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FUTURE WORK OF THE IPCC

Additional collated comments from Governments on Further refined Options Paper IPCC-XL/Doc.13, Add.1

(Submitted by the IPCC Secretariat in support of the process of the Task Group
on the Future Work of the IPCC)

Future of the IPCC – Further Refined Options Paper Input from WGII Co-Chairs

Summary:

Four opportunities for enhancing the future work of the IPCC fall into a sweet spot of enhancing the quality of IPCC products, ease of implementation, consistency with IPCC procedures, and moderating the demands on the community of authors, reviewers and focal points. The four big opportunities are:

- 1) **Rationalizing the schedule of report development and release.** The IPCC does not need to do more reports (with six reports approved during the AR5), but it should restructure the schedule to improve (i) integration among reports, (ii) spacing among reports to enhance efficient reviewing and approval, and (iii) the schedule of releases to better support the assessment needs of the United Nations Framework Convention on Climate Change (UNFCCC). The rationalized schedule should ideally include (i) explicitly basing the Working Group II (WGII) assessment of impacts and adaptation on the physical climate in the most recent WGI assessment, (ii) managing the WGII sectoral and regional components as separate reports, and (iii) allowing a full year for the development of an outstanding Synthesis Report.
- 2) **Enhancing the effectiveness of developing country co-chairs** with a technical support team including at least one scientific staff position in the home institution of each developing country co-chair. The perspectives and insights of developing country co-chairs are central to the success of the IPCC goals. The current system limits the effectiveness with which developing country co-chairs can participate in all aspects of IPCC science and operations.
- 3) **Increasing the effectiveness of developing country authors** with a combination of improved selection, training, and support. Regional workshops to highlight opportunities and training for all authors about modes of constructive collaboration and participation can help create a strong author team. Increased resources for library access, scientific support, and author schedule flexibility can help maximize contributions from all authors.
- 4) **Enhancing the training of Technical Support Units (TSUs), Authors, and Secretariat.** Many of the operational challenges within the IPCC can be substantially reduced with improved training. Key elements should include intensive training of new TSUs shortly after they are created, a special meeting for training Coordinating Lead Authors (CLAs) shortly after they are appointed, and ongoing efforts to assure that the Secretariat, TSUs, and author teams understand their responsibilities and opportunities for working effectively. Training all authors to work productively and sensitively in an international environment can facilitate a culture of mutual respect that supports constructive, collegial interactions.

WGII specific comments on the Further Refined Options Paper follow

I) Products, timing, and usability

A) Product types and timing

Product types: The current set of product types can be effective, especially if enhanced in three important ways. First, the IPCC needs to continue to produce compelling Special Reports. Second, the utility of the reports can be enhanced through refining the concept for the boundaries among the Working Groups (WGs). Third, the regional part of WGII should be managed and featured as a separate product.

Special reports (SRs): SRs can be some of the most compelling products of the IPCC. They can be explicitly cross WG and focused on topics that intrinsically highlight roles for developing country scientists.

Boundaries among WGs: Several of the most awkward features of the Fifth Assessment Report (AR5) involve poor conceptualization of the boundaries. Examples include (1) the boundary between the physical science and the impacts (impacts can be much more compelling and actionable if they include physical changes like drought, heavy precip, heat waves, in the context of interactions with the vulnerability and exposure of human systems), (2) the integration of adaptation and mitigation, and (3) the harmonization of climate changes and greenhouse gases (GHGs) considered between WGI and WGIII.

Regional report: From the developing-country perspective, the regional report is an essential product of the IPCC. The value of the Regional Assessment in the AR5 was greatly enhanced with the inclusion of material from WGI and WGIII. A sharper, stronger focus on the regional report will further address regional needs, address developing country needs, and increase engagement of developing country scientists.

Timing: The process would work much better and impose much less burden on the community of authors, reviewers, and governments with a more rational timing. In particular, the IPCC should release a more steady stream of reports, **keeping approximately the current number of reports in each cycle**. Specifically, the IPCC released six major reports over the six years of the AR5 cycle, but concentrated four of them in a period of just over 14 months.

