







Minutes of CLIVAR/GEWEX Monsoons Panel Meeting

MEETING INFORMATION

Meeting Number	2024-4	Meeting Title	CLIVAR/GEWEX Monsoons Panel Meeting
Objective/Purpose	Discuss on the Agenda Items and progress on action items		
Time & Date 10 June 2024 13-15 UTC		Venue	Microsoft Teams Video Conference

MEETING DETAILS

Chairperson(s)	Leila Carvalho and Suryachardra Rao A. (MP Co-Chairs)	Rapporteur(s)	E.N. Rajagopal
Attendees	MP: Leila Carvalho, Annalisa Cherchi, Rondrotiana Barimalala, Ajaya Mohan Ravindran, Satyaban Ratna, Hiroshi Takahashi, Hui Su, Samson Hagos, Thea Turkington WCRP Secretariat: Hindumathi IMPO: E.N. Rajagopal, Rupakumar		
Absentees	MP: Jhan-Carlo Espinoza, Ruth Cerezo-Mota, Shabehul Hassan, Salvatore Pascale IMPO: Susmitha Joseph		

ACTIONS

Deadline	Action	Responsible
As and when required	Updating of contents of webpages and websites of Monsoons Panel, populating the IMPO webpage with more information on the activities of panel and WGs.	MP & IMPO
Ongoing	Continue to build connections with other panels and Light House Activities (LHA) of WCRP and make strong linkages with partner projects.	MP members & Co-Chairs
Ongoing	MP members to participate in WG meetings of their interest and collaborate on any activity.	MP members & Co-Chairs
5 July 2024	Draft Concept Note on "How to collaborate with GEWEX panels"	MP Co-chairs & IMPO
12 July 2024	Active in-person participation in the monsoon sessions and other weather & climate sessions of 9th GEWEX OSC at Sapporo, Japan	MP members, WG-AAM & IMPO

Deadline	Action	Responsible
11 July 2024	Active involvement in the organisation of the 6 th Session of MP along with the meeting between MP & WG-AAM at 9 th GEWEX OSC, Sapporo, Japan	MP members, WG-AAM & IMPO
31 July 2024	Creation of joint task teams to address specific cross-panel topics	MP Co-chairs & IMPO
31 July 2024	Initiate a cross-panel activity with APARC on Stratospheric Network for the Assessment of Predictability (SNAP), particularly in Monsoon ISO and MJO.	MP, WG Members & IMPO
31 October 2024	Reconstitution of all regional Working Groups after consultations with various stakeholders	MP & IMPO

AGENDA AND KEY OUTCOMES

Agenda Point	Description		
1	Opening Remarks (Leila): Leila (Co-Chair) welcomed all MP members and IMPO members present in the meeting. She requested all present to introduce themselves briefly. Screenshots of the in-progress online meeting can be found in Appendix-I.		
	Updates from the Regional Working Groups:		
2	 WG on Asian-Australian Monsoons [WG-AAM]: - (Thea) 1) Activity Highlights of the Sub-Groups (SG): SG1: Monsoon Processes and Teleconnections:		
	 Other Activities: Recent WG meeting (see 2 May 2024 (Web view)) served as an "AGM" at which future science priorities and WG membership were discussed, as well as the impending rotation of Co-chairs. Some members will request to continue, and others may rotate off, and WG will consider suggestions for new members. MP members are welcome to attend WG meetings (~quarterly) for interest/information and can request to be active participants in sub-groups (meeting ~monthly) if they want to. A commitment to attend and engage fully in subgroups would be required for the latter. GEWEX SSG reps may be invited to some future WG meetings. Gill's term as co-chair should be ending in July 2024 so we will be looking to nominate a replacement for her (with some overlap, maybe 2-3 months). Tieh Yong's term as co-chair is due to end in July 2025 although he may be looking to hand over earlier. 		

- GEWEX Quarterly article on Asian summer monsoon in 2022 and 2023 was submitted on 7th June for publication in the autumn issue.
- GEWEX OSC 7-12 July 2024: ~10 WG members are attending, 3 funded by CLIVAR.
 - Joint MP & WG-AAM meeting will take place on Thursday 11 July (time TBC but likely to be evening in Japan / morning in UK).
- Eighth WMO International Workshop on Monsoons (IWM-8) is being held during 17-21 March 2025 at Pune, India.
 - There was a request for 2 WG members to join the International Scientific Committee (ISC) for IWM-8, to which there was a positive response from 4 members.
- Cross-panel activities:
 - Several WG members have agreed to join cross-panel activities, but it is not clear whether much has yet taken place. Joseph Basconcillo volunteered for GPEX LHA.

