

Workshop on Applications of Climate Downscaling

9 March 2017

Day 3: Summary Notes from Group Discussion and Next Steps

- Request a compendium of research papers; would have liked to have some published papers relevant to the workshop beforehand (comment by Shwetal Shah, Gujarat)
 - o Want information and downscaling at village level, block level
 - o This is part of the sustainability goals; this is part of the mandate; the tools are needed for the mandate
- Important to get the stakeholders together by bringing science and administration together; need the policy makers to be at the discussions
- Important to bring the science as a rational policy making instrument for administration for decision-making
- Suggestions:
 - o 1) this workshop is the initial first group; create a common email group or whatsapp group. Then include more academics and politicians in the common thread to start the dialogue. And create information flow for the administrators
 - o 2) Some amount of approaches is available w/regards to data and framework and how they can assist counties and this can be shared; there is a need to hold meetings on capacity building and for greater awareness
- IPT have the second meeting in Telangana: include administrations
- Each state has a center for climate excellence (or at least a nodal institute) that should be involved. This should reach states and they should be a stakeholder. Bring the volunteers to get the stakeholders together.
 - o Each state has a nodal agency – get the list from the Forestry department
- Ultimately, we want a knowledge platform, to make research more amenable to decision-makers. This is one the objectives: to create a common knowledge platform
- Govt MP: “thank you for holding our hands.” All the work has been for the subnational state level. But many are operating at the district level. The climate information and science is very very important. This is the first detailed experience...and people are beginning to appreciate the work
- Question: is it possible for IITM to do this climate modeling downscaling interpreting and do it for each state --- off the shelf. How can we make the information available for each state?
 - o This is needed b/c VRA reports needs to be updated routinely
 - o Any climate information requires this downscaling as a prerequisite otherwise we can't get investment; need climate science information and must be from authentic institutions
 - o Can there be a possibility of organizing a training program --- regionally?
 - o 5 to 6 trainings
- Detailed science and remote sensing is hard to share with the general public. Can we have a mechanism where IITM can share scientific expertise and downscaled information to enable analysis by others

- What is the structure that can enable downscaled data from authoritative sources --- there can be a mechanism
- On the topic of downscaling: there is a large scale interest in understanding the science behind it. How exactly is it done? Can IMD refresher course on downscaling. Fund a few scholarships. Can IITM host a refresher course?
- **Health:** John: implementation of resilience – the silos do not exist in the same way at the village level in the health area. At the level of health, things get integrated, when talking about implementation to use the information that is available from the other sectors. You can't solve ag issue without water and it all comes together in health. Health sector think about things in an integrated way.
- **TOOLS:** Need more downscaling tools and techniques at the state and district level.
- **SCIENCE & POLICY:** The bridge between scientists and government should be done well...the interaction will help planners be more aware of climate variables. SAPCC is the only official document; not a lot of seriousness in these SAPCC. Need to go forth with these initiatives.
- **RESOURCES:** MOEFCC has a list of nodal persons for each state
- **CLIMATE AND DRM:** Integrating climate change into disaster risk and preparedness and SAPCC – this will be useful. Need to go further --- need IITM helps to come up with indicators on disasters to make it effective in disaster planning, need to collaborate again, and need your help again for disaster managing planning
- **CLIMATE CHANGE IMPACTS:** Need to think about climate change and its impact on biodiversity (from Sikkim)
- No one is representing the Himalayan states --- climate change workshops should be held in the Northern regions
- State specific workshop should be organized
- Climate related issues are there – variety of issues by each state
- SkyMet: if there is something required in public private partnership, SkyMet is interested in engaging. SkyMet is currently installing AWS in India.
- How can we have the mechanism for downscaling for each of the states? There are IIT's in every state --- they have the capacity of adopting it from each state. There are opportunities for integrating IIT through the state government...
 - Dr. Ashwini can be the liaison from IITM
- Near term solution for downscaling information: Katharine Hayhoe has volunteered to take the data from the states, use the QA/QC techniques and perform the downscaling
- **FEEDBACK** Hands on training was the highlight; able to appreciate the climate modeling knowledge and training
- Interest in learning more about downscaling. We talked about making the downscaling model available in the future
 - We both agree that it requires knowledge in R
 - And knowledge in climate data
 - If they have station data, Texas Tech can do it
 - They will clean the code and only can do it for people that are knowledgeable
 - First training in R, and then downscaling...
 - Suggest to host a follow on webinar on the code in R

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- States wants to do VRA
 - o MOEF Ravi Shankar Prasad should be involved. Through him we will write a letter to the nodal officers about availability of the downscaled information
 - o There should be a follow up meeting in 3 to 6 months for more awareness
- IIT Mumbai -- need to have other institutions to say they are interested
 - o Timeframe to get the entire structure IMD, IIT and state governments... should take 6 to 12 months
 - o Have another follow up in 6 months
- DRR + VRA = HRVA --- both areas are engaging in parallel activities with climate risks; this should be integrated and involved (and engage with disaster risk management agency)

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