भी हवा में उड़ दिया था। कमल चंद ने बताया कि उनका पूरा परिवार बाढ़ के अगोश में समा गया केवल एक पोता बचा था। शाट के हेमराज का कहना है कि मैं उस समय भी महीने का था जब मेरा परिवार भी इस बाढ़ में बह गया था, उनकी परवरिश दादा-दादी ने की थी। यही

—(शेष पृष्ठ 2 पर)—

स्लाइडिंग से नहीं ...

महेंद्र सिंह ने बताया कि 16 वर्ष की आयु में बादल फटने का खौफनाक संसर हमने देखा है। हमारी आंखों के सामने बहुत कुछ तबाह हुआ। आज भी जब उस घटना की याद आती है, तो रोते खड़े हो जाते हैं। बाढ़ से पीड़ित शामीण आज भी सरकार और प्रशासन से खफा है। उनका कहना है कि उस समय सभी ने सहस्रभूति जलाई, लेकिन इस नाले में आजतक किसी ने फ्रेटवाले लगाने तक की जहमत नहीं उठाई। पार्वती वैली के शाट नाले में भी ऐसे सेंसर लगाने की प्रयोज किया है अगर प्रयोजल मिलती है तो यहां भी इस तरह के सेंसर लगाए जा सकते हैं। अगर स्लाइडिंग आने से पहले ही सूचित करने वाले सेंसर शट में लगाया जाते हैं तो यहां की जनता के लिए यह बहुत बड़ी बात होगी। विज्ञान और डीजोगिकी भारत सरकार मंत्रालय के तत्वधान से व सेंटर फॉर मीडिया स्टडीज द्वारा जलवायु परिवर्तन पर दो दिवसीय राष्ट्रीय स्तरीय कार्यशाला का आयोजन कुलु घाटी में किया गया। फौलड विजिट में मणिकर्ण गुरुद्वारा में गिरी चट्टान और उससे हुए नुकसान का भी जायजा लिया गया। कार्यशाला का उद्देश्य जलवायु परिवर्तन अनुकूलन पर पत्रकारों को विशेषज्ञों और क्षेत्र की यात्राओं द्वारा इंटरैक्टिव प्रस्तुतियों के साथ उन्मुख करना है। कार्यशाला के आयोजन में सीएमएस दिल्ली की निदेशक अनु उमंग, पर्यावरण विभाग हिमाचल प्रदेश के कोऑर्डिनेटर दुषी चंद ठाकुर, देश भर से विभिन्न मीडिया से आए हुए पत्रकारों ने भाग लिया।

संपूर्ण दैनिक अखबार

आपका फैसला



कुल्लू घाटी में जलवायु परिवर्तन पर कार्यशाला, फील्ड विजिट



भूतल, (आपका फैसला)। विज्ञान व प्रौद्योगिकी विभाग भारत सरकार के तत्वावधान में सेंटर फॉर मॉडिया स्टडी द्वारा जलवायु परिवर्तन को लेकर कुल्लू घाटी में दो दिवसीय कार्यशाला का आयोजन किया गया। इसमें पार्वती मैली के शाह, धर्मिक व पर्यटक नगरी भौतिकी के अलावा संचार का फील्ड विजिट किया गया। कार्यशाला का उद्देश्य जलवायु परिवर्तन अनुकूल पात्रकारों को विशेषज्ञों और क्षेत्र की माना द्वारा इंटरैक्टिव प्रस्तुतियों के साथ जन्मुख करना था। इस आयोजन में देश भर के विभिन्न राज्य से आए हुए पत्रकार, पर्यावरण विभाग के विशेषज्ञ व सेंटर फॉर मॉडिया स्टडी की टीम सहित अल्पदा से प्रभावित लोगों के साथ किसान-जगजगन भी उपस्थित

रहे। कार्यशाला का मुख्य उद्देश्य पर्यावरण परिवर्तन से हो रही आपदाओं के खयाल व कृषि में आए धानी बदलाव के बारे में जनता को जागरूक करना है। विशेषज्ञों द्वारा बताई गई पर्यावरण परिवर्तन पर महत्वपूर्ण जानकारी को मॉडिया के माध्यम से जनता तक पहुंचाने व उन्हें जागरूक करने के लिए विज्ञान व प्रौद्योगिकी मंत्रालय भारत सरकार द्वारा इस तरह के कार्यक्रम किए जाते हैं। कुल्लू घाटी में भी इसके लिए फील्ड विजिट किया गया, जिसमें सीएचएस की निदेशक अनु आनंद, पर्यावरण विभाग के सूनी चंद ठाकुर डिप्टी को-ऑर्डिनेटर क्लाइमेट सैल हिमाचल प्रदेश व देश भर से आए हुए पत्रकारों ने भाग लिया।

