



**Subsidiary Body for Scientific and Technological Advice**

**Report of the Subsidiary Body for Scientific and  
Technological Advice on its fiftieth session, held in Bonn  
from 17 to 27 June 2019**

**Contents**

	<i>Paragraphs</i>	<i>Page</i>
Abbreviations and acronyms .....		4
I. Opening of the session (Agenda item 1).....	1–2	5
II. Organizational matters (Agenda item 2).....	3–9	5
A. Adoption of the agenda .....	3–4	5
B. Organization of the work of the session .....	5–8	7
C. Mandated events .....	9	7
III. Nairobi work programme on impacts, vulnerability and adaptation to climate change (Agenda item 3).....	10–34	7
IV. Terms of reference for the 2019 review of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (Agenda item 4).....	35–39	10
V. Koronivia joint work on agriculture (Agenda item 5).....	40–48	10
VI. Matters relating to science and review (Agenda item 6).....	49–86	12
A. Scope of the next periodic review of the long-term global goal under the Convention and of overall progress towards achieving it .....	49–53	12
B. Research and systematic observation.....	54–80	12
C. Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5 °C .....	81–86	16
VII. Matters relating to the forum on the impact of the implementation of response measures serving the Convention, the Kyoto Protocol and the Paris Agreement (Agenda item 7).....	87–94	17
VIII. Methodological issues under the Convention (Agenda item 8).....	95–111	18



A.	Training programme for review experts for the technical review of greenhouse gas inventories of Parties included in Annex I to the Convention	95–101	18
B.	Training programme for review experts for the technical review of biennial reports and national communications of Parties included in Annex I to the Convention.....	102–108	18
C.	Greenhouse gas data interface .....	109	19
D.	Common metrics to calculate the carbon dioxide equivalence of greenhouse gases .....	110	19
E.	Emissions from fuel used for international aviation and maritime transport .	111	20
IX.	Methodological issues under the Kyoto Protocol (Agenda item 9).....	112–113	20
A.	Land use, land-use change and forestry under Article 3, paragraphs 3 and 4, of the Kyoto Protocol and under the clean development mechanism .....	112	20
B.	Implications of the inclusion of reforestation of lands with forest in exhaustion as afforestation and reforestation clean development mechanism project activities .....	113	20
X.	Methodological issues under the Paris Agreement (Agenda item 10).....	114–129	20
A.	Common reporting tables for the electronic reporting of the information in the national inventory reports of anthropogenic emissions by sources and removals by sinks of greenhouse gases.....		20
B.	Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement.....		20
C.	Common tabular formats for the electronic reporting of the information on financial, technology development and transfer and capacity-building support provided and mobilized as well as support needed and received under Articles 9–11 of the Paris Agreement .....		20
D.	Outlines of the biennial transparency report, national inventory document and technical expert review report pursuant to the modalities, procedures and guidelines for the transparency framework for action and support .....		21
E.	Training programme for technical experts participating in the technical expert review .....	114–129	21
XI.	Matters relating to Article 6 of the Paris Agreement (Agenda item 11).....	130–136	23
A.	Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement .....		23
B.	Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement .....		23
C.	Work programme under the framework for non-market approaches referred to in Article 6, paragraph 8, of the Paris Agreement .....	130–136	23
XII.	Market and non-market mechanisms under the Convention (Agenda item 12).....	137	24
A.	Framework for various approaches .....		24
B.	Non-market-based approaches .....		24
C.	New market-based mechanism .....	137	24

---

XIII.	Cooperation with other international organizations (Agenda item 13).....	138–142	24
XIV.	Other matters (Agenda item 14).....	143	24
XV.	Closure of and report on the session (Agenda item 15).....	144–148	25
Annex	Terms of reference for the 2019 review of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts .....		26

## Abbreviations and acronyms

AC	Adaptation Committee
Annex I Party	Party included in Annex I to the Convention
CEOS	Committee on Earth Observation Satellites
CGMS	Coordination Group of Meteorological Satellites
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
COP	Conference of the Parties
CRF	common reporting format
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
GCF	Green Climate Fund
GCOS	Global Climate Observing System
GEF	Global Environment Facility
GFCS	Global Framework for Climate Services
GHG	greenhouse gas
IG <sup>3</sup> IS	Integrated Global Greenhouse Gas Information System
IMO	International Maritime Organization
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
KCI	Katowice Committee of Experts on the Impacts of the Implementation of Response Measures
KJWA	Koronivia joint work on agriculture
LEG	Least Developed Countries Expert Group
MPGs	modalities, procedures and guidelines for the transparency framework for action and support
NGO	non-governmental organization
NWP	Nairobi work programme on impacts, vulnerability and adaptation to climate change
RD	meeting of the research dialogue
SB	sessions of the subsidiary bodies
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SR1.5	Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5 °C
UNESCO-IOC	Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization
WCRP	World Climate Research Programme
WIGOS	World Meteorological Organization Integrated Global Observing System
WIM	Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts
WMO	World Meteorological Organization

## I. Opening of the session

(Agenda item 1)

1. SBSTA 50 was held at the World Conference Center Bonn in Bonn, Germany, from 17 to 27 June 2019.
2. The Chair of the SBSTA, Paul Watkinson (France), opened the session on Monday, 17 June, and welcomed all Parties and observers. He also welcomed Annela Anger-Kraavi (Estonia) as Vice-Chair and Stella Gama (Malawi) as Rapporteur of the SBSTA.