Comments from members:

- Leila: These indices that are developed are more regional or more of a largescale type of index or focusing more on regional, sub regional aspects?
- Thea: We will be having a poster at the upcoming GEWEX OSC to show more to explain more. The index is based on the 850 hPa wind anomaly. What we are trying to do with this index is capture the progression of the monsoon in the 2 different seasons, it is done based on the timing of the monsoons for Southeast Asia. Currently the countries have different definitions for monsoon onset and progression. This index is just to have a common framework for defining the onset and progression for Southeast Asian countries.

❖ WG on African Monsoons [WG-AFM]: - (Rondro)

- 1) Activity Highlights of the Sub-Groups:
 - WG-AFM had our regular meeting a month ago for a couple of activities that is been going on in the WG.
 - One is the paper on the African rainfall is submitted to the special issue on Global and Regional monsoon in Advances in Atmospheric Sciences, Coordinated by Annalisa.
 - Another one is as tenures of most of the members of the working group are
 ending by the end of this year, so we decided to have a white paper on the
 challenges and recommendations on African monsoon research. So, this
 activity has been started with populating ideas on what members are thinking
 about the challenges that we are facing in terms of African monsoon research,
 and the plan is to have that submitted before the end of the year, which is the
 end of the term of all the members.
 - Another activity we talked about the ENSO teleconnection for 2023-2024, which had kind of a big impact or so over the African monsoon, at least for the southern part now because the monsoon season is over, but for West Africa it is JJAS. MP in its last meeting discussed about populating idea from different regions on how the ENSO teleconnection affects the rainfall in different monsoon areas, so in the working group, we decided to have a paper on the impact of the ENSO and its teleconnection over for different areas of Africa. For instance, during 2023-24 monsoon season, the southern Africa was relatively dry, very dry compared to normal, while the eastern Africa was very wet. So, these are things that that will go into the working group activities and then we will look at the West Africa after the season is over. But that's an activity that the group is taking.
 - There was also a proposal led by Samson and endorsed by the MP on Observational field campaign over eastern Africa. And there was a discussion during the WG meeting because another completely different group, went for

- a field campaign in the area and faced some issues with the local authorities and they were not able to conduct the field campaign. So, there was a discussion in the working group like is there anything that the WG could somehow suggest or recommend for such filed campaigns. Is there anything that the WGs could do or at the WCRP level to kind of influence these decisions to facilitate the observations in any part of the world?
- I have contacted Annalisa with the GPEX activity as she is involved in that but
 would be nice if we could invite someone for from GPEX or from WCRP in our
 next working group meeting to discuss about observational campaigns planned
 in the region.
- Lastly on the cross-panel activities, there are few members of the WG involved in the lighthouse activity on explaining and predicting Earth system change (EPSEC). Because this lighthouse activity is planning to have a case study on model predictability of rainfall over Africa and for several members of the WG are involved in this cross-panel activity.

Comments from members:

- Samson: We are still waiting for the response on the east African observational campaign proposal. The way DoE proposal works is there is 2 tiers. The first one is the infrastructure to assess whether it is doable, the proposal seems to have passed. The next level is kind of programmatic and scientific review which decides what they want to do. We have been working with the infrastructure people, who did the costing and they decided that it could be it could potentially be done.
- Annalisa: How to deal with the problems when field campaign is not going on because of local issue. I checked with Xubin, Chair of GPEX, they have not received any reply, yet he was asking to some local contact in Africa. Maybe there is something that must be agreed or requested as a community, and not only the monsoon panel, but probably within WCRP and thinking of a way to check how to deal with such issues. There may be some guidelines or some suggestions that need to be followed, probably Hindumathi may know more about it.
- O Hindumathi: Within GPEX we would like to encourage field campaigns, but that does not actually mean that we would be involved directly in regional field campaigns. So for instance, the issue that Rondro mentioned, what we would like to do as a part of GPEX is and this is already taking place, albeit at a very slow pace, is to get in touch with the WMO's Infrastructure Department, by which we are hoping that if a body like the WMO is able to recommend or suggest infrastructural developments in regions where we have difficulties, maybe you know this might push this issue further in terms of you know finding a solution or working more with the regional agency. So, the only hope is that through this GPEX we will be able to engage more with WMO's Infrastructure Department to come out with a set of recommendations for a region. This may not be immediate; it is going to take time as any other recommendations coming out from WMO and one of the objectives of JPEX would be to do this.
- Surya: African monsoon WG is also doing well now, have started gaining momentum in their activities.
- Leila: I am personally becoming more involved in studying the African monsoons, so I'll be happy to be included in some of the discussions if possible being applied to many grants to work on this. I just want to say, yeah, it sounds like a lot of great work and papers and white papers coming out from the WG. It is interesting.
- Thea: Just want to say, yeah, it sounds like a lot of great work and papers and white papers coming out. It is really interesting. I just have a question, you mentioned that the terms of members are coming to an end this year and then it seemed to imply that people are not staying on. I think we also sort of were