संपूर्ण दैनिक अखबार

आपका फैसला



प्रदेश में कुल्लू घाटी के शाट नाला में सबसे पहले 1994 में फटा था बादल



मीप सिंह खरवाल
भेदक, जलवायु

बादल फटने की घटना पहले कभी नहीं सुनी थी, लेकिन कुल्लू घाटी के शाट नाला में हुई भारी तबाही के बाद पता चला की बादल भी फटते हैं। सन 1994 में देश में सबसे पहले बादल जिला कुल्लू के पार्वती वैली स्थित शाट नाला में फटा था। शाट नाले में पड़े कड़े-कड़े पत्थर और चट्टानों में लगे धिन्दी के पिशाच उस मंजर की बाद घामियों को आज भी दिखाते हैं। जलवायु परिवर्तन स्टडीज की पार्वती नाला पर अरु सेंटर फॉर मीडिया स्टडीज टीम, जलवायु विभाग के विशेषज्ञ व देश के विभिन्न क्षेत्र से आए हुए पत्रकारों के सामने घामियों ने 25 साल पहले का खडू का दर्द बताया। सुकुर्ण घामोच कमल चंद ने बदल फटने की घटना की जानकारी देते हुए कहा कि 11 जुलाई 1994 को वहां बादल फटने से आई भयंकर बाढ़ ने 27 लोगों की जिंदगियां निगल ली थीं। बाढ़ का रूप इतना भयंकर था कि नाले के पारों और से पहले सीटी बजने जैसी आवाज आई, जो बहुत डरावनी थी। देखते ही देखते बाढ़ ने लोगों के सकारों व दुकानों सहित शाट नाले पर बने पुल को भी हवा में उड़ दिया था। कमल चंद ने बताया कि उनका पूरा परिवार बाढ़ के आगोश में समा गया, केवल एक पोता बचा था। शाट के देवस्थान का कहना है कि वी उस समय भी मरने का था, जब मेरा परिवार भी इस बाढ़ में ख गया था। उनकी परवरिश दादा-दादी ने की थी। बही चोहंद सिंह ने बताया कि 16 वर्ष की आयु में बादल फटने का खौफनाक मंजर हमने देखा है। हमारी आंखों के सामने बहुत कुछ छाया हुआ। आज भी जब उस घटना की याद आती है, तो रोंगटे खड़े हो जाते हैं। बाढ़ से पीड़ित घामोच आज भी सरकार और प्रशासन से खचा है। उनका कहना है कि उस समय सभी ने सहानुभूति जताई, लेकिन इस घाते में आज तक किसी ने ज़रूरत लगाने तक को जहमत नहीं उठाई। जलवायु विभाग से आए हुए डिप्टी कोऑर्डिनेटर कलाइमेंट रीत हिमालय प्रदेश सीडी त्रिपुर ने कहा कि लैंडस्लाइडिंग को रोकना तो नहीं जा सकता, लेकिन इससे होने वाले नुकसान को बचा जा सकता है। इस तरह की टेक्नीकली तैयार है, जो स्लाइडिंग आने से पहले सचेत कर देगी। सेंसर द्वारा भूमि में हलकों से हलचल होने से सावरन बस

जाएगा, जिससे स्लाइडिंग होने से पहले सुरक्षित स्थान पर पहुंच कर जान-माल के नुकसान को बचाया जा सकता है। उन्होंने कहा कि इस तरह के सेंसर आईआईटी मंडी द्वारा कोटरीपी में रिसर्च के लिए लगाने गए हैं, क्योंकि यह एरिया भी स्लाइडिंग प्रभावित है। पार्वती वैली के शाट नाले में भी ऐसे सेंसर लगाने की प्रयत्न किया है। अगर प्रयोजन मिलती है, तो यहां भी इस तरह के सेंसर लगाए जा सकते हैं। अगर स्लाइडिंग आने से पहले ही सूचित करने वाले सेंसर शाट में लगाए जाते हैं, तो वहां की जनता के लिए यह बहुत बड़ी बात होगी। विज्ञान और प्रौद्योगिकी भारत सरकार मंत्रालय के तत्त्वधान से व सेंटर फॉर मीडिया स्टडीज द्वारा जलवायु परिवर्तन पर दो दिवसीय राष्ट्रीय स्तरों कार्यक्रमों का आयोजन कुल्लू घाटी में किया गया। फोल्ड सिमिज में स्थित कर्णपुरा में गिरी चट्टान और उससे हुए नुकसान का भी जायज लिया गया। कार्यक्रम का उद्देश्य जलवायु परिवर्तन अनुकूलन पर पत्रकारों को विशेषज्ञों और क्षेत्र की यात्राओं द्वारा इंटरैक्टिव प्रस्तुतियों के साथ अनुभव करना है। कार्यक्रम के आयोजन में सीएमएस दिल्ली की निदेशक अनु आनंद, पर्यावरण विभाग हिमालय प्रदेश के कोऑर्डिनेटर दुषी चंद त्रिपुर, देश भर से विभिन्न मीडिया से आए हुए पत्रकारों ने भाग लिया। जलवायु परिवर्तन का मुख्य कारण मनुष्य ही है। सामान्यतः जलवायु में परिवर्तन कई वर्षों में धीरे-धीरे होता है, लेकिन मनुष्य के द्वारा पेड़-पौधों की लगातार कटाई और जंगलों को खेती या मकान बनाने के लिए उपयोग करने के कारण इसका प्रभाव जलवायु में भी पड़ने लगा है। जलवायु परिवर्तन औसत मौसमी दराजों के फटने में ऐतिहासिक रूप से बदलाव आने को कहा जाता है। सामान्यतः इन बदलावों का अध्ययन पृथ्वी के इतिहास को दोषे अवधिओं में बंटकर किया जाता है। जलवायु की दराजों में यह बदलाव मानव के क्रियाकलापों का परिणाम है। बाढ़ जैसी घटनाओं को भी मनुष्य की क्रियाओं का परिणाम माना जा रहा है। विकास के नाम पर घाटा का खैर हरण आने वाले

समय के लिए चुप खड़े नहीं हैं। औद्योगिक क्रान्ति के बाद मनुष्य द्वारा उद्योगों से निःसृत कार्बन डाई ऑक्साइड अतिरिक्त के वायुमंडल में अधिक मात्रा में बंद जाने का परिणाम है, जिसके कारण मौसम में भारी बदलाव आया है। परिणाम में अधिक गर्मी और गर्मी को तन को जलाने वाली गर्मी हो रही है। मौसम के तापमान में भी बदलाव हो रहा है। अवैध तरीके से जल संचयन से हो रही खेती के कारण पर्यावरण की स्थिति बिगड़ती जा रही है। इन कार्यों से हमारे जल स्रोत भी प्रभावित हो रहे हैं तथा जनसंख्या बढ़ी घुटी वह जनसंख्या को बहुत नुकसान हो रहा है। प्रदेश में सबसे पहले बादल फटने का शाट नाला में फटा था, जिसमें कई जिंदगियां मृत के आगोश में समा गई थीं। उसके बाद रोचना उड़ी वर्षे बहुत के शाट नाला में बादल फटने से कई जिंदगियां मरने में दफन हो गई। वर्ष 1997 में चित्तौड़ में बादल फटा, वहीं वर्ष 2000 में धर्मिक नगरी खरौली में 2003 में चेंब की सूड में तथा वर्षों के पुलिस में बादल फटा, वहीं कुल्लू की ग्याम और फरकी वदी में कई बार बाढ़ आई। बादल फटने की आसदी किसी की बचता ने भी कम नहीं होती है। वहीं उत्तराखंड में हुई भारी तबाही से मनुष्य ने सबको नहीं लिया। कुल्लू में वर्ष 2018 में बाढ़ की स्थिति ऐसी बनी कि बहुत सी जिंदगीयां की आंखों के जवाबों और उनके हेलीकॉप्टर द्वारा बचाया गया। वहीं 2019 में कुल्लू में आई बाढ़ से कई सड़कें और पुल क्षतिग्रस्त हुए जंगल को महीने तक पोखरियों का सामना करना पड़ा। दरअसल, पिछली कुछ सदियों से हमारी जलवायु में धीरे-धीरे बदलाव हो रहा है। पृथ्वी का औसत तापमान अभी लगभग 15 डिग्री सेल्सियस है, हालांकि भूगर्भीय प्रमाण बताते हैं कि पूर्व में ये बहुत अधिक था कम रहा है, लेकिन अब पिछले कुछ वर्षों में जलवायु में अचानक तेजी से बदलाव हो रहा है। मौसम की अपनी खसियत होती है, लेकिन अब इसका रंग बदल रहा है। गर्मियां लंबी होती जा रही हैं, और सर्दियां छोटी। पूरी दुनिया में ऐसा हो रहा है। यही जलवायु परिवर्तन है।



