

IPCC approves summary for policymakers, reserves on full scientific report on adaptation

KUALA LUMPUR, 3 April (Hilary Chiew) – The Intergovernmental Panel on Climate Change (IPCC) has formally approved the Summary for Policymakers of the assessment report of its Working Group II on ‘Climate Change 2014: Impacts, Adaptation and Vulnerability’.

However, the underlying full scientific and technical assessment was “accepted but not approved in detail” by the Panel made up of 195 member governments, nor by the Plenary of Working Group II, pending editing work on the agreed changes in the Summary for Policymakers (SPM).

The approval of the SPM by the IPCC was shortly after it was approved line-by-line by the Plenary of government representatives at the 10th session of the Working Group II (WGII). This was on Sunday afternoon (30 March), nearly a day beyond the planned five-day meeting of the IPCC’s 38th session from 25 to 29 March 2014 in Yokohama, Japan.

The delay was due to the high number of contentious issues that were discussed through contact groups. Most of the contact group discussions took long hours and more than one break-out session to reach consensus. In anticipation of the rigorous scrutiny by member governments, the meeting began holding night sessions that went past midnight from Wednesday to Saturday and with some hours without interpretation service.

The final draft of the full scientific and technical assessment was accepted with a caveat that it has to be read in conjunction with the document entitled ‘Climate Change 2014: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the IPCC 5th Assessment Report – Changes to the Underlying Scientific/Technical Assessment’. This is to ensure consistency with the approved SPM, known as the trickle-back process. This document lists the changes necessary to ensure consistency between the full WGII assessment report and the SPM which was approved line-by-line by government representatives. A listing of substantive edits additionally indicates corrections of errors for the final report. (See <http://ipcc-wg2.gov/AR5/report/final-drafts/>)

Towards the end of the meeting, the WGII Co-chair Dr. Christopher Fields (Stanford University, USA) proposed a document with six ‘headline statements’ to follow the practice of WGI (on The Science of Climate Change) whose SPM was approved by the IPCC on 27 September 2013. However, the Panel, largely on the basis that more time was needed to discuss the statements, rejected this proposal. As one government representative said, “I would not want to labour (on this) at this late hour, it is a pretty risky thing to do.”

(Headline statements comprise conclusions of the technical and scientific assessment undertaken and are primarily aimed for media use and the public, but are regarded by many governments as sensitive.)

IPCC Chair Dr. Rajendra K. Pachauri pointed out that as a large number of delegations had already left and some will be leaving in the afternoon (of Sunday, 30 March). He pleaded for the WGII session to be wrapped up as soon as possible, warning against a totally unfruitful situation with hugely reduced attendance for the conclusion of the 38th session of the IPCC that was to follow.

Although Dr. Field felt that the headlines could be easily approved, he concurred with a number of delegations that preferred to delete the proposed headline statements, noting that “we do not need snappy headlines to change the world”.

Around noon, the marathon meeting which reconvened after at 9:30 pm the night before, finally reached an agreement. However, several countries expressed their reluctance to approve the report without seeing a copy of the report with the amendments. The meeting was temporarily suspended to enable the secretariat to update changes to the report while the delegates went for their lunch break.

When the meeting resumed at 2:15pm, delegates were presented with the SPM document with the words “approved Text – Copyedit pending” on every page, while the underlying scientific and technical assessment report had the qualifier that it be read with a separate document that deals with the changes.

The 44-page SPM includes 18 pages of tables and figures. There are three main sections: ‘Observed impacts, vulnerability and adaptation in a complex and changing world’; ‘Future risks and opportunities for adaptation’; and ‘Managing future risks and building resilience’.

The underlying report is the result of a worldwide collaboration of 309 lead authors from 70 countries and received 50,492 comments from member governments. Coordinating lead authors and authors involved in the assessment were present to defend their findings as well as civil society organisations that attended as observers. The report is divided into two volumes – global and sectoral aspects in 20 chapters and regional aspects in 10 chapters.

The WGII assessment report was preceded by the report of WGI on the ‘physical science basis’ approved on 27 September 2013 in Stockholm, Sweden while the WGIII report which assesses ‘options for mitigating climate change’ will be released at the conclusion of the 39th session of the IPCC on 7 – 11 April in Berlin, Germany. The assessment reports from all three WGs will contribute towards the IPCC Fifth Assessment Report (AR5). The AR5 Synthesis Report will be considered by the IPCC in Copenhagen on 27 – 31 October 2014.

Like the WGI SPM, the WGII SPM was also closely examined by member governments on a line-by-line basis in long and intense exchanges among themselves and with the authors, resulting in many changes to the draft document.

Among the governments who intervened actively were Bolivia, Brazil, Saudi Arabia, St. Lucia, Mali, Tanzania, Venezuela, Mexico, Austria, the United States of America, the United Kingdom, Norway, Canada, Switzerland, Australia, Germany and the European Union.

Among the key messages of the SPM are:

- Risk of climate-related impacts results from the interaction of climate-related hazards (including hazardous events and trends) with the vulnerability and exposure of human and natural systems. Changes in both the climate system and socio-economic processes including adaptation and mitigation are drivers of hazards, exposure and vulnerability.