- discussing this in WG-AAM. It is sometimes good to have some people stay on a bit longer, so you have a bit more continuity.
- Rondro: We have not really discussed in depth on the renewal of the membership, but it was mentioned in the previous WG-AFM meeting that members who are active are really encouraged to renew their membership. But there isn't really anything concrete out of that.

❖ WG on American Monsoons [WG-AMM]: - (Ruth - Absent)

 There is no update in the <u>Monsoons Panel Notebook</u>. Ruth will be requested again to update the Notebook. More discussions on this WG are given under agenda point 6.

Updates from IMPO (Rajagopal):

1) Activity Highlights:

- Played a key role in the successful organization of the fourth Joint WCRP/WWRP Webinar Series on American Monsoons held on 24th April 2024 during 17:30-19:15 UTC, which featured talks by Prof Pedro Leite da Silva Dias (University of São Paulo, Brazil): "Challenges for the South American monsoon predictability" and Dr. Salvatore Pascale (University of Bologna, Italy): "The North American monsoon: current scientific issues and perspective for the future". WG-AMM Co-chair Alice Grimm chaired the webinar.
 - Out of the 126 registered attendees, 53 attended the webinar.
 - Played a key role in advertising the webinar in IMPO Events Page, WCRP Academy Catalog and through the various group e-mails.
 - Video recording of the webinar was also made available on IITM YouTube Channel at https://youtu.be/I1pQ0rxPyp8?si=HL7DNRBre3iFtSH3 which already has 111 views.

 IMPO Participated in IPOs & WCRP Sectt. Group meeting on 7th May 2024 and highlighted the activities of IMPO/MP during the reporting period.

- IMPO played a key role in the organization of the International workshop on Stratosphere-Troposphere Interactions and Prediction of Monsoon weather EXtremes (STIPMEX) held during 2-7 June 2024 at IITM Pune.
- IMPO was actively involved in the organizational aspects of IWM-8.
- Somnath Mahapatra, Senior Scientist (IMPO) retired from IITM on 31 May 2024.

2) Future Activities:

- a) Participation in GEWEX OSC during 8-12 July 2024 at Sapporo
- b) Organization of the 6th Session of MP along with joint meeting between MP and WG-AAM on 11th July at Sapporo
- c) IMPO looks forward to its active role in the organization of IWM-8

Discussions on Cross-Panel Activities (Lead: Rajagopal/Surya)

- SPARC activity on Atmospheric Composition and the Asian Summer Monsoon (ACAM). – Wei Ting Chen and Lin Wang of WG-AAM identified for this activity has established contact with ACAM.
- CliC activity on understanding the connections between the Himalayan cryosphere and Asian monsoons & Impacts of reduced Arctic sea-ice on Asian monsoons. - Hui Su and Hiroshi Takahashi of MP are identified for this activity.

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- "SynObs Project" on the evaluation of the Ocean Observing System
 - Volunteers: Surya, Ajaya
 - Observing System Evaluation Task Team Co-chairs, Elisabeth Remy (Mercator Ocean International) and Yosuke Fujii (MRI/JMA) were contacted, and they have fixed an online meeting with Surya & Ajaya on12th June.
- GPEX LHA Activity:
 - Annalisa has been leading this activity from MP side and a document MP's involvement is under preparation. As per Xubin Zeng (who participated in STIPMEX) the GPEX LHA Steering Group is getting established soon.
- Indian Ocean Regional Pane (IORP):
 - IORP is interested in an observing system evaluation focussing on Indian Ocean. Surya and Ajaya will be involved in it. In the next MP meeting they will present results from this activity.