संपूर्ण दैनिक अखबार
आपका फैसला



हर वर्ष 10 से 20 लाख का अनार पहुंचाते हैं सब्जी मंडी

तीर्थन घाटी के बागबान पदम ने अनार से की आर्थिकी सुदृढ़

भुंनार, (आपका किसान): तीर्थन घाटी के समस्त गांव जहाँक बाजार जिला कुलु के पदम देव रोष के बाद अब अनार की फसल में रूचि दिखाई। डीम पंचायत मंगलौर के पदम का कहना है कि हमारे यहां 30 वर्ष पहले यहां रोष की अच्छी फसल होती थी लेकिन धीरे-धीरे जलवायु परिवर्तन के कारण यह फसल खराब हो गई। उसके बाद हमने पलम भी तैयार किया लेकिन यह भी इतना कामयाब नहीं हुआ। फिर यहां के लोगों ने अपनी किस्मत अनार लगाकर अलबार्ड। अनार के बगीचे लगाने से अच्छी खाली पैदावार हुई। उन्होंने कहा कि हमने लगभग 10 बीघा में अनार के पौधे लगाए जो लगभग तीन सालों में तैयार हो गए। जिसमें 1 साल में लगभग 10 से 20 लाख के बीच का अनार तैयार होने लगा। अनार के बगीचे में इतनी उत्पन्न करने से अब के अच्छे रकबे मिल जाते हैं। फलदार पौधों में येहमा की बात करें तो परम देव ने कहा अनार की देखभाल बहुत करना पड़ती है। जबकि रोष की फसल में हमें इतनी मेहनत नहीं करना पड़ती थी। मंगलौर पंचायत की प्रधान विधा भारती ने बताया इस पंचायत में लगभग 26 गांव हैं जिनका रंधा किसानों व बागवानी है। यहां के ग्रामीणों का कहना है कि कृषि विभाग व संबंधित विभागों से किसानों-बागवानी को



सामग्री सुविधा मिलती है। अनार कृषि विभाग हमारी मदद करें तो हम अपने आर्थिकी को और भी सुदृढ़ बना सकते हैं। किसान पदम देव ने देवी भोसिका गोदावरी ने परावरण को लेकर अपने अनुभव शेयर कर मीडिया कंटैक्ट की टीम व देशपरा के आर् पत्रकारों के सामने रखी। इसी गांव की 82 वर्षीय गोदावरी का कहना है कि अब जलवायु परिवर्तन बहुत हो चुका है अब बारिश भी कम होती है गर्मी बहुत ज्यादा बढ़ गई है पहले हम यहां धान कोटार गेहूं आदि की फसल उगाते थे लेकिन अब यह फसलें विफल होने के कारण पर हैं रोष की गुणवत्ता भी जो पहले समय में होती है आज यह हो नहीं

है। परावरण विभाग से आए हुए डीम देव का कहना है कि अब वर्ष की मात्रा बहुत कम हो गई है जिससे रोष की क्वालिटी खराब नहीं होती। अब नई किस्म के रोष पौधों की क्वालिटी मार्केट में आ चुकी है जो गर्म मौसम में भी अच्छी फसल देते हैं। इस नई वैरायटी से किसान अपनी आर्थिकी में सुधार ला सकते हैं। तीर्थन घाटी में किसी समय मछली का शिकार भी किया जाता था लेकिन इसके बाद सरकार ने 1975 में बंद लगा दिया है। उसम किस्म की मछली टूटत इस घटी में पाई जाती है। मछली पालन में भी रोजगार के बहुत और अवसरों हैं। सरकार चाहे तो इसमें भी पलन तैयार कर तीर्थन घाटी के लोगों को रोजगार के अवसर प्रदान कर सकती है। किसान परम देव ने बताया की 6 बीघा में कम से कम 400 पैड़ अनार के लगाए जा सकते हैं और उनसे एक साल में एक लाख तक कमाया जा सकता है। ओरगेनिक इंटिग्रेल्स में कार्यरत मोती लाल नेगी का कहना है कि पौष्टिकता लगाकर भी किसान अपनी आर्थिकी में सुधार ला सकते हैं। लेकिन इसमें अनुभव का होना बहुत जरूरी है पौष्टी डायरी के लिए पानी के



India will soon have its climate vulnerable spots pinned down

Link: <https://www.indianewsstream.com/india-will-soon-have-its-climate-vulnerable-spots-pinned-down/>

By Naz Asghar

Oct 3, 2019

New Delhi: With rising global temperature throwing up ever new challenges for populations across the world, the Government is soon going to develop a map that would have information specific to a state or district vulnerable to various kinds of risk owing to climate change.

Such climate vulnerability atlas has already been prepared for 12 states in the Indian Himalayan Region, using a common framework.

”But now we are going to have by 2020, a national level climate vulnerability profile for India,” Dr Akhilesh Gupta, head of the climate change programme at DST announced at a national media consultation on climate change here.

He said this kind of information specific to a certain region, state or district was needed to prepare communities and people to meet the challenge arising out of climate change which is has already happened, as the science tells us, and was going to happen at faster rate if the present rate of emission of green house gases continued.

The impact of climate change was not uniform for all communities and regions, he underlined.

The atlas is being developed under a joint project of the Department of Science and Technology and Swiss Agency for Development and Cooperation (SDC). This will be done

using a common methodology which was critical for assessing vulnerability for comparison and for planning adaptation strategies.