## II. Organizational matters

(Agenda item 2)

### A. Adoption of the agenda

(Agenda sub-item 2(a))

3. At its 1<sup>st</sup> meeting, on 17 June, following consultations led by the SBSTA Chair and in line with the resulting understanding among Parties, the SBSTA considered a note by the Executive Secretary containing the provisional agenda and annotations (FCCC/SBSTA/2019/1).
4. The SBSTA adopted the agenda as follows:<sup>1</sup>
  1. Opening of the session.
  2. Organizational matters:
    - (a) Adoption of the agenda;
    - (b) Organization of the work of the session;
    - (c) Mandated events.
  3. Nairobi work programme on impacts, vulnerability and adaptation to climate change.
  4. Terms of reference for the 2019 review of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts.\*
  5. Koronivia joint work on agriculture.\*
  6. Matters relating to science and review:
    - (a) Scope of the next periodic review of the long-term global goal under the Convention and of overall progress towards achieving it;\*
    - (b) Research and systematic observation;
    - (c) Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5 °C.
  7. Matters relating to the forum on the impact of the implementation of response measures serving the Convention, the Kyoto Protocol and the Paris Agreement.\*
  8. Methodological issues under the Convention:
    - (a) Training programme for review experts for the technical review of greenhouse gas inventories of Parties included in Annex I to the Convention;

---

<sup>1</sup> Joint SB 50 agenda items are marked with an asterisk.

- (b) Training programme for review experts for the technical review of biennial reports and national communications of Parties included in Annex I to the Convention;
  - (c) Greenhouse gas data interface;
  - (d) Common metrics to calculate the carbon dioxide equivalence of greenhouse gases;
  - (e) Emissions from fuel used for international aviation and maritime transport.
9. Methodological issues under the Kyoto Protocol:
- (a) Land use, land-use change and forestry under Article 3, paragraphs 3 and 4, of the Kyoto Protocol and under the clean development mechanism;
  - (b) Implications of the inclusion of reforestation of lands with forest in exhaustion as afforestation and reforestation clean development mechanism project activities.
10. Methodological issues under the Paris Agreement:
- (a) Common reporting tables for the electronic reporting of the information in the national inventory reports of anthropogenic emissions by sources and removals by sinks of greenhouse gases;
  - (b) Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement;
  - (c) Common tabular formats for the electronic reporting of the information on financial, technology development and transfer and capacity-building support provided and mobilized, as well as support needed and received, under Articles 9–11 of the Paris Agreement;
  - (d) Outlines of the biennial transparency report, national inventory document and technical expert review report pursuant to the modalities, procedures and guidelines for the transparency framework for action and support;
  - (e) Training programme for technical experts participating in the technical expert review.
11. Matters relating to Article 6 of the Paris Agreement:
- (a) Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement;
  - (b) Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement;
  - (c) Work programme under the framework for non-market approaches referred to in Article 6, paragraph 8, of the Paris Agreement.
12. Market and non-market mechanisms under the Convention:
- (a) Framework for various approaches;
  - (b) Non-market-based approaches;
  - (c) New market-based mechanism.
13. Cooperation with other international organizations.
14. Other matters.
15. Closure of and report on the session.

## B. Organization of the work of the session

(Agenda sub-item 2(b))

5. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> meeting. The Chair drew attention to the deadline for all groups to conclude their work by 1 p.m. on Wednesday, 26 June, to ensure the timely availability of draft conclusions for the closing plenary, which was to be convened on Thursday, 27 June. On a proposal by the Chair, the SBSTA agreed to proceed on that basis and in line with previously adopted SBI conclusions<sup>2</sup> on the timely conclusion of negotiations and related working practices.

6. Also at its 1<sup>st</sup> meeting, statements were made by representatives of nine intergovernmental organizations: EUMETSAT on behalf of CEOS and CGMS, GCOS, IMO, IPBES, IPCC, UNESCO-IOC, the WCRP Scientific Steering Committee, the Division for Ocean Affairs and the Law of the Sea on behalf of UN-Oceans, and WMO.

7. At the 2<sup>nd</sup> meeting of the SBSTA, on 17 June, which was held jointly with the 2<sup>nd</sup> meeting of the SBI, statements were made by representatives of 20 Parties,<sup>3</sup> including 14 on behalf of groups of Parties: the African Group; the Alliance of Small Island States; the Arab Group; Argentina, Brazil and Uruguay; the Bolivarian Alliance for the Peoples of Our America – Peoples' Trade Treaty; Brazil, South Africa, India and China; the Coalition for Rainforest Nations; the Environmental Integrity Group; the European Union and its member States; the Group of 77 and China; the Independent Association for Latin America and the Caribbean; the least developed countries; the Like-minded Developing Countries; and the Umbrella Group. Statements were also made on behalf of business and industry NGOs, environmental NGOs, farmers NGOs, indigenous peoples organizations, local government and municipal authorities, research and independent NGOs, women and gender NGOs and youth NGOs.<sup>4</sup>

8. At the 4<sup>th</sup> meeting of the SBSTA, on 27 June, which was held jointly with the 5<sup>th</sup> meeting of the SBI, closing statements were made by representatives of NGOs and representatives of Parties and groups of Parties (see para. 147 below).

## C. Mandated events

(Agenda sub-item 2(c))

9. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> meeting and took note of the information provided on the mandated events being held at the session, including an in-session thematic workshop of the Local Communities and Indigenous Peoples Platform, on the topic of enhancing the participation of local communities, in addition to indigenous peoples, in the Platform, and three informal dialogues related to the functions of the Platform, as per the mandate from COP 24 to organize in-session activities.<sup>5</sup>

## III. Nairobi work programme on impacts, vulnerability and adaptation to climate change

(Agenda item 3)

### 1. Proceedings

10. The SBSTA considered this agenda item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings on 27 June. It had before it document FCCC/SBSTA/2019/INF.1. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Monika Antosik (Poland) and

<sup>2</sup> FCCC/SBI/2014/8, paras. 213 and 218–221.

<sup>3</sup> The statements can be heard at <https://unfccc-sb50.streamworld.de/webcast/sb-joint-statements-plenary>.

