# ORIENTATION PROGRAM FOR FUTURE EARTH NATIONAL COMMITTEE, INDIA

# **MEETING REPORT**

#### **ORGANISED BY:**

FUTURE EARTH SOUTH ASIA AND DIVECHA CENTRE FOR CLIMATE CHANGE, INDIAN INSTITUTE OF SCIENCE, BENGALURU









# Contents

Introduction	2
Items on the Meeting Agenda	J
Future Earth Vision, Structure and Programs – Global Perspective	3
National Committee Programs and Structures in Asia – An Overview	3
Regional Structure and Activities at Future Earth South Asia, DCCC, IISc	4
Discussion, Questions and Remarks from National Committee and Ex-Officio Members	5
Concluding Remarks by the Chair	8



#### Introduction

The National Committee of Future Earth, India, met online for an Orientation Program on 25 November, 2020. The meeting was attended by Dr. M. N. Rajeevan, chair of the National Committee, and 7 National Committee members. The event was a one-and-a-half-hour long session, and included presentations regarding Future Earth, its regional activities in Asia and South Asia, followed by a brief round of introductions and discussions by the National Committee members on the way forward.

#### **Attendees**

- Dr. M. N. Rajeevan, Chair, Future Earth National Committee, India, and Secretary, Ministry of Earth Sciences, Government of India
- Dr. Aditi Mukherji, Principal Researchers, International Water Management Institute
- Dr. Ravi S. Nanjundiah, Director, Indian Institute of Tropical Meteorology
- Dr. S. Suresh Babu, Head, ATRF, Space Physics Lab, VSSC, Indian Space Research Organization
- Dr. Sandeep Tambe, Professor, Indian Institute of Forest Management
- Dr. Sunderrajan Krishnan, Executive Director, Indian Natural Resource Economics and Management Foundation
- Dr. T. R. Shankar Raman, Scientist, Nature Conservation Foundation
- Dr. Vandana Prasad, Director, Birbal Sahni Institute of Paleosciences
- Prof. J. Srinivasan, Distinguished Scientist and Former Chair, Divecha Centre for Climate Change, Indian Institute of Science
- Dr. Veera Mitzner, Network Lead, Future Earth Global Hub, USA
- Dr. Ria Lambino, Science Officer, Future Earth Asia Regional Centre, Japan
- Dr. Smriti Basnett, Co-Director, Future Earth South Asia
- Ms Anupama Nair, Program Coordinator, Future Earth South Asia
- Mrs Sushma Bharadwaj, Project Officer, Future Earth South Asia



#### Items on the Meeting Agenda

- ❖ Introduction of the Chair, all National Committee members and invited guests, by Anupama Nair
- ❖ Future Earth Vision, Structure and Programs Global Perspective, by Dr. Veera Mitzner
- National Committee Programs and Structures in Asia An Overview, by Dr. Ria Lambino
- \* Regional Structure and Activities at Future Earth South Asia, DCCC, IISc, by Dr. Smriti Basnett
- Questions, Discussion and Remarks from National Committee and Ex-Officio members
- Wrap Up and Follow up Actions, by Dr. Smriti Basnett

## Future Earth Vision, Structure and Programs – Global Perspective

Dr. Veera Mitzner explained the vision, objectives and working of the organizational structure. Future Earth is in process of opening opportunities for more countries to join its Secretariat. She introduced all the international organizations that have partnered with Future Earth and have representative in its global governing council. She also highlighted the integral role played by Future Earth summit and internal task force, Future Earth Secretariat and governing council in addressing the key issues.

She detailed the Mission, Function and benefits of Future Earth National committees, and announced the roll out of membership portal that will have specific functions and services for the National committees to provide easy access to Future Earth Global programs and opportunities to participate in events. She mentioned the transition and change in organization structure of Future Earth, and also announced that the Sustainability Research Innovation Congress, in collaboration with Belmont Forum, plan to hold an annual Sustainability Innovation Research conference every year. The first one is currently scheduled to be held in June 2021.

## National Committee Programs and Structures in Asia – An Overview

Dr. Ria Lambino went over the regional activities that the Future Earth Asia Regional Centre is undertaking. The Asia Regional Centre has 8 National Committees in different parts of Asia. It hosts regional research activities (MAIRS, HI-ASAP and SIMSEA) and is currently transitioning from Regional Advisory Committee to forming Regional Committee. She explained that the Future Earth Asia Regional Centre is focused on several work streams: Enabling research, promoting research agenda within the region, facilitating networking, collaboration of committees to work together and build programs and projects together, and involve in capacity building program for early career researchers.