According to the vulnerability map for Himalayan states, released in March this year, Assam and Mizoram were the most vulnerable among the hill states, though all the 12 states faced different kind and level of risk. These two states are followed by Jammu and Kashmir, Manipur, Meghalaya, West Bengal, Nagaland, Himachal Pradesh and Tripura, Arunachal Pradesh and Uttarakhand, with Sikkim being the least vulnerable.

The assessment was carried out by DST under the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) which is one of the eight missions under the National Action Plan for Climate Change. The DST is coordinating the implementation of the NMSHE with support from the Swiss Development Agency under the Indian Himalayas Climate Adaptation initiative.



From right to left: Chairman, CMS N Bhaskara Rao, Dr Akhilesh Gupta of DST, Marie-Laure Crettaz of the Swiss Development Agency and CMS director Annu Anand at a national media consultation on climate change in New Delhi.

Since vulnerability within a state may differ from one region or district to another, the national profile will have area specific information like the one for the 12 Himalayan states. A common set of indicators will be used for vulnerability profile and ranking of 650 districts all over the country.

Vulnerability may arise in any system, and could be of any type bio-physical or socio-economic (including institutional). Bio-physical vulnerability considers the extent to which a natural system is susceptible to damage from climate change. The socio-economic dimension indicates a region's capacity to recover from extreme events and adapt to change over the longer term.

As many as 25 states have set up climate change cells and centres of excellence are also being established in states for capacity building.

Some states had already started using the vulnerability assessment report, particularly while revising state climate action plans and developing adaptation projects, Dr Mustafa Ali Khan (Indian Himalayas Climate Adaptation Programme) said while moderating a session in the seminar.

The consultation was organised by DST, IHCAP and Centre for Media Studies (CMS). This was followed by field visits to vulnerable areas in Kullu district of Himachal Pradesh.

India News Stream

SATURDAY, OCTOBER 05, 2019

HimalayanUpdate.com

बंजार के बागबान पदम देव ने अनार से की आर्थिकी सुदृढ़

हिमालयन अपडेट ब्यूरो | September 30, 2019 06:11 PM

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हर वर्ष 10 से 20 लाख का अनार पहुंचाते हैं सब्जी मंडी

आनी,

जिला कुल्लू के विकास खण्ड बंजार की मंगलौर पंचायत के ममजा गांव के निवासी पदम देव ने सेब के बाद अब अनार की फसल में रुचि दिखाई है, जिससे उसे अच्छी कमाई हासिल हो रही है। पदम देव का कहना है कि वे 30 वर्ष पहले अपने खेतों में सेब की फसल से आय अर्जित करते थे, मगर वातावरण में धीरे धीरे बदलाव होने से सेब की पैदावार कम होती गई, जिसके फलस्वरूप उन्हें अपनी पैदावार को बदलना पड़ा। उसके बाद उन्होंने पलम भी तैयार किया, लेकिन वह भी इतना कामयाब नहीं हुआ। फिर उन्होंने अपनी किस्मत अनार लगाकर अजमाई। अनार के बगीचे लगाने से अच्छी खासी पैदावार हुई। पदम देव ने कहा कि उन्होंने लगभग 10 बीघा में अनार के पौधे लगाए, जो लगभग तीन सालों में तैयार हो गए। जिसमें 1 साल में लगभग 10 से 20 लाख रुपए का अनार तैयार होने लगा। अनार के बगीचे में सब्जी उत्पन्न करने से आय के अच्छे स्रोत मिल जाते हैं। परम देव ने कहा अनार की देखभाल बहुत करना पड़ती है। जबकि सेब की फसल में हमें इतनी मेहनत नहीं करना पड़ती थी। मंगलौर पंचायत की प्रधान विना भारती ने बताया इस पंचायत में लगभग 26 गांव हैं जिनका धंधा खेतबाड़ी व बागबानी है, जिसके लिए सरकारी विभागों द्वारा भी समय समय पर सहायता व शिविर लगाए जाते हैं। गांव की 82 वर्षीय गोदावरी का कहना है कि अब जलवायु परिवर्तन बहुत हो चुका है, जिससे बारिश भी कम होती है और गर्मी बहुत ज्यादा बढ़ गई है। उन्होंने कहा कि पहले उगाई जाने वाली पारम्परिक फसलें धान, कोदरा, गेहूं, बिथू, व कोदा इत्यादि, आज विलुप्त होने के कगार पर हैं। सेब की गुणवत्ता भी जो पुराने समय में होती है आज वह हो नहीं रही है। बहरहाल किसान परम देव अनार की फसल से अच्छी आय अर्जित कर रहे हैं, जो दूसरों के लिए एक प्रेरणा है।




LARGEST CIRCULATED NEWS PAPER IN MANIPUR
The Sangai Express

Climate change, cloudburst haunt Kullu folks no end

Link: <https://www.thesangaiexpress.com/Encyc/2019/9/27/Mungchan-ZimikKullu-Sep-26-People-of-Kullu-district-living-in-Parvati-valley-region-still-have-grim-memories-of-climate-cruelty-of-cloudbursts-that-claimed-the-lives-of-many-and-the-floods-that.html>



Mungchan Zimik

Kullu, Sep 26 : People of Kullu district, living in Parvati valley region, still have grim memories of climate cruelty of cloudbursts that claimed the lives of many and the floods that devastated Parvati valley. The villagers have drawn the attention of the Government to instal an advanced warning system in vulnerable areas ahead of natural/ man-made disasters and not to face the earlier fate.

A team of 40 members including journalists, experts, CMS staff visited Parvati valley under Kullu district of Himachal Pradesh to conduct a survey and to find out the risks and vulnerability of the local community.

It can be mentioned that Parvati valley has been identified as a major risk spot for monsoon floods, cloudbursts, landslides and potential Glacial Lake Outburst Flood (GLOFs). The team held a brief interaction programme with the residents, former village Sarpanch, victims and officers of Climate Change Cell, Himachal Pradesh.

They all narrated the first cloudburst incident of Shat village in 1994 to the visiting team. During the cloudburst, 27 persons lost their lives and resulted in heavy flood in the Parvati river. In 2015 a landslide hit Manikaran Sahib Gurudwara, over the north bank of the Parvati river leaving 10 people dead and many injured.

The mountainous regions had been severely affected due to climatic events while the economically weaker section of the population are unaware of the severity of the region.