<sup>4</sup> The texts of statements, including those not delivered at the plenary meeting, are available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.

<sup>5</sup> See decision 2/CP.24, paras. 22 and 23.

Majid Shafiepour (Islamic Republic of Iran). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

## 2. Conclusions

11. The SBSTA welcomed the annual report on progress in implementing activities under the NWP, prepared by the secretariat under the guidance of the SBSTA Chair.<sup>6</sup>

12. The SBSTA appreciated the reader-friendly format of the annual report and encouraged the secretariat to adopt a similar approach in future reports.

13. The SBSTA welcomed the NWP workplan for 2019–2020, contained in the annual report, noting that the workplan is indicative and flexible.

14. The SBSTA also welcomed the report on the 12<sup>th</sup> NWP Focal Point Forum,<sup>7</sup> on economic diversification, which was held under the overall guidance of the SBSTA Chair in conjunction with SBSTA 49.<sup>8</sup>

15. With a view to supporting the delivery of the mandated activities under the NWP, the SBSTA requested the secretariat to include in future NWP annual reports information on the lessons learned and challenges encountered in implementing the NWP workplans as well as on the experience of knowledge users in accessing and utilizing knowledge products developed under the NWP.<sup>9</sup>

16. The SBSTA also requested the secretariat to solicit feedback from knowledge users, including national focal points, on the accessibility, applicability and clarity of NWP knowledge products.

17. The SBSTA further requested that future NWP annual reports provide an overview of progress tracked against the NWP annual workplan using the NWP knowledge-to-action methodology.

18. The SBSTA requested the secretariat to prioritize the following NWP thematic areas mandated at SBSTA 48:<sup>10</sup>

- (a) Extreme weather events such as heatwaves, flash floods, sand and dust storms, cyclones and heavy precipitation;
- (b) Drought, water scarcity and land degradation neutrality;
- (c) Forests and grassland;
- (d) Oceans, coastal areas and ecosystems, including mega deltas, coral reefs and mangroves;
- (e) Agriculture and food security.

19. The SBSTA invited NWP partner organizations to disseminate information and knowledge to inform adaptation planning and action at the regional, national and subnational level, particularly in relation to the thematic areas highlighted in paragraph 18 above.

20. The SBSTA requested that cross-cutting issues be considered in relation to the activities under the NWP.

21. The SBSTA welcomed the contributions of the NWP and its partner organizations to the work of the LEG. It invited the secretariat, in collaboration with NWP partner organizations, to continue contributing to the efforts of the LEG to provide technical guidance

---

<sup>6</sup> FCCC/SBSTA/2019/INF.1.

<sup>7</sup> Available at [https://unfccc.int/sites/default/files/resource/Proceedings\\_2019.02.12\\_FPF%20summary\\_FINAL2.pdf](https://unfccc.int/sites/default/files/resource/Proceedings_2019.02.12_FPF%20summary_FINAL2.pdf).

<sup>8</sup> Further details on the 12<sup>th</sup> Focal Point Forum are available at <https://unfccc.int/event/12th-focal-point-forum-of-the-nairobi-work-programme>.

<sup>9</sup> As described in document FCCC/SBSTA/2019/INF.1, paras. 12–13.

<sup>10</sup> FCCC/SBSTA/2018/4, para. 21.



and advice in the context of national adaptation plans in line with the NWP indicative workplan.

22. The SBSTA welcomed the advice provided by the AC<sup>11</sup> on the delivery of NWP mandates that relate to the work programmes of the constituted bodies and on opportunities to align efforts with relevant bodies, workstreams and institutional arrangements,<sup>12</sup> and requested the secretariat to implement that advice.

23. Further to the advice of the AC referred to in paragraph 22 above, the SBSTA also requested the secretariat to collaborate with NWP partner organizations in contributing to the work mandated to the AC by the CMA<sup>13</sup> as well as to the adaptation knowledge related activities set out in the AC three-year workplan,<sup>14</sup> including:

(a) Developing and updating an inventory of methodologies for assessing adaptation needs;

(b) Sharing experience and lessons learned from developing and implementing monitoring and evaluation systems.

24. The SBSTA invited the AC to consider, as appropriate, the work of the NWP when implementing its mandates related to the adaptation communication and the global stocktake.

25. The SBSTA requested the secretariat, under the guidance of the SBSTA Chair, to communicate information on the work and mandates of the NWP to the relevant constituted bodies and institutional arrangements and to invite them to consider collaborating with the NWP, as appropriate.

26. The SBSTA welcomed the collaboration of NWP partner organizations and relevant organizations on bridging priority knowledge gaps in the context of the Lima Adaptation Knowledge Initiative<sup>15</sup> and welcomed the continued partnerships, including the collaboration of universities around the world with governments and communities on the ground to help validate information and communicate knowledge gaps in locally relevant ways.

27. The SBSTA requested the secretariat to collaborate with partners and relevant organizations in the thematic area of oceans, including on organizing the 13<sup>th</sup> NWP Focal Point Forum, on the topic of oceans, in conjunction with SBSTA 51 (December 2019).

28. The SBSTA also requested the secretariat to invite the Intergovernmental Panel on Climate Change to share the findings contained in its forthcoming Special Report on the Ocean and Cryosphere in a Changing Climate at the 13<sup>th</sup> NWP Focal Point Forum.

29. The SBSTA further requested the secretariat to explore ways of scheduling the NWP Focal Point Forums to enable the participation of Parties and NWP partner organizations.

30. The SBSTA invited all Parties, NWP partners and other relevant organizations to provide support to enable the participation of relevant experts, including from developing countries, in the NWP Focal Point Forums.

31. The SBSTA requested the secretariat to strengthen existing modalities for and explore new ways of disseminating and communicating existing and new knowledge products, including tools and methodologies.