Comments from Members

- Surya: In the cross-panel activities we have identified several members for several activities and the complaint received from the other side is that identified members are not approaching the other panels for taking up activities. So, we must take proactive steps to contact them to understand their activities and check if we can join in some of their ongoing activities. The best way forward is to a identify the problem of common interest and work on it. So, all WGs are requested to be proactive and if support is required IMPO can be contacted.
- Leila: In all the WCRP/CLIVAR meetings that I have attended that, they have mentioned their interest in collaborating with WG-AAM, especially on APARC's interest in the stratospheric aerosols by including more chemistry over Tibetan region.
- Thea: I completely agree and that is something we were discussing also in the working group is that people should be active. It's not just putting your name forward, but I think in some of these cases, perhaps they need the person to contact like who to contact in the other panel. And if they don't get an email saying from the other panels, then they do not know who to contact. So, who is the contact person the other panel/WG should be known to follow up.
- Surya: Ajaya and I are now going to collaborate with Indian Ocean Regional Panel (IORP) on different OSC experiments. Similarly, APARC is also approaching us with stratospheric chemistry proposal for doing some simulations on S2S scales to test the model skills, I have volunteered for this cross-panel activity and shall share the details with all. Here also WG-AAM can contribute a lot. Urge WGs to take these cross-panel activities seriously and make initiatives to take them forward. WCRP is very keen that MP should get involved in these cross-panel activities as they are important activities with which WCRP is concerned.
- Rupakumar: Is it possible to set up a few joint task teams to address specific cross-panel topics?
- Surya: A very good suggestion. We should have a task team for each cross-panel activity or for 2-3 cross-panel activities together depending on their similarities. So, the Co-chairs and IMPO can look at the ongoing cross-panel activities and the volunteers identified to create task teams. This can be one of the action items of today's meeting and the same can be minuted if Leila also agrees.
- Surya: It is very important to take forward this cross-panel activities. Henceforth
 we can have updates from WGs and from Cross-panel Task teams in future
 MP meetings.
- Surya: CLiC SSG has approached MP with a clear scientific question "the impact of polar regions on Monsoons". During the GEWEX SSG meeting in

- Budapest, CliC SSG Co-chair suggested that MP can interact with Prof. A.P. Dimri, Member CLiC SSG. So, I have initiated dialogue with him. Soon they will arrange a meeting with the identified MP members.
- Surya: APARC is interested in collaborating with MP on <u>Stratospheric Network</u> for the <u>Assessment of Predictability (SNAP)</u>. Peter Hitchcock, Cornell University, USA is the contact person for this activity. They are looking for MP's active contributions particularly in Monsoon ISO and MJO. This also can be an action point from this meeting.
 - SNAP's scientific goals include: (i) assessing current skill in forecasting the extra-tropical stratosphere; and (ii) investigating the extent to which accurate forecasts of the stratosphere contribute to improved tropospheric predictability.
- Surya: GEWEX Co-chairs wants MP to have more cross-panel activities with GEWEX panels. With this objective in mind the GEWEX Panels' presentations from the recent SSG meeting were shared by IMPO to members. All members are requested to identify some possible cross-panel activities with GEWEX panels. This is one activity that will be discussed during the In-person MP meeting at Sapporo, some GEWEX panel members will be joining on 11th July.
- Surya: Both GEWEX and CLIVAR SSGs were suggesting that MP should have its own science project on monsoons and try to interact with other panels within that framework so that in that manner MP's visibility will increase. So, instead of just collaborating with them, let them also be part of our activities and keep inviting them for MP meetings and WG meetings. So, if anybody has any ideas on how to move forward, we can discuss in the in-person MP meeting at Sapporo, so please come prepare with ideas for that. I also will prepare something and share with you background document.
- Surya: Satyaban is also a member of Climate Dynamics Panel, so he can also bring in some cross panel activities for MP, like Annalisa bringing in GPEX activities to MP.
- Satyaban: In the climate dynamics panel there is a cross-panel activity on <u>Pacific Atmospheric Teleconnections in a wArming Climate (PATAC)</u> with Pacific Regional Panel.
- Surya: Some of the MP members who are interested in the Pacific atmospheric teleconnection can get involved in PATAC. So, in the previously shared MP Cross-Panel document, members can express their interest in this new activity.
- Rupa Kumar: I think we should also find a way to bring up monsoon links with polar/cryosphere aspects in the discussions of the WMO Panel on Polar & High-mountain Observations, Research and Services (PHORS). I can help with these linkages.
- Hui Su: I have signed up 2 different cross panel activity. Hiroshi and I have talked about the CliC cross-panel activity, but we have never got any email from them. I don't know who to write so that is the problem.
- Surya: I and Rajagopal will pursue with some of these CliC members and get back to you because CliC Co-chair has asked us to directly talk to the Members who are interested in this particular scientific problem. So, one of them is Prof. A.P. Dimri from IIG, Mumbai, will speak to him and get back.