Instead of snowfall in high mountain, the locals have encountered yearly disasters including flash floods, rapid rise in temperature, windstorm, endemic diseases, heat waves particularly intermittent rainfall in the region. Among several Indo Himalaya

Region (IHR), Manipur is also equally facing the same climatic impact with scanty rainfall and shifting of rainfall pattern that has clearly indicated severity and vulnerability of climate change.

As compared to other North East States, Manipur and Himachal Pradesh (which comes under IHR) are witnessing changes in rainfall patterns. There has been gradual shift of agricultural practices, loss of indigenous plantation thereby causing economic losses in both regions. According to a report, the rise in mercury level in Parvati valley has forced apple plantation to be shifted to regions with higher altitudes. The local farmers also said that apple cultivation is no longer sustainable in the region and as a result they have diversified to other cash crops such as Capsicum, Pomegranate and Mushroom for their livelihood.

This correspondent also witnessed the effect of climate change in Kullu district while interacting with the residents of Parvati valley. The residents said that each year, extreme floods occur in mountain catchment causing economic losses as well as fatalities in the inhabited valleys downstream. The causes of the flood include long duration of monsoon rainfall, local cloudbursts, intense downpours, glacier lake outburst floods, landslides etc.

According to them, at least 66 floods have taken place since 1965. The flood assessment for Kullu district indicates variation in hazard levels for different catchment areas. Data of the flood season normally lasts from June to September, with peaks in flood activity in July and August. On the other hand, a four-day 'National Media Consultation on Climate Change reporting in the Himalayas' was organised by Centre for Media Studies while a trip to Himachal Pradesh was also organised to take stock of the ground situation. Experts and intellectuals spoke on climate change on contemporary phenomenal climatic events in the Himalayan region at length.



Manipur News

Climate change, cloudburst haunt Kullu folks no end

Link: <http://www.manipur.org/news/2019/09/26/climate-change-cloudburst-haunt-kullu-folks-no-end/>

People of Kullu district, living in Parvati valley region, still have grim memories of climate cruelty of cloudbursts that claimed the lives of many and the floods that devastated Parvati valley Source The Sangai Express Mungchan Zimik

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संपूर्ण दैनिक अखबार
आपका फैसला 

कुल्लू घाटी में जलवायु परिवर्तन पर कार्यशाला, फील्ड विजिट



भूँतर, (आपका फैसला)। विज्ञान व प्रौद्योगिकी विभाग भारत सरकार के सत्यावधान व सेंटर फॉर मीडिया स्टडी द्वारा जलवायु परिवर्तन को लेकर कुल्लू घाटी में दो दिवसीय कार्यशाला का आयोजन किया गया। इसमें पार्वती वैली के शाह, थर्मिक व पर्यटक नगरी मणिकर्ण के अलावा बंजार का फील्ड विजिट किया गया। कार्यशाला का उद्देश्य जलवायु परिवर्तन अनुकूल पर पत्रकारों को विशेषज्ञों और क्षेत्र की यात्रा द्वारा इंटरैक्टिव प्रस्तुतियों के साथ उन्मुख करना था। इस आयोजन में देश भर के विभिन्न राज्य से आए हुए पत्रकार, पर्यावरण विभाग के विशेषज्ञ व सेंटर फॉर मीडिया स्टडी की टीम सहित आपदा से प्रभावित लोगों के साथ किसान-आगवान भी उपस्थित

रहे। कार्यशाला का मुख्य उद्देश्य पर्यावरण परिवर्तन से हो रही आपदाओं के खयाल व कृषि में आए भारी बदलाव के खतरे में जनता को जागरूक करना है। विशेषज्ञों द्वारा बताई गई पर्यावरण परिवर्तन पर महत्वपूर्ण जानकारी को मीडिया के माध्यम से जनता तक पहुंचाने व उन्हें जागरूक करने के लिए विज्ञान व प्रौद्योगिकी मंत्रालय भारत सरकार द्वारा इस तरह के कार्यक्रम किए जाते हैं। कुल्लू घाटी में भी इसके लिए फील्ड विजिट किया गया, जिसमें सीएमएस की निदेशक अनु आनंद, पर्यावरण विभाग के सूची बंद ठाकुर डिप्टी को-ऑर्डिनेटर कलाहमेत सैल हिमाचल प्रदेश व देश भर से आए हुए पत्रकारों ने भाग लिया।

संपूर्ण दैनिक अखबार

आपका फैसला



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का जलवायु परिवर्तन का प्रभाव का अवलोकन।



बंजार : पॉलीहाउस में फल-सब्जियों एवं अन्य फसलों के उत्पादन बारे जानकारी लेते पर्यावरण विशेषज्ञ।

(भूपे)

जलवायु परिवर्तन को पर्यावरण विशेषज्ञों ने जाना

हिमालयन क्षेत्रों के राज्यों हिमाचल प्रदेश, जम्मू-कश्मीर, उत्तराखंड, सिक्किम, नागालैंड, अरुणाचल प्रदेश, असम, त्रिपुरा तथा मेघालय से आए लोगों ने लिया भाग

बंजार, 24 सितम्बर (ब्यूरो): भारत सरकार के विज्ञान एवं प्रौद्योगिकी विभाग के तत्वावधान में सेंटर फॉर मॉडिया स्टडीज द्वारा हिमालय क्षेत्र में जलवायु में आए परिवर्तन को लेकर कुल्लु घाटी में प्रभावित क्षेत्रों का दौरा किया गया।

जिसमें भारत के हिमालयन क्षेत्रों के राज्यों हिमाचल प्रदेश, जम्मू-कश्मीर, उत्तराखंड, सिक्किम, नागालैंड,

अरुणाचल प्रदेश, असम, त्रिपुरा तथा मेघालय से आए 40 पत्रकारों एवं जिला कुल्लु के पत्रकारों ने भाग लिया। कार्यक्रम के दौरान पार्वती वैली के शाट गांव जहां पर 1994 में बाढ़ल फटने की सबसे भयानक घटना घटित हुई थी, इसके स्वधर्मिकर्ष के गुरुद्वारे में जहां 2015 में चट्टान के गिरने से 8 लोगों की मौत हुई थी, का दौरा किया गया। इसके साथ ही जलवायु में आए परिवर्तन के कारण हिमालयन क्षेत्रों में फसलों पर क्या प्रभाव पड़ा है, इस इस विषय में विकास खंड बंजार के ममजा गांव के किसानों एवं बागवान से बात की गई। कार्यक्रम का मुख्य उद्देश्य हिमालय क्षेत्र में ग्लोबल वार्मिंग के कारण बढ़ते तापमान से फसलों पर क्या प्रभाव पड़ रहा है, इस विषय पर भी बंजार के किसानों एवं बागवानों से मंगलीर पंचायत के ममजा गांव के किसान