32. The SBSTA expressed its appreciation to the European Union and Japan for providing financial support for the implementation of activities under the NWP.

33. The SBSTA invited Parties, NWP partners and other relevant organizations to continue providing financial and in-kind support, as appropriate, for the implementation of activities under the NWP.

34. The SBSTA took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in paragraphs 13, 21, 22, 26, 27 and 31 above and

<sup>11</sup> As invited in document FCCC/SBSTA/2018/4, para. 19.

<sup>12</sup> See [https://unfccc.int/sites/default/files/resource/20190411\\_ac15\\_letter%20NWP%20advice.pdf](https://unfccc.int/sites/default/files/resource/20190411_ac15_letter%20NWP%20advice.pdf).

<sup>13</sup> See AC document AC/2019/2, available at <https://unfccc.int/node/193710>.

<sup>14</sup> Available at <https://unfccc.int/process/bodies/constituted-bodies/adaptation-committee-ac/workplan>.

<sup>15</sup> See [https://www4.unfccc.int/sites/NWPStaging/Documents/LAKI\\_e-pub\\_2018.pdf](https://www4.unfccc.int/sites/NWPStaging/Documents/LAKI_e-pub_2018.pdf).

requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

#### **IV. Terms of reference for the 2019 review of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts**

(Agenda item 4)

##### **1. Proceedings**

35. The SBSTA considered this agenda item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. It had before it document FCCC/TP/2019/1 and the submissions related to the item. At its 1<sup>st</sup> meeting, the SBSTA agreed that the item would be considered together with the equally titled SBI 50 agenda item 9 in informal consultations co-facilitated by Marianne Karlsson (Norway) and Pepetua Latasi (Tuvalu). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

##### **2. Conclusions**

36. In accordance with decision 4/CP.22, paragraph 2(d), the SBSTA and the SBI finalized the terms of reference for the 2019 review of the WIM.

37. The SBSTA and the SBI agreed to undertake the review at SB 51 (December 2019) based on the terms of reference contained in the annex and forward the output of the review to the appropriate body or bodies.<sup>16</sup>

38. The SBSTA and the SBI invited Parties and other stakeholders to submit via the submission portal<sup>17</sup> by 16 October their views on the review of the WIM, on the basis of the terms of reference, for consideration at SB 51.

39. The SBSTA and the SBI took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in the annex and requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

#### **V. Koronivia joint work on agriculture**

(Agenda item 5)

##### **1. Proceedings**

40. The SBSTA considered this agenda item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. It had before it document FCCC/SB/2019/INF.1 and the submissions related to the item. At its 1<sup>st</sup> meeting, the SBSTA agreed that the item would be considered together with the equally titled SBI 50 agenda item 8 in informal consultations co-facilitated by Heikki Granholm (Finland) and Milagros Sandoval (Peru). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

##### **2. Conclusions**

41. The SBSTA and the SBI continued their joint work on addressing issues related to agriculture.<sup>18</sup>

42. The SBSTA and the SBI welcomed the report on the first Koronivia road map in-session workshop, on topic 2(a) (modalities for implementation of the outcomes of the five in-session workshops on issues related to agriculture and other future topics that may arise

---

<sup>16</sup> Nothing in these conclusions or the terms of reference prejudices Parties' views or prejudices outcomes on matters related to the governance of the WIM.

<sup>17</sup> <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.

<sup>18</sup> In line with decision 4/CP.23, para. 1.

from this work), which was held in conjunction with SB 49. The SBSTA and the SBI considered the workshop report and agreed to:

(a) Recognize that information provided during the workshop and in the workshop report<sup>19</sup> and other information provide a mapping of activities and mandates of constituted bodies;

(b) Encourage the continued involvement of constituted bodies and financing entities in the KJWA, highlighting the potential for creating interlinkages that lead to enhanced action and improvements in implementation;

(c) Recognize that some modalities for implementation already exist and invite Parties to scale up implementation;

(d) Recognize the importance of the continued involvement of scientific and technical knowledge in transforming the agriculture sector, enabling conditions, the crucial role of farmers, youth, local communities and indigenous peoples, including gender considerations, and of meeting the needs of farmers and food systems;

(e) Welcome the presentation made by the GCF on its work on issues relating to agriculture, and welcome the subsequent clarification by the secretariat on the process for Parties to submit their views to the Standing Committee on Finance, in line with existing procedures,<sup>20</sup> on elements to be taken into account in developing guidance for the operating entities of the Financial Mechanism.

43. The SBSTA and the SBI also welcomed the two Koronivia road map workshops held at these sessions, on topic 2(b) (methods and approaches for assessing adaptation, adaptation co-benefits and resilience) and 2(c) (improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management), and looked forward to considering the reports on the workshops at SB 51. They further welcomed the submissions from Parties and observers that served as input to the workshops.<sup>21</sup>

44. The SBSTA and the SBI welcomed the participation in the workshops of observers and representatives of the operating entities of the Financial Mechanism (GEF and GCF), the Adaptation Fund, the GEF-administered Least Developed Countries Fund, and the constituted bodies under the Convention. They noted with appreciation the work already undertaken on issues related to agriculture by those entities, and recalled inviting them to contribute to the work and participate in the workshops set out in the Koronivia road map.<sup>22</sup>

45. The SBSTA and the SBI requested the secretariat to organize, in addition to the workshops mandated in the Koronivia road map and subject to the availability of supplementary funds, an intersessional workshop between SB 51 and 52 (June 2020) to contribute to delivering the outcomes of the KJWA, taking into consideration the vulnerabilities of agriculture to climate change and approaches to addressing food security, and to prepare a report on the workshop for consideration at SB 52. They took note of the importance of issues, including, but not limited to, farmers, gender, youth, and local communities and indigenous peoples. They welcomed with appreciation the offer of the Government of New Zealand to host the workshop. They requested the secretariat to take into account the following elements when organizing the workshop:

(a) Sustainable land and water management, including integrated watershed management strategies, to ensure food security;

(b) Strategies and modalities to scale up implementation of best practices, innovations and technologies that increase resilience and sustainable production in agricultural systems according to national circumstances.

