

## **Sixth meeting of the Adaptation Committee Bonn, Germany, 29 September to 1 October 2014**

### **Summary report on the special event of the Adaptation Committee in collaboration with the Intergovernmental Panel on Climate Change Working Group II**

#### **Recommended Action by the Adaptation Committee**

The AC, at its sixth meeting, may wish to consider the information contained in this report and agree on next steps resulting from the recommendations made, and for future collaboration with the IPCC, including the information presented in section "Possible means of collaboration and enhancing the flow of information from the IPCC into the work of the AC".

#### **Background and mandate**

Within its work plan (Activity 15), the AC agreed to "convene a meeting to gather up-to-date information on adaptation, including the limits of adaptation, in collaboration with the Intergovernmental Panel on Climate Change Working Group II (IPCC-WGII)". At its fifth meeting, the AC considered and endorsed a concept paper prepared for the meeting (AC/2014/13). It requested the secretariat, in collaboration with AC members, to engage with the IPCC secretariat and the Co-Chairs of IPCC Working Group II to collaborate on the meeting and to identify and invite relevant IPCC authors.

This report provides an overview of the proceedings and a summary of the key points discussed at the meeting. The full presentations as provided to the secretariat by the IPCC authors are attached in annex II.

#### **Proceedings**

The special event took place in the Maritim Hotel, Bonn, on 8 June 2014, during the 40<sup>th</sup> sessions of the SBs. The event was chaired by the Co-Chairs of the Adaptation Committee, Mr. Juan Hoffmaister and Ms. Christina Chan.

The event was attended by five IPCC lead authors, seven members of the AC, a member of the LEG, the SBI Chair, the SBSTA Vice-Chair and staff members of the IPCC and the UNFCCC secretariats (see annex I). Participation was limited to invited observers from other constituted bodies in order to initiate a focused and informal discussion. The AC agreed to make the report on the meeting publicly available.

The meeting was scheduled to take place in two main parts, part I inviting short presentations from IPCC authors on the following questions:

1. What is new about climate risk management, climate resilient pathways and limits of adaptation?
2. What are the key findings with regard to adaptation assessments, planning, and implementation?
3. What data gaps did IPCC encounter in producing AR5?



Part II was a facilitated discussion around the questions:

4. How can IPCC and AC cooperate in raising awareness, outreach and sharing of the latest scientific information on adaptation and reduction of vulnerability?
5. What lessons can be learnt and exchanged from the IPCC's experience to address knowledge gaps?
6. How can the AC use information provided by the IPCC and integrate it into the development of its workplan?

### **Opening and introduction**

In opening the event the Co-Chairs stressed the fact that the AC very much welcomes the opportunity to meet, for the first time, with authors of IPCC WGII in an informal setting to initiate an exchange. They expressed their hope that this meeting could lay the foundations for future fruitful collaboration and exchange that would be useful for both sides. The AC was particularly interested in exploring how the IPCC and the AC can cooperate in raising awareness, outreach and sharing of the latest scientific information on adaptation and reduction of vulnerability.

The Co-Chairs further noted that AC members had previously had the opportunity to attend the IPCC briefing on the findings of WG II that was held under the SBSTA, so the main information had already been shared and more time could be dedicated to the discussion and focused on the questions above.

An AC member then provided an overview of the work of the AC. He highlighted the fact that the AC can transfer recommendations to the Parties, and welcomed this opportunity to reach out to the IPCC authors.

In a short opening address the SBI Chair recognized the importance of the meeting, as this was the first time that members of the AC and the IPCC engage in a dialogue. Coherent adaptation action, informed by sound scientific information, would add significant momentum to the implementation of adaptation action. He expressed his hope that collaboration between the Committee and the Panel would feed back into the work of the constituted bodies.

The SBSTA Vice-Chair, on behalf of the Chair, stressed the importance of coherence of the wide array of adaptation action and support that is being offered and implemented worldwide. He stressed that collaboration on all levels is key and that good cooperation between the intergovernmental process and recent scientific findings was paramount to enhance adaptation action.