Discussions on Monsoon Session and In-person meeting in GEWEX OSC-2024 (Rajagopal)

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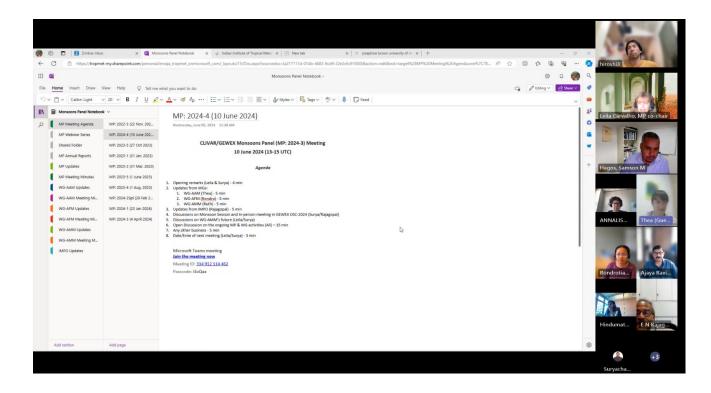
- Will be attending the GEWEX OSC with IITM travel support during 8 to 12 July along with Surya and many others from IITM.
- We will organize the 6th session of the Monsoon Panel along with the Joint meeting of MP and WG-AAM on 11th July during 7-9 PM (10-12 UTC) in hybrid mode. 9 members from MP/WG-AAM have confirmed in-person participation. The agenda for the meeting and the meeting link will be shared soon.

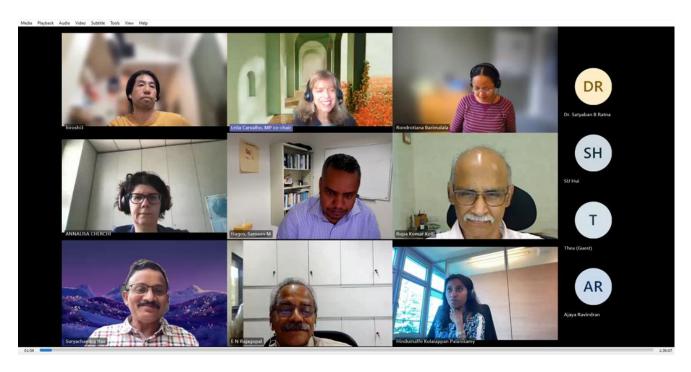
	GEWEX OSC's Session 10: Monsoons (Special Session Celebrating 150 Years of IMD) coordinated by Surya is scheduled in 2 parts on 10 th July. Few MP members and WG-AAM members will be presenting their paper/poster.
6	Discussions on WG-AMM's Future (Leila/Surya) The discussion details are given in Appendix-II
	Open Discussion on the ongoing MP & WG activities (All)
7	 Rupakumar: Do we have a clear idea of the potential role of the MP and WGs in IWM-8? Rajagopal: IWM-8 is looking to have representatives in the International Scientific Committee (ISC) from all around the globe, representing all monsoons. So, we thought we should have the Co-chairs and 2 members from each of the working groups and MP in ISC. One member each from WG-AAM and WG-AMM did not accept the invitation. Rajagopal: The role of ISC members is to help in the evaluation of submitted abstracts, get involved in the scientific planning of the workshop, etc. All these things are mentioned in the invitation letter sent out to prospective members. The WWM-8 Concept Note was also attached with the invitation letter. The first announcement circular of IWM-8 will be first circulated to ISC members for their feedback and then published in all networks. Rajagopal: The development of IWM-8 webpage is running behind schedule as the IT Team was busy with STIPMEX workshop and now it will be done by end of June. So, the Abstract Submission start date may be pushed to 15th July 2024. The first announcement circular of IWM-8 will be circulated to ISC members soon.
8	 Any other business Surya: The next MP meeting will be hybrid. Request for maximum participation if the time is not too inconvenient. A calendar invitation with the MS Teams meeting link will be send out. Surya: We are going to have one important agenda point on "How to collaborate with GEWEX panels?" GEWEX SSG has asked us to create a cross-panel plan for the different GEWEX panels. So, I'll create some background note for that and circulate to members. We need to discuss that that plan in the meeting. It is likely that some of the GEWEX panel members who will attend the MP meeting.
9	 Date/time of next meeting (Lead: Leila) The Sixth Session of CLIVAR/GEWEX Monsoons Panel and the Joint Meeting between MP & WG-AAM will be held in hybrid mode on 11th July 2024 during 10-12 UTC at Sapporo, Japan