<sup>19</sup> FCCC/SB/2019/INF.1.

<sup>20</sup> Decision 5/CP.24, paras. 9–10, and decision 2/CP.17, para. 121(c).

<sup>21</sup> Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.

<sup>22</sup> FCCC/SBSTA/2018/4, para. 64; FCCC/SBI/2018/9, para. 42; FCCC/SBSTA/2018/8, para. 23; and FCCC/SBI/2018/22, para. 41.

46. The SBSTA and the SBI recalled their invitation<sup>23</sup> to Parties and observers to submit via the submission portal by 30 September 2019 their views on topic 2(d) of the Koronivia road map (improved nutrient use and manure management towards sustainable and resilient agricultural systems), on which a workshop will be held in conjunction with SB 51.

47. The SBSTA and the SBI agreed to continue consideration of this matter at SB 51.

48. The SBSTA and the SBI took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in paragraph 45 above. They requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

## **VI. Matters relating to science and review**

(Agenda item 6)

### **A. Scope of the next periodic review of the long-term global goal under the Convention and of overall progress towards achieving it**

(Agenda sub-item 6(a))

#### **1. Proceedings**

49. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed that the sub-item would be considered together with the equally titled SBI 50 agenda item 7 in informal consultations co-facilitated by Leon Charles (Grenada) and Madoka Yoshino (Japan). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

#### **2. Conclusions**

50. The SBSTA and the SBI recalled decisions 1/CP.16, 2/CP.17, 1/CP.18, 10/CP.21 and 18/CP.23, and continued their consideration of the scope of the next periodic review at this session.

51. The SBSTA and the SBI noted that Parties exchanged their views on this matter at this session.<sup>24</sup>

52. The SBSTA and the SBI took note of decision 19/CMA.1 on the global stocktake, the Talanoa Dialogue undertaken in 2018<sup>25</sup> and the ongoing technical examination processes.<sup>26</sup>

53. The SBSTA and the SBI agreed to continue consideration of this matter at SB 51 with a view to forwarding a recommendation for consideration at COP 25.

### **B. Research and systematic observation**

(Agenda sub-item 6(b))

#### **1. Proceedings**

54. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. It had before it the submissions related to the sub-item. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Richard Muyungi (United Republic of Tanzania) and Christiane Textor (Germany). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

---

<sup>23</sup> FCCC/SBSTA/2018/4, annex I; and FCCC/SBI/2018/9, annex I.

<sup>24</sup> See <https://unfccc.int/documents/196732>.

<sup>25</sup> See decision 1/CP.24, section V.

<sup>26</sup> See <http://unfccc.int/resource/climateaction2020/tep/index.html> and <https://unfccc.int/topics/adaptation-and-resilience/workstreams/technical-examination-process-on-adaptation-tep-a>.

## 2. Conclusions

55. The SBSTA noted with appreciation the activities and information reported in the statements delivered at SBSTA 49<sup>27</sup> by representatives of EUMETSAT on behalf of CEOS and CGMS, GCOS, the Inter-American Institute for Global Change Research, the IPCC, WCRP and WMO; and at this session<sup>28</sup> by representatives of EUMETSAT on behalf of CEOS and CGMS, GCOS, the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, the IPCC, UN-Oceans, WCRP and WMO.

56. The SBSTA welcomed the submissions received at SBSTA 49 from CEOS and CGMS, and WMO<sup>29</sup> and at this session from WMO.<sup>30</sup>

### *Systematic observation*

57. The SBSTA, recalling its conclusions from SBSTA 45 on the Earth Information Day held in 2016,<sup>31</sup> noted the submissions from Parties containing their views on the Earth Information Day and the organization by the secretariat of similar events.<sup>32</sup>

58. The SBSTA invited the secretariat to organize similar events at future sessions of the SBSTA at which systematic observation is considered, as appropriate, starting at SBSTA 51, recognizing that this could be a valuable opportunity for exchanging information on the state of the global climate system and developments in systematic observation. The SBSTA also invited Parties and relevant organizations to submit their views on possible themes for the next such event via the submission portal by 5 September 2019.

59. The SBSTA welcomed the adoption by the WMO Executive Council at its seventieth session of the science implementation plan for a new IG<sup>3</sup>IS.<sup>33</sup> The SBSTA recognized that IG<sup>3</sup>IS is an innovative science-based framework that supports the needs of a broad range of users by combining atmospheric observations with other sources of information to enhance understanding of GHG concentrations and fluxes at multiple spatial scales, and encouraged the use of the framework.<sup>34</sup>

60. The SBSTA noted the country support initiative contained in the WMO resolution on closing the capacity gap, scaling up the effective partnerships for investments in sustainable and cost-efficient infrastructure and service delivery.<sup>35</sup>

61. Recalling the conclusions of SBSTA 45<sup>36</sup> and 47,<sup>37</sup> the SBSTA:

(a) Welcomed the joint GCOS–WIGOS Pacific region observing network plan and urged Parties and relevant organizations to support implementation of the plan;

(b) Also welcomed the joint GCOS–Copernicus–WIGOS–GFCS regional workshop, organized in collaboration with the secretariat and held from 29 October to 2 November 2018 in Entebbe, Uganda, on improving the value chain from observations to

<sup>27</sup> Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx> and <https://unfccc.int/node/820>.

<sup>28</sup> Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx> and <https://unfccc.int/node/17727>.