### **Dialogue**

In introducing the next part of the meeting, the Co-Chair set the scene by suggesting to envision the IPCC as the provider of information, and the AC as a recipient, having the possibility to transfer related recommendations to the Parties. The sections below highlight only the main points from the presentations. Please refer to annex II for the full presentations as provided to the secretariat by the IPCC authors.

#### **1. What is new about climate risk management, climate resilient pathways and limits of adaptation?**

The WGII report clearly sets climate change as part of many other societal risks and opportunities as shown in Fig SPM.1 from the IPCC WGII contribution to the Fifth Assessment Report, *Climate Change 2014: Impacts, Adaptation, and Vulnerability*.<sup>1</sup> This new approach provides a more nuanced sense and frames climate change in a more analytical way, i.e. by looking at risk as a combination of vulnerability, hazard and exposure, and interacting with socio-economic processes, as presented at the figure below.

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<sup>1</sup> IPCC, 2014: Summary for Policymakers. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

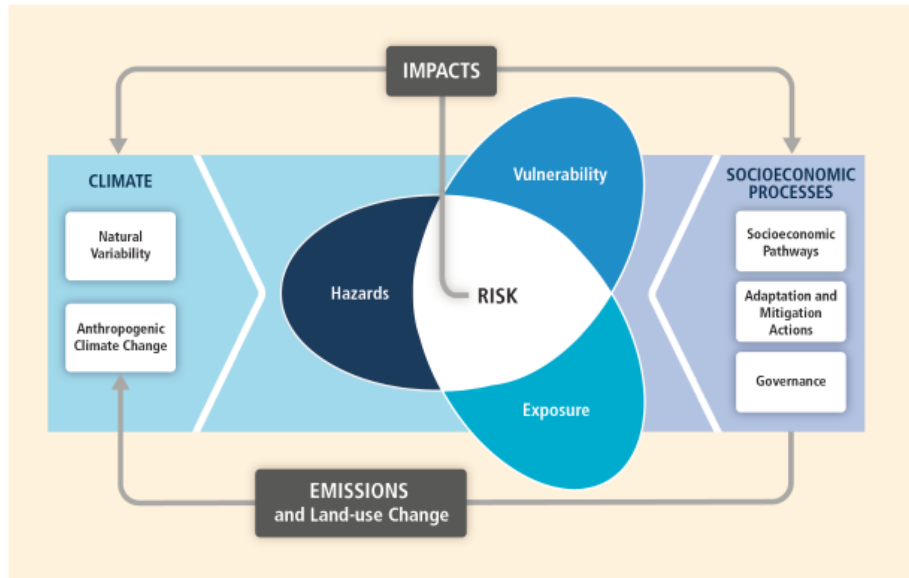


Figure SPM.1.

The world is threatened by many stressors that impinge on resilience from many directions, summarized as biophysical and social stressors. In this context, the report explores the opportunity space with a range of futures from high-resilience, low risk to low resilience, high risk, by choosing a series of different pathways through deciding on different actions/non actions.

Authors shared findings on adaptation barriers and limits, their relationship to loss and damage, and they described how the WGII explored the question of when losses following adaptation turn from acceptable into intolerable. The report differentiates between constraints (factors that make it harder to plan and implement adaptation actions) and limits (the point at which an actor is unable to secure objectives from intolerable risks through adaptive action). There are three options when reaching a limit: Accept losses; shift objectives; or apply discontinuous/ transformative responses. The report further differentiates between soft and hard limits, with hard limits being the ones for which no adaptive actions are foreseeable that would avoid intolerable risks.

Both limits and constraints are related to actors' objectives, values and needs; they are linked to the rate and magnitude of climate change, in context of other risks; they differ across scales (a limit for an individual is not a limit for a group or a system) and they are dynamic and change over time. Both therefore need to be assessed within a given time-frame.

IPCC authors recommended the AC to consider the risk tables in each chapter of the IPCC report on information to reduce risks. They contain suggestions that the AC could use in its work.

## 2. What are the key findings with regard to adaptation assessments, planning, and implementation?

**Assessment:** One of the key findings is that most assessments are restricted to impacts, vulnerability, and adaptation planning; very few assessments are available on implementation processes or the effects of adaptation actions. There is unequal geographic distribution of studies on impacts and adaptation, with fewer studies available from developing regions. It is possible, though, to draw on grey literature to get a fuller picture on adaptation experiences, as opposed to relying merely on peer-reviewed literature.