Dr. Lambino also explained the working of 3 National Committees in the Asia region (Japan, Taipei and Philippines) to show diversity in each one of them:

National Committee, Japan: It is composed of 35 member organizations (19 universities, 9 research organizations and 7 stakeholder organizations).



- National Committee, Taipei: Its members are mostly scientists involved in various global research programs (24 scientists, 1 NGO, 1 Industry and 3 Government Agencies). They align with Future Earth thematic structures specifically on the knowledge action network (KAN) structure with working groups for different subjects (themes). They actively participate in a large number of activities and initiatives hosted by Future Earth.
- Future Earth, Philippines: It does not have a National Committee yet, but is formed as a platform for knowledge to action for sustainability. Over the past year, they have tried to develop a research agenda and various programs related to SDGs. They have identified clusters or themes that they want to work on in alignment with the SDGs.

She also briefly explained a few initiatives that the Asia Regional Centre is involved in: 10 New Insights in Climate Science; Our Future on Earth report; Sustainability in Digital Age; Sleeping Financial Giants; and Carbon law accelerator. She added that the Centre focuses on science-based pathways in sustainability as an integrated approach to SDGs, from local to global scale.

# Regional Structure and Activities at Future Earth South Asia, Divecha Centre for Climate Change, Indian Institute of Science

Dr. Smriti Basnett gave a brief about the activities carried out at Future Earth South Asia, hosted by Divecha Centre for Climate Change (DCCC), IISc.

She explained that the South Asia Governing Council comprises of members from 6 countries so far, and its domain includes SAARC, Myanmar and 2 Island nations in Indian Ocean (Mauritius and Maldives). Its area of focus has been finalised as 4 themes: Water, Food, Clean Air & Energy, and Health. The chair of Governing Council South Asia is Dr. K. Kasturirangan, and the Council is composed of 20 Members. The Chair of the Future Earth National Committee, Dr. M. N. Rajeevan, is also one of the members of Governing Council South Asia. Dr. Basnett added that there are 2 global research programs: Water Future program and MAIRS program.

Dr. Basnett mentioned that Future Earth South Asia currently has 32 researchers from DCCC and outside currently working on a working document, as part of its regional program. This program has a 5-year timeline. A review work is in progress to find out the issues and challenges faced by the countries in its domain. A small survey was carried out amongst our Governing Council members from other countries to come up with a list of priority areas that Future Earth South Asia would like to focus on, which will be shared amongst National Committee members. Dr. Basnett very briefly mentioned the highlights of the 2nd Governing Council meeting as well.



# **Discussion, Questions and Remarks** from National Committee and Ex-Officio Members

#### Dr. M. N. Rajeevan, Chair, Future Earth National Committee, India

Dr. M. N. Rajeevan appreciated the Future Earth team for organizing the meeting with National Committee members and other Future Earth representatives. He would like to see National Committee members from different fields and expertise, and expressed his confidence that the National Committee will do well. He said he would discuss with Dr. K. Krishnamoorthy (former chair) about the status of progress of National Committee and the move forward. He agreed with the need for a workshop on global sustainability, and to have a detailed discussion on the work plan for National Committee going forward. A challenge he foresees for the National Committee is how to link with different communities, ministries and academic institutions working on research and development for sustainability. Different ministries in the Indian government are responsible for implementation of programs for SDGs, and he emphasized on the importance to have good links with all science ministries. He also expressed his concern about the lack of academic research representation in the National Committee.

#### Dr. Aditi Mukherji, Principal Researcher, International Water Management Institute

Dr. Aditi Mukherji mentioned her interactions with Future Earth Knowledge to Action Network hosted by the Paris hub. She expressed her interest in the South Asia Regional Program as it maps very well with the work she is involved in International Water Management Institute. She briefly explained her work on solar irrigation project, and she wanted to know if this is a good platform to bring together a journal. She explained her involvement with the IPCC in leading the water chapter of the next assessment report, and acknowledged Future Earth and IPCC interactions. She also expressed her willingness to host a meeting or workshop in India, especially around (water-energy-food) nexus issues.

