## 23-24th March, 2023

10th Meet of the Mountain States (MoMS) Conference: Special highlights by Divecha Centre for Climate Change.



**10th MoMS and Session Themes:** The Integrated Mountain Initiative (IMI), the Divecha Center from Climate Change and the Ministry of Environment Forest and Climate Change organized the IMI's 10th Meet of the Mountain States (MoMS), in Delhi, Ganga Auditorium, Ministry of Environment and Forest and Climate Change (MoEFCC) Building, on March 23-24, 2023. The event brought together stakeholders, Legislators', scientists, delegates from all the mountain states of India, delegates from Divecha Centre for Climate Change, officials from Govt. of India and members from various NGOs and institutions. The sessions had discourses and talks by legislators', farmers, scientists, and agri-entrepreneurs to discuss "Plastic Waste Management-Extended Producer Responsibility implementation in the Indian Himalayan Region" and "Agroecology in Indian Himalayas 'Resurgence with Millets', Planetary issues on Glaciers and Climate Change. The goal of the conference was to make stakeholders, the policy makers and the ministers familiar with new knowledge and research, to innovate on the ways of handling the imperatives thrust by society for policy implementation.

**Opening Address:** The President of Integrated Mountain Initiative (IMI), Mr P.D Rai and Chair Divecha Centre for Climate Change, Prof S. K Satheesh addressed the inaugural and highlighted the importance of sustaining the mountains and the need for science-policy and research to help solve mountain issues related to plastic pollution, climate change and on the need to reintroduce millets to the mainstream diets through nature sensitive agriculture and nature-based solutions.

Address by Legislators: Shri Bhupendra Yadav acknowledged the need for sustainable tourism in the IHR and stressed on plastic pollution in the Himalaya as well as extended producer responsibility implementation in the IHR. The need for legislative action to end plastic pollution in the mountains was acknowledged by all the Legislators who shared their childhood connections with millets and the need to revive and promote it for the well-being of people and the planet, and that the "UN Year of the Millets 2023" provided a great opportunity to revive a traditional food crop.



Picture 1: Lighting of the lamp at the inaugural by Hon'ble Ministers for State, MoEFCC, Shri Ashiwni K Choubey; the Hon'ble Minister for State, Tourism, Shri Ajay Bhatt and Hon'ble Tashi Gyalson, Chief Executive Councilo (CEC)- Ladakh Autonomous Hill Development Council along with the organisers Prof S. K Satheesh, Chair Divecha Centre and Director Future Earth South Asia Hub and President IMI, Ganga Auditorium, MoEFCC, Delhi, Mr P. D Rai, 23 March 2023.



nna Singh Chauhan, MLA-Uttarakhand; Dr. Rajkumar Ranjan, Minister of State for External Affairs and Education and Sonam Tshering Venchungpa, MLA- Sikkim). Prof. Satheesh, Chair, after highlighting the Glacier, Climate Science, Water-Energy-Food nexus and science-policy program of Future Earth South Asia Hub, emphasized on the need to contain the greenhouse gases to less than 400 ppm and cautioned that a higher consequence of one degree rise in global warming would be felt in the mountain regions of India and the world.



Picture 4: Audience engagement, 10<sup>th</sup> Meet of the Mountain States (MoMS), Delhi, Ganga Auditorium, Ministry of Environment and Forest and Climate Change (MoEFCC) Building, on March 23-24, 2023.

Announcing establishment of Future Earth Global Secretariat Hub – South Asia at DCCC and Release of Future Earth Coffee Table Booklet: Dr Smriti Basnett, Deputy Director, Future Earth South Asia Global hub introduced the Future Earth Platform to the audience and presented its global network of scientists, researchers and innovators supported by a well distributed network of nine Secretariat Global Hubs that support 27 Global Research Networks and functions to provide the knowledge needed to support transformation towards sustainability. The Future Earth 10 New Insights in Climate Science (10NICS) Report released by Future Earth for Policy makers at COP 22 was also presented and the 10 NICS Report was distributed to legislators and the audience. The Directors' of South Asia Hub officially announced the transition of the South Asia Regional Office and announced the establishment of the South Asia Global Hub at Divecha Centre for Climate Change that would further help build and mobilize network and link policy, business and civil leaders with researchers to address global concerns and advocate the work of Future Earth pertaining to SDG, Sustainability and Climate Change in South Asia and globally.



Picture 5: Dr Basnett officially establishment of the South Asia Global Hub being set up at the Divecha Centre for Climate Change. A coffee table book titled "Future Earth Global Secretariat Hub South Asia (2022) & Major Activities of Future Earth South Asia Regional Office (2016 - 2022)", was presented by Prof S. K Satheesh, Chair DCCC and Director, South Asia Hub and released in the presence of Hon'ble Minister MOEFCC, Bhupendra Yadav (virtual-screen) by Hon'ble Dr. Rajkumar Ranjan, Minister of State for External Affairs and Education, by Mr. P. D Rai, President IMI; by Hon'ble Ram Muivah, MLA-Ukhrul Manipur; by Hon'ble Ninong Ering, M.P- Arunachal Pradesh; and by Hon'ble Sonam Tshering Venchungpa, MLA- Sikkim).