There is a need for a better assessment of global adaptation costs, funding, and investment. However, there is growing attention to developing indicators and monitoring & evaluation (M&E) systems for adaptation. There are conflicting views on the choice of adaptation metrics, given that differing values placed on needs and

outcomes are hard to capture in a comparable way (the topic of M&E was further discussed in part II of the meeting, please see below).

**Planning:** Adaptation planning is increasing across governments and regions. Governments are developing adaptation plans and policies at different levels, with growing integration of climate change into broader development plans and policies. However, there is still a disjunction between the push of adaptation strategies and policies and broader economic development plans in many countries. There is a lack of institutional capacity at critical local government levels and often a failure to enforce policies, which is impeding progress of adaptation planning.

**Implementation:** In some parts of the world, insufficient responses to emerging impacts are already eroding the basis for sustainable development. In general, experience on implementing adaptation action is more limited. There is, however, growing recognition of, and experience with, social, institutional, and ecosystem-based measures, in addition to the more commonly recognised engineering and technological responses. There is also increasingly more experience with implementing adaptation as a participatory and iterative learning process.

### **3. What data gaps did IPCC encounter in producing AR5?**

**Literature:** While there is an increasing knowledge base and examples of effective adaptation, there is still a clear gap in the literature on implementation of adaptation, in particular from developing countries.

**Ecosystems:** Ecosystems and their species composition are already changing due to climate change. The questions raised in this context included: What degree of change appears tolerable to the system and to the maintenance of its main characteristics? How much would a species have to change, would it still be the same species? What are the genetic changes needed and where are their limits?

**Finance and Costs:** Adaptation cost estimates vary widely. Omissions and shortcomings in data and different assessment methodologies render available estimates highly preliminary. In addition, there is a lack of undisputable information on flows of adaptation finance and the levels of adaptation funding.

With regard to methodologies to assess adaptation costs: Less conventional methods have so far not been used as much as conventional ones in the economics of climate change analysis – this is a research gap indicated by literature assessments in various chapters of the report. Non-conventional methods could include the valuation of non-market goods and services as well as non-accounting of ancillary costs and benefits (e.g. damages to an ecosystem after building a sea wall).

**Role of the public sector:** Economic analysis shows that some types of actions are not undertaken by the private sector due to the nature of their costs, incentives, and resource requirements. The public sector is, however, involved in economic regulation and the use of economic instruments in diverse ways, such as to overcome institutional barriers, developing resource-intensive technologies, providing basic public health facilities and addressing current and future equity concerns. The public sector has a role in creating synergies with the private sector, but so far there is a limited amount of specific cases and none have been rigorously documented in a way that IPCC could address it.

**Integrated assessment:** There is increasing recognition of the interactions between adaptation and mitigation, particularly at the intersections among water, energy, land use, and biodiversity. However, tools to understand and manage these interactions remain limited. For example, integrated research is needed on changes in land-use.

**Other limits and constraints:** There is relatively little discussion on the relation between short term adaptation and long term resilience; access to markets and information; and institutional barriers.

**4. How can IPCC and AC cooperate in raising awareness, outreach and sharing of the latest scientific information on adaptation and reduction of vulnerability?**

**5. And what lessons can be learnt and exchanged from the IPCC's experience to address knowledge gaps?**

**6. And how can the AC use information provided by the IPCC and integrate it into the development of its workplan?**

The following topics were highlighted with regard to the three questions above. During the informal discussion, IPCC authors spoke mainly in their personal expert capacity.

Full consideration of Article 2 of the Convention: Some experts raised concerns that the UNFCCC is not sufficiently considering the ecosystem element of its Article 2.<sup>2</sup> Present rates of climate change are probably too fast for many species to be able to adapt to and survive; and also too fast for species to keep track and follow the moving ambient temperature profile. Therefore, work on adaptation needs to distinguish between adaptation of natural systems and adaptation of human systems, with the notion that the latter are dependent on ecosystems and their services.

There was a strong recommendation from the scientists that human systems and ecosystems should be considered jointly. Experts pointed out that human systems and ecosystems are closely linked and should be considered in a holistic way.