#### Dr. Vandana Prasad, Director, Birbal Sahni Institute of Paleosciences

Dr. Vandana Prasad briefly explained her area of work in climate change modelling, evolutionary processes in climate change, and future environmental projections. The Birbal Sahni Institute of Paleosciences has 57 scientists working on different aspects of evolution and climate change. She would be highly interested in hosting workshops that focus on monsoonal fluctuation. Recently, her organization has begun studies on wetlands and shifting of species due to climate change and human factors, as well as on agricultural yields and the effects of climate change. She would like to stay connected and informed to explore avenues to connect scientists through this platform.

#### Dr. T. R. Shankar Raman, Scientist, Nature Conservation Foundation

Dr. Shankar explained his profile as a wildlife scientist at the Nature Conservation Foundation. He has worked mainly in tropical forests, particularly the Western Ghats, with his areas of focus being forest fragmentation, forest alteration and primarily looking at forest birds. Recently, his interests have shifted to tropical forest dynamics and forest restoration programs in the Western Ghats. He added that he is a writer and would like



his work to reach the larger community. He would also like to learn more about the committee to participate and promote concrete ideas.

#### Dr. Ravi S. Nanjundiah, Director, Indian Institute of Tropical Meteorology

Dr. Nanjundiah explained his work in the Indian Institute of Tropical Meteorology, which looks at all areas of weather and climate, especially monsoon and climate variability. They have their own centre for climate change for the Indian region, and also contributed to the most recent IPCC Assessment Report. They are also working on Air Quality and Air quality forecast. He added that they are a part of the Belmont Forum as well. He expressed his and IITM's happiness to interact with Future Earth and work towards providing support to any sustainability programs and discussions between Governing Council members and stakeholders to exchange data, knowledge and expertise.

#### Dr. Sandeep Tambe, Professor, Indian Institute of Forest Management

Dr. Tambe mentioned his work in the Indian Forest Service, having had the opportunity to interact with the government sector, civil society and academics through his work. He would like to explore science policy and practice to address some of the issues the country is facing in terms of economic growth, ending poverty and hunger, and preserving natural capital. He highlighted the lack of interaction between academics, policy makers and practitioners. He would like to bring stakeholders together on a single platform and bridge gaps between knowledge and action. He would also like to explore opportunities to use this platform to address these issues.

#### Dr. S. Suresh Babu, Head, ATRF, Space Physics Lab, Vikram Sarabhai Space Centre, ISRO

Dr. Suresh Babu explained his work in ATRF, ISRO, on climate and atmospheric sciences, where several projects related to climate science and atmospheric science using space-based data are carried out. His main areas of interests are in atmospheric aerosols and climate change. He would like to take this as an opportunity to work with scientists from other disciplines, and assured that National Committee would be able to formulate interdisciplinary programs to connect different scientific themes. He urged for a need to connect with various resources to convert research into actionable programs for sustainability and development.

# Dr. Sunderrajan Krishnan, Executive Director, Indian Natural Resource Economics and Management Foundation

Dr. Sunderrajan Krishnan explained his work at the INREM Foundation on sustainability issues related to freshwater, especially on the contamination of fresh water resources and its effects on public health. He strongly believes in the connection between health and environmental issues. He expressed his interest in connecting communities with government departments, and would like to put forth schemes where the Future Earth program can connect with local stakeholders and reach the ground. Another initiative he brought to attention was the water quality network, a part of INREM that focuses on water quality issues in India. Its emphasis is on bringing individuals, activists, and change makers to network and bring about change built around science-based evidence. He looks forward to working together with Future Earth.



# Prof. J. Srinivasan, Distinguished Scientist and Former Chairperson, Divecha Centre for Climate Change, Indian Institute of Science

Prof. J. Srinivasan explained his initiatives as the director of MAIRS, and two workshops conducted (on climate modelling with IIT-M Pune and on agriculture). He highlighted the lack of interaction with environmental activists, pointing out that researchers and academics do not have sufficient outreach programs to reach activists. He suggested that National Committee interact with important environmental activists and explore options to take forward knowledge generated and reach the ground. He suggested making a list of environmental activists and environmental organizations in the country as a starting point.

#### Questions to Dr. Veera Mitzner and Dr. Ria Lambino

With regards to National Committees from various countries having their own initiatives and priority areas, Dr. Shankar asked where they could get to know what the current global research topics being handled by these different groups are, and whether there is a way to participate in these if interested.