Figure 6: Dr Smriti Basnett presented the past activities of Future Earth and presented the Future Earth Coffee Table Booklet for release (left picture) and shared 10 New Insights in Climate Science (10NICS) Report(right picture) released by Future Earth for Policy makers at COP 22 to legislators and the audience.

Session Highlights: "Plastic Waste Management- Extended Producer Responsibility implementation in the IHR" and "Agroecology in Indian Himalayas 'Resurgence with Millets'



Picture 7: Salient Highlights of the session on Plastic Waste Management- Extended Producer Responsibility implementation in the IHR highlighted the challenges mentioned: "Mountains have higher costs for managing waste due to remoteness,

geography, land availability; Infrastructure limited and non-implementation of segregation at source makes it challenging; Linkage to recycling and processing is poor - only high value plastics collected"; with a way forward message on: "A narrative shift from end of the pipeline solutions to systemic circular systems; A need for acknowledgement that mountains need special focus for EPR; and a Task force to revisit EPR framework from a mountain lens that include targets specific for mountains, investments in infrastructure, viable rates, rural inclusiveness and focus on awareness."



Picture 8: Glimpses from the Meet of the Mountains showing audience taking oath to include millets in their diets. The session on "Agroecology in Indian Himalayas 'Resurgence with Millets' highlighted the challenges as- "Replacement of traditional millet culture through promotion of rice and wheat; Marginalization of millets by branding as poor man's crop, coarse, kala anaj, bada anaj; Challenges of post-harvest techniques, processing and access to markets; Limited popularity"; with a Way Forward message to: "Reclaim the lost agro-ecological space of millets in the mountains through concerted efforts as well as building on traditional knowledge and practice; Highlighting diversity, nutritional benefits, as well as climate resilience benefits of millets; Access, propagation and availability of post-harvest technology for mountains; Popularize local names and refrain from use of the word millets, which is reductive. GOI has renamed it as "Sri Anna"; Increase millet consumption -culinary innovations, collaboration with chef;s and Documenting / Sharing of best practices including practices like 12 anaaj ."

## Special Session: Keynote talk and Co-notes by invited speakers from Divecha Centre for Climate Change:

Invited speakers from Divecha Centre for Climate Change presented the research on glaciers, one health and millets and included Keynote talk by Professor Anil Kulkarni on the 'Challenges to mountain communities under changing climate'; and co-notes were presented by Dr H Paramesh and emphasized on the need to engage with local communities and healthcare providers in the development of sustainable healthcare systems; and Dr Rohini Mattoo talked about the importance of agroecology in Indian Himalayas with an emphasis on the gluten free and calcium rich property of millets, its long shelf life of 5 years, and an adaptive food crop that can sustain on varying soil including high-altitude climate. Dr Smriti Basnett on behalf of DCCC expressed the need for further collaboration with continued efforts between IMI and DCCC through a three-year road map, to build on the Science-Solution-Policy dialogues and plan activities that will look into science-policy and involve researchers and policy analyst from DCCC to create solution pathways and recommend policies for the Indian Himalayan Region on the topics discussed at various annual Sustainable Development Mountain Summits (SMDS).



Picture 9: A Special Session on "Reflection, Opportunities for Innovation and Collaboration between DCCC and IMI" with IMI was moderated by Shri Sushil Ramola, former President IMI and chaired by Mr P. D Rai, President IMI. Dr Kulkarni opened the session and acknowledged the organizers in bringing together scientists and policy makers to bridge the gap between science-solution and policy implementation with a concern for mountain societies that could face challenges due to early melting of seasonal snow. Other talks and discussions included co-note presentation by Dr H Paramesh on "One Health-A global perspective" and Dr Rohini Mattoo highlighted on the importance of millets as a climate resilient adaptive food crop. Dr Smriti proposed a three-year roadmap to foster and take forward the MoU signed between IMI and IISc (The MoU was signed on 9th

Sept 2021). Through this MoU DCCC would continue to engage with IMII in the annual Sustainable Mountain Development Summits (SMDS) and the Meet of the Mountain States (MOMs) that brings together stakeholders, scientists, society and govt. officials.

## **Group Pictures:**



Pictures: Group pictures from the 10<sup>th</sup> Meet of the Mountain State Conference held at, Delhi, March 23-24, 2023 at MOEFCC Ganga Building. The participants includes Speakers, Members of Integrated Mountain Initiative (IMI) Stakeholders, Legislators from the mountain states of India including invited speakers, researchers, co-organisers and administrators from Divecha Centre for Climate Change (DCCC) including: Young Career Researchers: Joshita S, Suman B. M; Rae Anne, Jency Maria, Harshita Rathore, Adheesh Rao; Invited Speakers: Dr Anil V Kulkarni, Dr H. Paramesh, Dr Rohini Mattoo; Office support from Mamatha G; along with convenor and co-organisers of the event: Dr Smriti Basnett and Chair DCCC, Prof S. K Satheesh.