<sup>29</sup> As footnote 27 above.

<sup>30</sup> As footnote 28 above.

<sup>31</sup> FCCC/SBSTA/2016/4, para. 44.

<sup>32</sup> As footnote 27 above.

<sup>33</sup> See decision 8 (EC-70) of the WMO Executive Council, available at [https://library.wmo.int/index.php?lvl=notice\\_display&id=20626#.W-yYoTFryM8](https://library.wmo.int/index.php?lvl=notice_display&id=20626#.W-yYoTFryM8).

<sup>34</sup> See <https://ig3is.wmo.int>.

<sup>35</sup> See draft resolution 8.3, annex 2, of the eighteenth World Meteorological Congress, available at <http://meetings.wmo.int/cg-18/English/Forms/AllItems.aspx> (under “provisional report”).

<sup>36</sup> FCCC/SBSTA/2016/4, para. 39.

<sup>37</sup> FCCC/SBSTA/2017/7, para. 55(c), in regard to support available via the operating entities of the Financial Mechanism as well as other relevant organizations and channels to support the GCOS regional workshops and projects identified in the resulting implementation plans.

climate services to support climate policy, adaptation and mitigation in East Africa, and noted the key messages from the workshop;<sup>38</sup>

(c) Further welcomed the training provided at the workshop by Copernicus on using the Climate Data Store;<sup>39</sup>

(d) Noted that GCOS plans to hold a regional workshop for the Caribbean in Belize in 2019.

62. The SBSTA recognized the value of providing free and open access to systematic observation data through the relevant international systems, such as WIGOS,<sup>40</sup> for improving, inter alia, national climate prediction and climate services. It urged Parties to make relevant data available through these systems.

63. The SBSTA noted the importance of the work of the observation community and the wider scientific community in line with the GCOS implementation plan on essential climate variables, which are fundamental to climate indicators, and climate services and decision-making on mitigation and adaptation. The SBSTA invited WMO and other relevant organizations to continue to support in a coordinated manner the development of climate services, taking into account the GFCS implementation plan.

64. The SBSTA urged Parties to enhance the development of climate services, including by:

(a) Working with and supporting the ongoing activities of relevant organizations such as WMO and CEOS/CGMS, frameworks such as GFCS and programmes such as GCOS and WCRP, as well as other relevant initiatives;

(b) Addressing gaps and needs related to systematic observation;

(c) Making use of the value chain from observations to climate services to support and strengthen project development and decision-making on adaptation and mitigation, including by sharing knowledge and information through global, regional, national and local mechanisms.

65. The SBSTA encouraged Parties and relevant organizations to maintain, strengthen and enhance systematic observation through in situ as well as remote sensing observations, and archiving those data and information, in order to address gaps, needs and challenges in many domains, including in relation to oceans and as identified, inter alia, in the statements, submissions and reports referred to in paragraphs 55 and 56 above and the summary report on RD 10 prepared by the SBSTA Chair.<sup>41</sup>

66. The SBSTA emphasized the continued need to secure funding to meet the essential needs for global climate observation under the Convention on a long-term basis.

#### *Research*

67. The SBSTA welcomed the provision of the summary report on RD 10 prepared by the SBSTA Chair.<sup>42</sup>

68. The SBSTA noted the views submitted by Parties on possible topics and considerations for the eleventh and future meetings of the research dialogue.<sup>43</sup> It also noted the information note on RD 11 prepared by the SBSTA Chair.<sup>44</sup>

---

<sup>38</sup> See <https://gcoss.wmo.int/en/regional-workshops/east-africa-workshop>.

<sup>39</sup> See <https://cds.climate.copernicus.eu#!/home>.

<sup>40</sup> Coordinated by WMO; see <https://public.wmo.int/en/about-us/vision-and-mission/wmo-integrated-global-observing-system>.

<sup>41</sup> See <https://unfccc.int/documents/183867>, inter alia, paras. 62 and 139–142.

<sup>42</sup> Available at <https://unfccc.int/documents/183867>.

<sup>43</sup> Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.

<sup>44</sup> Available at [https://unfccc.int/sites/default/files/resource/RD11\\_InformationNote.pdf](https://unfccc.int/sites/default/files/resource/RD11_InformationNote.pdf).



69. The SBSTA expressed its appreciation to the secretariat and the SBSTA Chair for organizing RD 11, held on 20 June 2019, on the topic of science for transformation, and for its aim to promote discussion at the science–policy interface.<sup>45</sup>

70. The SBSTA welcomed the four themes of RD 11:

(a) Transformation of energy and other sectoral systems to achieve the purpose and long-term goals of the Paris Agreement;

(b) Transformative adaptation and climate-resilient development;

(c) Changing levels of risk and the attribution of extreme climate events and impacts to climate change;

(d) Role of the ocean in the climate system.

71. The SBSTA expressed its appreciation to Parties and all participating research programmes and organizations and their representatives for their contributions to RD 11.<sup>46</sup>

72. The SBSTA welcomed the inclusion of breakout groups as a new format in the research dialogue, and the diverse and informative set of posters and presentations. It recognized the interesting exchanges of information and the value of the dialogue.

73. The SBSTA emphasized the importance of hearing directly from representatives of the IPCC and national, regional and international climate change research programmes and organizations for the enhancement of knowledge exchange, and noted the value of hearing directly from representatives of the communities and peoples most vulnerable to the current and projected impacts of climate change. It encouraged the secretariat to continue to invite a wide range of representatives, including from indigenous peoples and different scientific disciplines, to future meetings of the research dialogue.

74. The SBSTA noted the release of the *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*<sup>47</sup> and the SBSTA–IPCC special event held on the refinement at this session.