पदमदेव शर्मा से एवं अन्य किसानों से चर्चा की गई। किसान पदमदेव ने बताया कि लगभग 15 वर्ष पहले ममजा गांव में भी सेब की फसल होती थी लेकिन मौसम में आए बदलाव के कारण अब वहां पर सेब नहीं होते, जिसके स्थान पर वहां के लोगों ने अब अनार के बगीचे लगाए हैं व अच्छी फसल निकालकर अपनी आजीविका कमा रहे हैं।

इसके साथ ही पॉलीहाउस द्वारा फलों-सब्जियों एवं अन्य उत्पादों को कैसे बढ़ाया जा सकता है, इस पर भी बंजार में एक पॉलीहाउस का निरीक्षण किया गया। कार्यक्रम में सी.एम.एस. की निदेशक अनु आनंद, पर्यावरण विभाग के दुनी चंद ठाकुर, डिप्टी को-ऑर्डिनेटर क्लाइमेट हिमाचल प्रदेश के साथ भारत के हिमालयन क्षेत्रों से आए पत्रकार एवं जिला कुल्लु के पत्रकारों ने भाग लिया।



THE TIMES OF INDIA

Link:

http://timesofindia.indiatimes.com/articleshow/71453303.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Parvati Valley in Himachal's Kullu awaits Early Warning Sensors

Seema Sharma | TNN | Updated: Oct 5, 2019, 13:57 IST



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Parvati Valley

KULLU: Around 1,600 residents of Shat village of Kullu Tehsil in Parvati Valley of Himachal Pradesh are awaiting Early Warning Sensors (EWS) for the last four years. The environment department of Himachal Pradesh had sent a proposal for funding of Rs 50 crore for EWS installation in three climatically-vulnerable regions of Kullu district -

Parvati valley,  njjar valley

and Great Himalayan National Park (GHNP) - to the Centre in 2015. Shat village had shot into limelight when a cloudburst incident wreaked havoc, claiming 27 human lives and lots of commercial and residential structures way back on July 11, 1994.

The tell-tale signs of tragedy are still palpable around the center point of disaster-area around sub-tributary of Parvati river which flows through the village. The water level in it has risen 30 meter since then while the area around the banks of the water body has flattened with debris. "A number of small hotels, shops and houses situated on either sides of banks of the river were swept by the flooded river within a short span of just five minutes of torrential rain on that fateful day. Twenty seven people had died, bodies of many were recovered 12 km away at Bajora and Jiri villages," Kamal Chand, former sarpanch (village head) said.

Mohinder , another local had seen his uncle and two cousins getting washed away when he was standing under a rock on a hill top overlooking the river for shelter . “ Each affected family got Rs 75000 as compensatory amount over death of an adult and Rs 56000 of a child but no monetary compensation was ever given to any for displacement of land,” he complained.

He further explained that those living close to the river who survived have now moved upstream. This was the biggest disaster ever seen by the villagers. However a number of flood incidents of lesser magnitude have happened in the valley during Monsoon in the subsequent years. Local like Meghraj Singh also holds the man-made reasons such as number of hydro power projects operating in the area. “Rampant deforestation and mountain blasting to create tunnels for the hydro-power projects and indiscriminate river mining have exacerbated the impact of erratic rainfall for short duration pattern in past few years.

On August 18, 2015, seven people were killed and many injured after a massive landslide hit famous Manikaran gurudwara on Parvati river. A massive boulder smashed its seven stories and community kitchen. Karan Singh, sahayak prabhandhak (assistant administrator) said, “It is a historical place so we can not shift from here despite being vulnerable. However, we have begun plantation of Poplar and walnut saplings on the landslide area to contain the soil erosion and future possibility of occurrence of same event.”

A three-year pilot study has been concluded in Kullu to provide an integrated assessment of climate vulnerability , hazards and risk for climate adaptation planning under Indian Himalayas Climate Adaptation Programme (IHCAP) which was initiated by the Swiss Agency for Development and Cooperation (SDC) together with the Department of Science and Technology (DST), Government of India.

Most of the inhabited valleys in the Indian Himalayan Region (IHR) have high risk of floods. Since the mid-20th century , more 5000 casualties have been reported as a result of flood in HP. The aim of the research was to develop innovative and sustainable approaches for regional flood risk assessments and adaptation planning in Kullu district.

The experts are of the view that the situation is not likely to improve even in future due to developmental pressure, related land use changes with regard to urbanization, tourism and impacts of climate change and extreme events.

Mustafa Ali Khan, team leader of IHCAP said, “This is one of the first studies to be based on the globally accepted risk assessment framework as well as one of the most detailed study on permafrost done in the Indian Himalayan Region. Kullu was selected for the pilot study as it emerged as the hotspot for climate change impacts such as floods. Nearly 40% of all flood events over the time period between year 1950 to 2014 happened in Kullu. Around 66 floods took place in Beas, Parvati, Sainj and Tirthan rivers in Kullu district since 1965.”

He said that one of the key findings of the study was that the glacial lake outburst flood (GLOF) hazard will increase across all blocks. A notable GLOF hot spot will emerge in the Parvati valley. Banjar was identified as a hot spot of agricultural vulnerability, based on both quantitative assessment and farmers perceptions. Thirdly the forests near to habitations were found more vulnerable than the ones distant from the habitations due to the dependence of the communities on forests for their sustenance.

Under the study, flood risk for a total of 1958 existing infrastructures in Kullu district was analysed and accordingly categorization of zones in five classes was carried out. Overall 70 percent of all infrastructure was categorised at very high or high flood risk. "One of the key findings of the study was that the glacial lake outburst flood (GLOF) hazard will increase across all blocks. A notable GLOF hot spot will emerge in the Parvati valley. The study also identified that some areas, such as the upper Beas catchment apart from the Parvati valley which are likely to face a significant threat from multiple hazards such as monsoon-triggered flooding, glacial lake outbursts, landslides and earthquakes. This increases the potential for far reaching, cascading disasters to occur in downstream," Mustafa said adding that long term monitoring and EWS was recommended to be developed to mitigate future losses and fatalities and improve resilience of the population against future hydrological related disasters.