- In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Evidence of climate change impacts is strongest and most comprehensive for natural systems. Some impacts on human system have also been attributed to climate change, with a major or minor contribution of climate change distinguishable from other influences.
- In many regions, changing precipitation or melting snow and ice are altering hydrological systems, affecting water resources in terms of quantity and quality (medium confidence). Glaciers continue to shrink almost worldwide due to climate change (high confidence), affecting runoff and water resources downstream (medium confidence). Climate change is causing permafrost warming and thawing in high-latitude regions and in high elevation regions (high confidence).
- Many terrestrial, freshwater and marine species have shifted their geographic ranges, seasonal activities, migration patterns, abundances, and species interactions in response to on-going climate change (high confidence). While only a few recent species extinctions have been attributed as yet to climate change (high confidence), natural global climate change at rates slower than current anthropogenic climate change caused significant ecosystem shift and species extinction during the past millions of years (high confidence).
- Based on many studies covering a wide range of regions and crops, negative impacts of climate change on crop yields have been more common than positive impacts (high confidence). The smaller number of studies showing positive impacts relate mainly to high-latitude regions, though it is not yet clear whether the balance of impacts has been negative or positive in these regions (high confidence). Climate change has negatively affected wheat and maize yields for many regions and in the global aggregate (medium confidence). Effects on rice and soybean yield have been smaller in major production regions and globally, with a median change of zero across all available data, which are fewer for soy compared to the other crops. Observed impacts relate mainly to production aspects of food security rather than access or other components of food security. Since AR4, several periods of rapid food and cereal price increases following climate extremes in key producing regions indicate a sensitivity of current markets to climate extremes among other factors (medium confidence).
- At present, the worldwide burden of human ill-health from climate change is relatively small compared with effects of other stressors and is not well-quantified. However, there has been increase heat-related mortality and decreased cold-related mortality in some region as a result of warming (medium confidence). Local changes in temperature and rainfall have altered the distribution of some water-borne illnesses and disease-vector (medium confidence).
- Impacts from recent climate-related extremes, such as heat waves, droughts, floods, cyclones, and wildfire reveal significant vulnerability and exposure of some ecosystem and many human systems to current climate variability (very high confidence). Impacts of such climate-related extremes include alteration of ecosystems, disruption of food production and water supply, damage to infrastructure and settlements, morbidity and mortality, and consequences for mental health and human well-being. For countries at all level of development, these impacts are consistent with a significant lack of preparedness for current climate variability in some sectors.

- Climate-related hazards exacerbate other stressors, often with negative outcomes for livelihoods, especially for people living in poverty (high confidence).
- Adaptation is becoming embedded in some planning processes, with more limited implementation of responses (high confidence).
- Adaptation experience is accumulating across regions in the public and private sector and within communities (high confidence).
- Responding to climate-related risks involves decision-making in a changing-world, with continuing uncertainty about the severity and timing of climate change impacts and with limits to the effectiveness of adaptation (high confidence).
- Uncertainties about future vulnerability, exposure and responses of interlinked human and natural systems are large (high confidence). This motivates exploration of a wide range of socioeconomic futures in assessments of risks.
- Adaptation and mitigation choices in the near-term will affect the risks of climate change throughout the 21st century (high confidence).
- The number of scientific publications available for assessing climate change impacts, adaptation and vulnerabilities more than double between 2005 and 2010, with especially rapid increases in publications related to adaptation. Authorship of climate change publications from developing countries has increased, although it still represents a small fraction of the total.

The SPM also produced a framework summarising key risks across sectors and regions called Reasons for Concerns (RFCs) to illustrate the implications of warming and of adaptation limits for people, economies and ecosystems. The five integrative RFCs are: unique and threatened systems; extreme weather events; distribution of impacts; global aggregate impacts; and large-scale singular events.

The meeting also saw a territorial dispute raised by Japan and the Republic of Korea over the use of the term “Sea of Japan”, first in a break-out group and later with both countries reading out their respective statements in the plenary and requesting their statements to be recorded in the official report of the 38th session of the IPCC.

In response, IPCC Secretary Dr. Renate Christ informed that the secretariat confirmed that the official name is Sea of Japan and that both statements would be recorded.

China too raised its concern over some misrepresentation concerning autonomous provinces and administrative regions found in maps in the scientific and technical assessment report and that it has conveyed its concern to the Co-chairs. However, it was unhappy that the problem remained unsettled and hoped that during the revision process it could be resolved. It also wanted its statement to be recorded officially.

Christ said the standard UN disclaimer will appear on the cover page of the underlying report.

IPCC Vice-chair Mr. Ismail El Gizouli raised the issue of the absence of many delegations that had to leave before adopting the documents. He said the situation was attributable to the inflexibilities in reserving airplane tickets for the delegations (from developing countries) by the Secretariat.

In response, the Secretariat said there was indeed request for it to allow developing country delegations to stay for an extra day so that they are present when the approval

takes place. It further explained that a few delegates had declined to change their tickets, as they would like to return to their capitals before going to the WGIII meeting in Berlin next week.

The panel also decided to dedicate the report in memory of the deceased Prof Yuri A. Izrael, who was one of the former vice-chairs of the IPCC until 2008.

The IPCC WGII was co-chaired by Christopher Field (Stanford University, USA) and Vicente Barros (University of Buenos Aires, Argentina).