75. The SBSTA acknowledged the ongoing efforts of the IPCC in its sixth assessment cycle.<sup>48</sup>

76. Noting the value of multiple knowledge systems, which include traditional knowledge, and the importance of the co-production of knowledge for developing transformative solutions for addressing climate change, the SBSTA encouraged Parties, academia, research institutions and the wider scientific community, national and subnational institutions, local communities and indigenous peoples, and other communities of practice to work together, as applicable, to create such solutions for addressing climate change. The SBSTA noted that the co-production of knowledge may strengthen research related to addressing and responding to climate change, including through the possible engagement of the research community in the relevant activities of the Local Communities and Indigenous Peoples Platform.<sup>49</sup>

77. The SBSTA encouraged Parties, research programmes and organizations to continue to support research as identified under this and other agenda items<sup>50</sup> and as identified by constituted bodies under the Convention.

<sup>45</sup> The information note, agenda, presentations and other information related to RD 11 are available at <https://unfccc.int/node/196130>.

<sup>46</sup> Including the panellists, representing Belize, Chile, Climate-KIC, the Indigenous Peoples of Africa Co-ordinating Committee, the Institute for Sustainable Development and International Relations, the IPCC, Hokkaido University in Japan, the Potsdam Institute for Climate Impact Research, the SIKU team of the Arctic Eider Society and Inuit Circumpolar Council, South Africa and WCRP.

<sup>47</sup> Available at <https://www.ipcc.ch/report/2019-refinement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories>.

<sup>48</sup> Including on its Special Report on the Ocean and Cryosphere in a Changing Climate, Special Report on Climate Change and Land, and Sixth Assessment Report; see <https://www.ipcc.ch/>.

<sup>49</sup> See <https://unfccc.int/node/65106>.

<sup>50</sup> Such as under the NWP; see <https://unfccc.int/nwp>.

78. Noting the variety of local and sectoral research efforts presented during RD 11, the SBSTA invited Parties and relevant organizations to consider those efforts in relation to their response strategies to climate change.

79. The SBSTA requested its Chair to prepare, with the assistance of the secretariat, a summary report on RD 11, to be made available prior to SBSTA 51.

80. The SBSTA invited Parties to submit via the submission portal, by 31 January 2020, their views on possible topics and considerations for the meetings of the research dialogue to be held in conjunction with SBSTA 52 (June 2020) and beyond, taking into account previous themes and presentations, the outcomes of previous research dialogue meetings, and the themes suggested for future meetings.

## **C. Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5 °C**

(Agenda sub-item 6(c))

### **1. Proceedings**

81. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Ms. Anger-Kraavi and Ladislaus Chang'a (United Republic of Tanzania). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below. At the same meeting, statements were made by representatives of four Parties, including three on behalf of groups of Parties: the Alliance of Small Island States, the Environmental Integrity Group, and the Independent Association for Latin America and the Caribbean.<sup>51</sup>

### **2. Conclusions**

82. The SBSTA considered the SR1.5.<sup>52</sup>

83. The SBSTA recalled decision 1/CP.24, paragraphs 24–29, and noted Parties' engagement and exchange of views on the SR1.5 at this session.

84. The SBSTA expressed its appreciation and gratitude to the IPCC and the scientific community for responding to the invitation of the COP<sup>53</sup> and providing the SR1.5, which reflects the best available science.

85. The SBSTA thanked the Chairs of the SBSTA and the IPCC for the SBSTA–IPCC special event titled “Unpacking the new scientific knowledge and key findings in the IPCC Special Report on Global Warming of 1.5°C”<sup>54</sup> held at COP 24 and noted the summary report<sup>55</sup> that they prepared on the event.

86. The SBSTA noted the views expressed on how to strengthen scientific knowledge on global warming of 1.5 °C and agreed that its work under this agenda sub-item has been completed.

---

<sup>51</sup> Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.

<sup>52</sup> IPCC. 2018. *Global Warming of 1.5 °C: An IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Geneva: IPCC. Available at <http://ipcc.ch/report/sr15/>.

<sup>53</sup> Decision 1/CP.21, para. 21.

<sup>54</sup> See <https://unfccc.int/event/sbsta-ipcc-special-event-unpacking-the-new-scientific-knowledge-and-key-findings-in-the-ipcc-special>.

<sup>55</sup> Available at <https://unfccc.int/documents/195572>.



## VII. Matters relating to the forum on the impact of the implementation of response measures serving the Convention, the Kyoto Protocol and the Paris Agreement

(Agenda item 7)

### 1. Proceedings

87. The SBSTA considered this agenda item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. It had before it the submissions related to the item. At the 1<sup>st</sup> meeting, the SBSTA agreed that the item would be considered together with the equally titled SBI 50 agenda item 14, and that the forum would be convened as a contact group co-chaired by Xolisa Ngwadla (South Africa) and Delano Ruben Verwey (Netherlands). At the same meeting, the Chair invited a co-chair of the KCI to make a brief intervention on the highlights of the 1<sup>st</sup> KCI meeting. At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

### 2. Conclusions

88. The SBSTA and the SBI convened the meeting of the forum on the impact of the implementation of response measures in accordance with decisions 7/CMA.1, 7/CP.24 and 3/CMP.14.

89. The forum welcomed the 1<sup>st</sup> meeting of the KCI, held in conjunction with these sessions, which supports the work of the forum in accordance with decision 7/CMA.1, and noted the progress made at the 1<sup>st</sup> KCI meeting.

90. The SBSTA and the SBI took note of the draft rules of procedure prepared by the KCI<sup>56</sup> and invited the KCI to append the draft rules of procedure to its annual report to the forum with a view to the forum considering them during SB 51 and forwarding them for adoption by the COP, the CMP and the CMA.