Below are two notional rationalized schedules, keeping the current conceptualization of the suite of products while enhancing emphasis on the Synthesis Report. The most rational timing would put a substantial gap (2 years or more) between WGI and WGII. This is essential because so much of the WGII assessment is based on published papers that build from the contents of the WGI report. As a consequence, the schedule for producing a WGII assessment is (1) completion of WGI report, (2) development of impact and adaptation analyses based on WGI report, (3) preparation, submission, and revision of impact and adaptation publications, and (4) initiation of WGII assessment. This leads to the two models below with (option 1) WGII following WGI by 2 years within

a cycle and (option 2) WGII coming early in the cycle, with the detailed impact and adaptation studies based on the WGI report from the previous cycle. With option 1, a 6 year cycle could be:

Year 1 (2016): No Special Report or Assessment Report

Year 2 (2017): Special Report 1

Year 3 (2018): WGI, Special Report 2

Year 4 (2019): WGIII, Regional Report

Year 5 (2020): WGII

Year 6 (2021): Synthesis Report

For option 2, the argument is also strong that the AR5-WGI assessment has not yet been utilized in impact and adaptation analysis, and that the next logical WGII assessment should be thorough impacts and adaptation studies grounded in the AR5-WGI. The logic of this argument leads to a schedule in which the WGII contribution appears early, and the Regional Report builds on it. A notional schedule would be:

Year 1 (2016): No Special Report or Assessment Report

Year 2 (2017): Special Report 1

Year 3 (2018): WGII

Year 4 (2019): WGIII, Special Report 2

Year 5 (2020): WGI, Regional Report

Year 6 (2021): Synthesis Report

These rationalized schedules would require adjusting the procedures to allow modest updating with new material in the Synthesis Report. Specifically, this would be material from relevant publications that appear after the release of the Working Group and Special Reports, facilitating a strengthened Synthesis Report.

A rationalized schedule is helpful for several reasons:

- It avoids compressing all of the approvals into a single year (relieving the burden on reviewers and governments)
- It allows the IPCC to contribute to the broader dialog on climate change in a sustained way (without going silent over extended periods)
- It strengthens the focus on a WGII report based explicitly on the most recent WGI assessment
- It features the regional report as a separate release (also relevant to enhancing the role of developing countries)
- It sets the stage for a SYR that can be more integrative and up to date.

B) Cross working group collaboration

Cross WG collaboration was generally quite good in the AR5. Additional efforts to improve it can be helpful, but they will benefit most from evolutionary rather than revolutionary changes. Special Reports and Technical Papers and authors working on two WG reports can all be helpful.

The real bottom line is that the effectiveness of cross-WG interactions depends strongly on the priorities of the co-chairs. The best way to get the WGs to collaborate effectively is to elect co-chairs who make effective collaboration a priority.

C) Other issues

a. Increase readability

The key to increasing readability is co-chairs, TSUs, and author teams that understand communication, prioritize it at all stages of drafting, and can respond creatively in the approval session environment. This is an area where training can be effective. For example, enhanced training about style, revisions, possibilities of multiple interpretations, and creative balancing of legitimate perspectives should be a priority in future assessments. While input from a professional writer/editor can be helpful, the WGII experience with a professional writer for simplifying the Frequently Asked Questions (FAQs) emphasized the value of early focus on clarity and precision.

b. Better use of technology

The IPCC should be alert to the changing nature of publications and the changing options for capitalizing on technology, while also being attentive to the special requirements associated with reports that need to be approved and with the need for effective distribution across all regions of the world. It is possible, for example, that animated figures or interactive graphics might be included in the Sixth Assessment Report (AR6), but this would be possible only if there were a decision to make the paper version a subset of the approved material. This is an area where effective handoffs to third parties might be effective, as long as everyone involved pays scrupulous attention to the accurately characterizing the boundary between approved IPCC material and third-party extensions.

II) Organization of the IPCC

A) Options for the IPCC structure

The main argument against moving impacts into the WGI report is that the impacts work takes some time after the completion of the climate model analyses. A more compelling option would be moving physical impacts (drought, storm surge, heavy precipitation, heat waves) into the WGII report, where they can be assessed in the context of the vulnerability and exposure of ecosystems and human systems. This would highlight the importance of these impacts while presenting them in a setting more consistent with their effects.

The current structure provides a robust foundation for cross-WG Special Reports and the Regional Assessment.