DC Thakur, deputy project coordinator in Department of Environment of Himachal Pradesh said that three adaptation proposals, emerging from the research, have been endorsed and submitted by the Himachal Pradesh government to the Ministry of Environment, Forest and Climate Change for funds. These projects are flood risk in Parvati valley, climate resilient agri-horticulture and eco system based adaptation in GHNP.

"Considering the climatic vulnerability of the region, it is imperative to implement adaptation strategies to improve the resilience of the population against future hydrological related disasters. Installation of EWS based on the acquired knowledge during IHCAP research may help to mitigate future losses and fatalities in Kullu district in the short term. This can be complimented by a long-term monitoring system of hydro-meteorological conditions through 'flow and rain gauge stations and data management centres," he said.

Thakur said that the officials of the department have been responding to the various queries sent by centre for funding for EWS under the National Adaptation Fund for Climate Change for last four years, but barring Banjar valley, EWS for Paravati valley and GHNP are yet to be sanctioned.

"Considering the climatic vulnerability of the region, it is imperative to implement adaptation strategies to improve the resilience of the population against future hydrological related disasters. Installation of EWS based on the acquired knowledge during IHCAP research may help to mitigate future losses and fatalities in Kullu district in the short term. This can be complimented by a long-term monitoring system of hydro-meteorological conditions through 'flow and rain gauge stations and data management centres," Thakur said.

Link: <https://timesofindia.indiatimes.com/city/shimla/farmers-of-banjar-most-vulnerable-region-in-hp-adapted-to-climate-change/articleshow/71480655.cms>

Farmers of Banjar, most vulnerable region in HP, adapted to climate change

Seema Sharma | TNN | Updated: Oct 7, 2019, 18:42 IST



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KULLU: Padam Dev, resident of Mangan village in Banjar Tehsil of Kullu district, owns a pomegranate orchard on six bigha land. He earns roughly Rs 15 lakh per annum from it. Padam has been among few who switched over to pomegranate from apple cultivation alongside cash crops of seasonal vegetables some 20 years ago and

managed good earning. His area once was known for good quality apple production.

According to HS Bhatia, regional director of Regional Horticulture Research and Training Centre, to the Western Indian Himalayan Region, states of HP, Jammu & Kashmir and Uttarakhand account for the largest share, 99 percent, of apple

production in the country. With climate change adversely impacting the production of important agriculture and horticulture crops in Indian Himalayan Region, the supplies of apple yield to the region and to the low land has suffered. Increase in temperature and decrease in winter rainfall and snowfall has reduced the number of chilling hours, leading to a decline in apple production in the region. Despite being predominant fruit crop in Himachal Pradesh landscape, some regions like Kullu reported declined production in last three decades.

DC Thakur, project coordinator of Environment department of Himachal Pradesh said, " Banjar water is scarce, topography is difficult. Land pattern is fragmented and connectivity is also low. It is difficult to continue with apple cultivation in the region because increase in temperature leads to increased need for water which is insufficient."

Many farmers like resident Motilal has been wise to shift to cash crop and pomegranate cultivation. Motilal, an ex-horticulture employee now grows vegetables in his polyhouse. "I usually grow around 40 quintal capsicum, seedless cucumber and tomato and use mediums of drip irrigation and fogging to water my produce," he said adding that polyhouse may be little costly but it is the way to avert impact of climate change on horticulture and agriculture and earn good return in long run.

According to another study conducted by the College of Basic Sciences, Palampur, about 63 percent of the farmers have switched to alternate crops such as pears, kiwis, pomegranate, cabbage etc along with apple crop. It says, "The vulnerability has exacerbated due to climatic extreme events and unavailability of suitable crop protection method with the small and marginal farmers. Availability of source for water supply to orchards is another major problem in the area. Due to heightened temperature and decreased rainfall, soil moisture has reduced across the region. Unavailability of climate controlled storage units in the area is future restricting the farmers to draw additional benefits.

According to studies, the rise in temperature in the North-West Himalayan region has been about 1.6 degree C in the last century. There has also been decrease in rainfall and snowfall. The winter temperature and precipitation in the form of snow are important and sensitive factors for induction of dormancy, bud break and proper flowering in the apples. The fruit generally requires 1200-1500 hours of chilling depending on the type of cultivar. Chilling hours of less than 1000 lead to poor fruit formation.

A study conducted by IHCAP (Indian Himalayas Climate Adaptation Program) in different blocks of Kullu on the vulnerability index for the horticulture classified Banjar, a small valley in Kullu district, as the most vulnerable. Farmers in the area mostly grew the royal delicious variety of apple, which requires anywhere between 800-1200 chilling hours. However increase in temperature throughout the year has lowered the available chilling hours in the region and has impacted the productivity of the varieties that require chilling hours.

"There are some 26 villages like Targali, Ratba, Kandheri, Sedha under Manglore Panchayat in Banjar tehsil who have taken to pomegranate cultivation. Thanks to the introduction of low chilling variety of apple by experts of Krishi Vigyan Kendra in Bajaura, Kullu that we have begun the cultivation of this new variety of apple also. The apple fetch us on average Rs 80-90/KG and Pomegranate Rs 70-80 KG," he said.

Godavari Devi, 82 said that apple grown in their region tasted much better 30 years ago when the area would have its rich cultivation. "Those apples are now grown in highland. Climate which has changed gradually seem responsible for it. We used to have heavy snow fall which no more happens now in my area," she said.

As per key assessment findings of IHCAP, local climate assessment (1981 – 2010) demonstrated increase in mean annual air temperatures across all elevation levels. Increasing trend for spring temperatures of about 1°C over 30 years, stronger at higher elevations, was registered. The increase of spring temperature resulting to upward shift of the snowline with related impacts on precipitation, snow melt, glacier mass balance and lower chilling hours.

Fragmentation of glaciers observed. A total of 236 glaciers were mapped in 2002 (total area of 529 km²), whereas the same glaciers when mapped in 2006 have fragmented to become 242 individual glacier entities (total area of 489 km²). Assessment from 2002 and 2013 reveals an area loss of about 9 km² (~1.5%) and an increase in mean elevation of about 30 m. As a result, low chilling hours impacted yield and quality of apple production at low altitude, led to frequent pest incidence.