Monitoring and evaluation (M&E): M&E was touched upon briefly in the discussion. M&E of adaptation is useful in order to establish which adaptation action works well, and why. One AC member asked whether a global M&E system would be possible and useful. The AC, in its 3-day workshop on M&E of adaptation (September 2013), heard from M&E experts that a common set of indicators would not be desirable or useful. In response to the question raised by an AC member, one IPCC scientists saw the merits of developing a common set of core global indicators and noted that this is technically feasible, and that since different regions need different criteria, local indicators could potentially be used to complement the core set.

National Adaptation Plans: With regard to work on NAPs, a representative of the LEG noted that the NAPs are a voluntary, country driven process. While they cannot be prescriptive, they need to be supported by integrated scenario analyses at country and regional levels. The IPCC has tools available for this. The LEG representative also highlighted the value of documenting and monitoring the NAP process. Progress should be captured in an appropriate way. In this context, IPCC authors noted that the WGII report contains plentiful information on good adaptation action. While, according to the report, the majority of adaptation experience (which is in Europe) is on projects on infrastructure, addressing socio-economic, cultural, and institutional aspects would also provide good insight. This could be useful for the next generation of NAPs. IPCC authors noted that there is a lot of information available which could be synthesized.

Solution space: An AC member reported that sometimes the AR5 WGII report is perceived as highlighting more barriers than solutions, and that it reports more on research than on implementation. The question was raised on whether the IPCC is planning to report, in its future work, more on action undertaken. IPCC authors reported that much solution space is contained in the report. The IPCC is required not to be policy specific in its reports, but much relevant information can be extracted from it, including information on what are effective approaches and key steps to national adaptation.

Vulnerability index: An AC member raised the point that some regions claim to be more vulnerable than others, and noted that it might be useful if the IPCC could issue vulnerability indices on regional or country levels.

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<sup>2</sup> The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. **Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change**, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

**Possible means of collaboration and enhancing the flow of information from the IPCC into the work of the AC:**

*Synthesis publication:* The IPCC holds a large amount of information that is highly relevant and valuable to the work of the AC. Several options of synthesizing this information were discussed, so as to tailor it to the needs of the AC and make it publicly available.

1. The AC could send an informal request to the IPCC to produce a paper with a summary of relevant information targeted to the work of the AC. More information would be required on the process and feasibility to do that. Alternatively, since IPCC products are public, the AC is free to use and summarize as needed, provided the information is referenced correctly and the content is not changed. The AC could, without going through any official process, use, synthesize and publish information as needed, with appropriate referencing.
2. The AC could informally discuss with authors in their personal capacity to receive advice on where to find relevant information. Authors could provide guidance on content for a paper or leaflet. Options to facilitate this could include a request for continued collaboration between the IPCC and the AC secretariats.

*Specific work areas:* The AC could recommend that the IPCC place, in its future work, attention on specific work areas that the AC considers particularly relevant. If the AC could collate its knowledge needs the IPCC might be able to respond.

**Conclusion and next steps**

The meeting provided a space for a very useful discussion and met the aim of initializing a dialogue and possible future collaboration between the AC and the IPCC.

Participants agreed that it would be very useful if the AC could have a designated point of contact with the IPCC authors for future interaction and collaboration. Continued contact between the Committee and the Panel, including through their secretariats, would be a relevant and desirable outcome from the meeting.

The Co-Chairs informed IPCC authors and AC members of the immediate next steps as follows:

1. The Co-Chairs, in collaboration with the secretariat, will write a short summary report on the meeting;
2. All presentations received by IPCC authors will be attached to the report;
3. The report and presentations will be shared with the AC and IPCC authors who participated in the meeting;
4. The Co-Chairs will report back to the AC, at its 6<sup>th</sup> meeting (which is webcast);
5. AC6 will consider the report and recommend next steps, as appropriate.

**Annex I: List of participants****IPCC lead authors:**

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Tomasz Chruszczow, Damdin Davgadorj, Margaret Mukahanana-Sangarwe, Klaus Radunsky, Sumaya Zakieldeen

**Chair of the Subsidiary Body for Implementation**

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Narcis Paulin Jeler

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