Dr. Veera Mitzner responded by saying that they have regular global meetings for National Committees to which the chairs of National Committees are invited. The chairs are free to invite other members. These meetings are great places to learn what each group is doing. Future Earth's main website also provides information about each National Committee, and they are trying to find ways to share information in a more centralized way. Dr. Smriti Basnett added that there is a global portal through which all subscribers can be informed of all events.

Dr. Sandeep Tambe noted that the first challenge for the National Committee will be to figure out how to broaden and engage with the larger community, the whole family of academics and activists, who are already doing lot of work on sustainability in the country. He asked for inputs about good engagements or networking or communication strategies that National Committees have adopted to connect with the larger society in other countries, based on their experience.

Dr. Ria Lambino answered that it would depend on the country in question. She noted that in Asia, the National Committees organize various symposiums, and suggested that they could organize symposiums or workshops on particular topics. She gave the example of Japan, where the National Committee established a Research, Knowledge and Action agenda, where they gathered researchers, practitioners and academics to identify the main things they wanted to address. She also suggested participating in conferences in order to network and get to know different people in their areas of interest, adding that the Science Council in India could be a good starting point.

Dr. Veera Mitzner added that a few National Committees have used local partnerships and organized events, and that some National Committees play more of an advisory role to national funding agencies for sustainability issues. She also mentioned an online portal, which is currently a work in progress, where one can log in and explore many activities. The hope is that all National Committees can build an individual membership there, so anyone can join to become a member of Future Earth. She also suggested that



National Committees can create a circle where they can bring together the participants from their country or region.

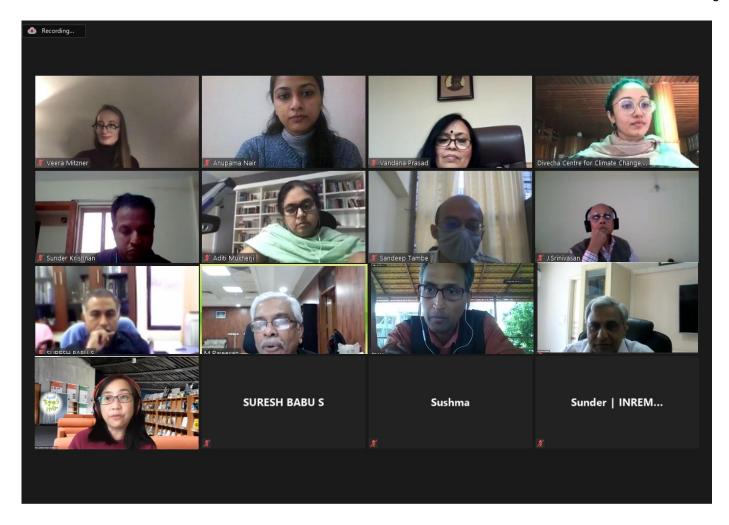
Dr. Smriti Basnett also added to their responses by emphasising on the different levels that National Committees can work; some work with the national science academies, some are independent, and there are two countries that directly fund Future Earth (Taiwan and India). She said that it is therefore up to the Committee members how they want to develop and extend support to device a program.

### **Concluding Remarks by the Chair**

Dr. Rajeevan thanked Dr. Smriti Basnett for organizing this meeting and appreciated the remarks made by all the Committee members. He acknowledged the responsibility of the National Committee and expressed his confidence that they will do well once again. He looks forward to interacting closely with Future Earth South Asia. He also looks forward to new linkages with other global hubs. As promised, he will have a discussion with Dr. K. Krishnamoorthy to get his views. He suggested organizing another meeting, so that a detailed discussion on the plan of action for the next two years can be conducted.

This was followed by Dr. Smriti Basnett thanking all participants for taking the time to attend the meeting. She announced that an online poll would be circulated to find a suitable time for the next meeting of the National Committee. The next meeting will tentatively be in February, 2021.





Screenshot of Future Earth National Committee Orientation Meeting (L to R): [Top row] Dr. Veera Mitzner, Ms. Anupama Nair, Dr. Vandana Prasad, Dr. Smriti Basnett, [Second Row] Dr. Sunderrajan Krishnan, Dr. Aditi Mukherji, Dr. Sandeep Tambe, Prof. J. Srinivasan, [Third Row] Dr. Suresh Babu, Dr. M. N. Rajeevan, Dr. T. R. Shankar Raman, Dr. Ravi S. Nanjundiah, [Bottom Row] Dr. Ria Lambino.