IHCAP in its study has also recommended to move to cultivation of pomegranate and apple varieties that require low chilling hours. For instance spur variety root stock apple plant, which IHCAP is targeting at, needs 600-800 hours of chilling.

It also recommended anti-hail nets to reduce crops damage and poly-lined tanks for micro irrigation technique in high density apple orchards and climate –controlled storage units and grading lines to enable farmers to sell apple even in off season.

The research carried out under IHCAP in Kullu valley highlighted the need for having a holistic approach at the landscape level considering both upland and low land in understand climate risks and vulnerabilities for adaptation planning and implementation.

Link: <http://epaper.mailtoday.in/2362937/Mail-Today/Mail-Today-issue-October-8-2019#page/13/1>

Mail Today, New Delhi, Tuesday, October 8, 2019

SPOTLIGHT 13



QUANTUM LEAP

DINESH C SHARMA

SEVERAL parts of the country have reported heavy rainfall in the last week of September, with floods seen in many urban areas in different states. All this when the monsoon, in normal course, is supposed to be in retreating mode. The dates of monsoon onset and withdrawal are one of the various points in the meteorological calendar that are changing.

That's what we witnessed this Monsoon Season. The pattern of rainfall was also topsy-turvy with long patches of dry weather and several instances of short duration, intense rainfall — the kind that can cause flooding. Such changes, according to experts, will be the new normal and are definite signs of climate change.

Climate change phenomenon is not something esoteric or only witnessed in high glacial areas or coastal belts, but is unfolding every day, everywhere — be it mountains, plains, coastal areas or cities. The question is: Are we ready? Can we adapt? Or do we wait until all countries in the world take steps to mitigate effects of climate change?

It continued to rain in India during Monsoon retrieval

The action seems to be slow, both in terms of recognising the problem and action on the ground. Almost all states now have climate action plans and climate change cells, but there are few projects. Take for instance Kullu district in Himachal Pradesh, which has been identified as one of the most vulnerable in the Indian Himalayan region. Floods often occur due to long-duration monsoon rainfall, cloudburst, due to localised and intense downpours, sudden outburst of glacier lakes, and floods due to outburst of lakes formed by landslides.

The occurrence of floods could increase due to climate change and there may be more losses as various valleys are inhabited and infrastructure has been built.

To reduce flood and glacial outburst hazard risks, Kullu needs early

Now is the time for climate action



Tirthan Valley is one of the catchment areas that needs early warning systems to prevent calamities in Kullu, Himachal Pradesh. Meanwhile, the Department of Science and Technology is initiating research in urban climate on priority basis.

warning system that works at the catchment level in various valleys like Parvati and Tirthan. Along with reducing hazard risk, action is needed to protect livelihoods of people. Lowland areas in Kullu that used to grow apple are no more suitable for it as the minimum

number of chilling hours needed are not available. So, farmers in some valleys are taking to other horticultural and vegetable crops. Multiple actions are needed to address climate change.

The Department of Science and Technology is initiating research in urban

climate on priority basis. In Chennai, a flood prediction system has been tested and found effective. Other cities too will need similar system very soon. Climate strikes being held by children are a reminder to policy makers and governments that they need to act, and act urgently.

The writer is a science journalist.

IF DOGS COULD COUNT

DOGS are human-friendly and have many qualities that distinguish them from other animals. But are they intelligent enough to count? To test this, researchers at the Indian Institute of Science Education and Research



Indian states are slow to act on hedging against climate change

Himachal: MoEF sits on proposal to install flood alert



Kalyan Ray, DHNS, Himachal Pradesh , SEP 30 2019, 09:39AM IST | UPDATED: SEP 30 2019, 09:39AM IST

Link: <https://www.deccanherald.com/national/himachal-moef-sits-on-proposal-to-install-flood-alert-765097.html>



A typical hilly rivulet near Shat village in Kullu district of Himachal Pradesh. The village witnessed a devastating flash flood in 1994 when the same rivulet turned deadly for 27 people. (DH photo)

For nearly four years, the Union Environment Ministry has sat on a proposal to install a flood alert system in Himachal Pradesh, whose vulnerability from such natural disasters is increasing each year due to climate change.

The warning system was to be set up in this hamlet in Parvati valley that witnessed a deadly flash flood in 1994, killing 27 villagers.

"This is to be the first flood alert system in Himachal. Depending on its performance, we planned to set up more such systems in other parts of the state. We have even identified 6-8 more sites," D C Thakur, an official from Himachal Pradesh environment department told a team of visiting journalists.

Since the middle of the 20th century, more than 5,000 flood deaths were recorded in the Himalayan state. There were 66 floods in Kullu district alone between 1965 and 2017.

The situation is unlikely to improve and more such events could be expected over the next decades due to urbanisation, tourism and impacts of climate change, according to a report prepared by the Indian Himalayas Climate Adaptation Programme (IHCAP).

The UN Inter-governmental Panel on Climate Change (IPCC) in one of its recent report too shared similar thoughts, "Increasing flash floods attributed to climate change have severely damaged terraces, orchards, roads, and stream embankments in the Himalayas."

In 2015, the state government submitted the Rs 20 crore proposal on reducing the flood risk in Parvati valley to the Union Environment Ministry under the National Adaptation Fund for Climate Change. "It is still pending with the central government," Thakur said.

While the plan was to reduce the risks from glacier lake outburst floods, the lessons gathered from the project would have been useful to tackle other types of floods caused by cloudburst or heavy intensity monsoon rainfall.

For instance, in case of a flash flood, warning sensors could be linked to a high-pitched siren alerting the locals who would get only a minute or two to run for their lives. "On July 11, 1994, the flood took just five minutes to destroy our village killing 27 people and our animals," said Kamal Chand, a former Sarpanch of the Shat village, who witnessed the deluge.

A warning system is also necessary to 1,958 infrastructure in Kullu valley facing the flood risk. Overall 70% of all infrastructure has been categorised as very high or high flood risk.

"Considering the high number of elements at flood risk, it is imperative to improve the resilience of the population against future hydrological-related disasters. Installation of early warning systems may help mitigate future losses and fatalities in Kullu district," says the IHCAP report, prepared by the Swiss Agency for Development and Cooperation (SDC).