NEXT MEETING

Meeting Number	2024-5	Meeting Time & Date	10-12 UTC 11 th July 2024
Location	Rose, Keio Plaza Hotel at Sapporo, Japan/Online		

Appendix-I





Screenshots of the in-progress online MP meeting held on 10th June 2024

Discussions on WG-AMM's Future

The members of the panel had elaborate discussions on the subject and the important comments/suggestions/recommendations are summarised below:

- 1. Several members expressed their concern about the WG being less active and less responsive.
- Many felt that there is an over emphasis on education, the co-chairs are currently busy working in the organisation of ICTP funded 2nd Workshop on the American Monsoons to be held in Mexico during 4-8 November 2024. They also organised the Fourth Joint WCRP/WWRP MP Webinar Series on American Monsoons on 24th April 2024, which is also a capacity building activity.
- There has not been anything more into research to operation and other kinds of activities seen
 in other working groups. These kinds of activities are important and more action on pressing
 issues, especially now with climate change making such a pressing issue in the American
 monsoons.
- 4. The whole working group has not had any meetings since last 2 years, despite several reminders from MP. In the last MP's interaction with the WG on 20th February 2024, it was recommended to form subgroups for an identified activity as being done by other 2 WGs and in response a member came up with an idea, but there has not much interest from the group. The problem may be people are overwhelmed with work as it always happens, and they don't have time to be involved.
- 5. Both CLIVAR and GEWEX SSGs are not very happy with WG-AMM's poor performance and suggested that MP should reconstitute the WG at the earliest.
- 6. In the recent GEWEX SSG meeting several South American scientists informed that whenever they have approached the American Monsoons Working Group, they are not getting any feedback from them.
- 7. The MP Co-chair who is also a member of WG-AMM is in the monsoons panel, needs to step in and try to mobilize at least some members based on her own understanding of how things work in that region and come up with a proposal. One can identify a few modest work elements, for the initial thrust and once that is done, it will be easy to sustain that process.
- 8. Within CLIVAR there is now a new guideline that is to be followed, viz., even though the membership is for 3 years after the end of 2 years, they review the membership just to see if the members of their panels are being active or not. If they see that a certain group of members, are not being active, they try to have a personal discussion with them to see if they would be happy to step-down from the panel. A similar approach can be adopted by MP.
- 9. In the recent WCRP JSC meeting, there was expression of interest from the <u>ANDEX</u> community on connecting with the monsoon related activities in the region. Jhan-Carlo (MP Member) who is a member of ANDEX Steering Committee could initiate some kind of joint activity between WG-AMM and ANDEX, which may give a motivation to WG-AMM to start working on this joint activity.
- 10. If the Co-chairs and members are busy, MP can add another Co-chair and few more members to help the group. Additionally, as the terms of all the working group members are coming to end by the end of this year, MP can start a fresh call for membership. MP can also check if there are members who have been in MP/WG for long who can be rotated off.

- 11. The normal practice to be adopted in respect of non-active members is that to first write to them about their inactivity with a request to step down. If they are non-responsive, need to send 2 reminders with a deadline and if they are still not responding they can be rotated off.
- 12. In CLIVAR panels/WGs the maximum tenure of members is 7 years. The rotated off members can continue to active in the panel/WG as ex-officials as per CLIVAR guidelines and they are going to be advisors for the working groups or the panels and help in training the new experts coming in to take up the leadership role. It is important to make sure that there is continuity from past Co-chair to the new one.
- 13. The monsoons panel has drafted its own terms of reference which was vetted by CLIVAR/GEWEX. In the case of the working groups, there is more freedom because their terms of reference are decided by the Monsoons Panel. In the working group membership, the Monsoons Panel has the final authority. So, Monsoons Panel can completely disband the working group and start afresh without worrying about the tenures.
- 14. The real challenge is that one does not know who are available for this working group. MP members from the region can try and identify potential members. As the working group membership has no upper limit and as there is no financial support to WGs from MP, one can always have more members who can support the work and subsequently take over leadership.