B) Options for the IPCC secretariat and TSUs

Training of TSUs can be enhanced. In the AR5, we were exceptionally fortunate to have vast experience and institutional memory. Since we may not have that good fortune in the future, it would be wise to have mechanisms in place for in-depth, early training of the TSUs and the Secretariat on the mechanics of managing the process and producing the reports.

Because an experienced TSU is so critical for supporting a robust assessment, establishing separate TSUs for SRs is a high risk approach. A more rational option is managing the schedule so that projects for one TSU do not overlap more than necessary.

C) Options for the selection and support of CLAs and Lead Authors (LAs)

Regional workshops (as conducted by WGII at the start of the AR5) can play an important role in broadening participation of diverse scientific communities in IPCC assessments. Regional workshops can also provide a combination of motivation and capacity building. Expanding the emphasis on gathering information and nominations from diverse sources within each country (including national scientific academies, international scientific organizations (e.g. START, IAI, Future Earth, UNEP), universities, and ministries) as well as through focal points has the potential to make a real difference. Enhanced author training can also be helpful.

Continued support for access to top-tier research libraries (as implemented by WGII in the AR5) is essential. Chapter scientists can play a critical role in managing references, assisting with literature reviews, and helping with accuracy checks. It would be great to see increased emphasis on and support for chapter scientists, if funding is available. For developing country authors, access to financial support for schedule flexibility could be very helpful, if funding is available.

III) Involvement of developing countries (DCs)

A strong option for increasing and highlighting the role of developing country scientists is to make the regional report a separate part of the AR6. Doing this automatically engages authors from around the world, captures literature in languages other than English, and focuses on the priorities in each region.

A) Options to improve the support for DC co-chairs

Finding support for a technical support team including at least one science officer in the home institution of each developing country co-chair should be a top priority for the IPCC in the AR6.

Many developing countries have the scientific capacity to host an effective TSU. It would be a big advance in IPCC operations to see the emergence of a TSU based in a developing country, perhaps with financing from a number of sources, including the host country, other supporting countries, and the Trust fund.

B) Options to improve developing country participation

Regional workshops (as conducted by WGII at the start of the AR5) can play an important role in broadening participation of diverse scientific communities in IPCC assessments. Regional workshops can also provide a combination of motivation and capacity building. Expanding the emphasis on gathering information and nominations from diverse sources within each country (including national scientific academies, international scientific organizations (e.g. START, IAI, Future Earth, UNEP), universities, and ministries) as well as through focal points has the potential to make a real difference. Enhanced author training (for authors from all countries) can also be helpful, especially for engendering a culture of mutual respect.

Continued support for access to top-tier research libraries (as implemented by WGII in the AR5) is essential. Chapter scientists can play a critical role in managing references, assisting with literature reviews, and helping with accuracy checks. It would be great to see increased emphasis on and support for chapter scientists, if funding is available.

Access to financial support for schedule flexibility could be very helpful, if funding is available. Ideally, developing country authors should be able to apply for funds to increase their capacity to participate fully, with selection based on need. A pool that combines funds from the Trust Fund and foundation grants could provide a mechanism for assuring against conflicts of interest.

C) Options for assessing non-English language literature

A separate regional report is a clear mechanism for picking up literature in languages other than English. Regional workshops (as conducted by WGII at the start of the AR5) can play an important role in broadening participation of and identifying literature from diverse scientific communities.

D) Options for support and training of young scientists

Regional workshops (as conducted by WGII at the start of the AR5) can play an important role in highlighting opportunities for participation in IPCC assessments. Regional workshops can also provide a combination of motivation and capacity building.

An expanded, funded chapter scientist program could enhance both the quality of the AR6 and the capacity of authors to contribute to the Seventh Assessment Report (AR7) and future reports. Placing one young scientist in the home institution of each CLA would provide excellent capacity building. At the same time, it would assure that each CLA has the support to cover operational details of the chapter and the availability to focus on the big picture. The chapter scientist model was very effective in the WGII contribution to the AR5, even though most of the chapter scientists were volunteers. Several developed countries already support chapter scientists working with CLAs. Extending the program to all CLAs might cost about \$1million a year. Given that this is about the scale of the foundation support for outreach during the AR5, obtaining this kind of funding might be possible, if the IPCC decides to use outside funding. A pool that combines funds from the Trust Fund and foundation grants could provide a mechanism for assuring against conflicts of interest.