91. The SBSTA and the SBI requested the forum to finalize the six-year workplan of the forum and the KCI at SB 51.

92. The SBSTA and the SBI took note of the informal documents, which have no hierarchy over each other, which were prepared by the co-chairs on their own responsibility, which have no status and do not reflect the consensus views of Parties.<sup>57</sup>

93. The SBSTA and the SBI agreed that the KCI, at its 2<sup>nd</sup> meeting, will exchange lessons learned and best practices on analysis and assessment of positive and negative impacts of the implementation of response measures by Parties and report to the forum in accordance with paragraph 4(j) of the annex to decision 7/CMA.1.

94. The SBSTA and the SBI took note of the estimated budgetary implications of the actions to be undertaken by the secretariat referred to in paragraph 93 above and requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

<sup>56</sup> Available at <https://unfccc.int/documents/196827>.

<sup>57</sup> Document 1, available at <https://unfccc.int/documents/197860>, and document 2, available at <https://unfccc.int/documents/197861>.

## VIII. Methodological issues under the Convention

(Agenda item 8)

### A. Training programme for review experts for the technical review of greenhouse gas inventories of Parties included in Annex I to the Convention

(Agenda sub-item 8(a))

#### 1. Proceedings

95. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Jae Hyuk Jung (Republic of Korea) and Harry Vreuls (Netherlands). At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

#### 2. Conclusions

96. As agreed at SBSTA 46,<sup>58</sup> the SBSTA initiated its assessment of the results of the training programme for review experts for the technical review of GHG inventories of Annex I Parties.

97. The SBSTA noted with appreciation the special event organized by the secretariat at this session on the training programme for experts participating in the technical expert review of information submitted by Annex I Parties and the technical analysis of biennial update reports submitted by Parties not included in Annex I to the Convention.

98. The SBSTA acknowledged the relevance of the training programme referred to in paragraph 96 above in contributing to the quality and consistency of the technical reviews of GHG inventories of Annex I Parties. It noted that the secretariat has received positive feedback from Parties and experts on the scope and focus of the training programme courses, and agreed that there is currently no need to further develop and enhance the training materials.

99. Noting that the implementation of the training programme was due to end in 2020,<sup>59</sup> the SBSTA agreed to extend it to the end of 2022.

100. The SBSTA also agreed to assess the continued utility and implementation period of the training programme at SBSTA 54 (May–June 2021), taking into account paragraphs 42 and 44 of decision 1/CP.24, the number of reviews for which reviewers might be needed after 2024, and the outcome of the deliberations of Parties on the training programme for technical experts participating in the technical expert review of biennial transparency reports under the Paris Agreement.

101. The SBSTA took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in paragraph 99 above and requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

### B. Training programme for review experts for the technical review of biennial reports and national communications of Parties included in Annex I to the Convention

(Agenda sub-item 8(b))

#### 1. Proceedings

102. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by

---

<sup>58</sup> FCCC/SBSTA/2017/4, para. 79.

<sup>59</sup> FCCC/SBSTA/2017/4, para. 80.

Mr. Jung and Mr. Vreuls. At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

## 2. Conclusions

103. As agreed at SBSTA 46,<sup>60</sup> the SBSTA initiated its consideration of the need to extend the implementation of the training programme for review experts for the technical review of biennial reports and national communications of Annex I Parties.

104. The SBSTA noted with appreciation the special event organized by the secretariat at this session on the training programme for experts participating in the technical review of information submitted by Annex I Parties and the technical analysis of biennial update reports submitted by Parties not included in Annex I to the Convention.

105. The SBSTA acknowledged the contribution of the training programme referred to in paragraph 103 above to the quality and consistency of the technical reviews of biennial reports and national communications of Annex I Parties.

106. Noting that the implementation of the training programme was due to end in 2020,<sup>61</sup> the SBSTA agreed to extend it to the end of 2022.

107. The SBSTA also agreed to assess the continued utility and implementation period of the training programme at SBSTA 54, taking into account paragraphs 42 and 44 of decision 1/CP.24, the number of reviews for which reviewers might be needed after 2024, and the outcome of the deliberations of Parties on the training programme for technical experts participating in the technical expert review of biennial transparency reports under the Paris Agreement.

108. The SBSTA took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in paragraph 106 above and requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

## C. Greenhouse gas data interface

(Agenda sub-item 8(c))

### Proceedings

109. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Takeshi Enoki (Japan) and Clifford Mahlung (Jamaica). At its 3<sup>rd</sup> meeting, the SBSTA noted that Parties had not been able to agree on conclusions. In accordance with rule 16 of the draft rules of procedure being applied, the matter will be included in the provisional agenda for SBSTA 51.

## D. Common metrics to calculate the carbon dioxide equivalence of greenhouse gases

(Agenda sub-item 8(d))

### Proceedings

110. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Mr. Enoki and Mr. Mahlung. At its 3<sup>rd</sup> meeting, the SBSTA noted that Parties had not been able to agree on conclusions. In accordance with rule 16 of the draft rules of procedure being applied, the matter will be included in the provisional agenda for SBSTA 51.

<sup>60</sup> FCCC/SBSTA/2017/4, para. 86.

<sup>61</sup> Decision 19/CP.23.

**E. Emissions from fuel used for international aviation and maritime transport**

(Agenda sub-item 8(e))

**Proceedings**

111. The SBSTA considered this agenda sub-item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to consider the matter in informal consultations co-facilitated by Luiz de Andrade (Brazil) and Bert van Loon (Belgium). At its 3<sup>rd</sup> meeting, the SBSTA noted that Parties had not been able to agree on conclusions. In accordance with rule 16 of the draft rules of procedure being applied, the matter will be included in the provisional agenda for SBSTA 51.

**IX. Methodological issues under the Kyoto Protocol**

(Agenda item 9)

**A. Land use, land-use change and forestry under Article 3, paragraphs 3 and 4, of the Kyoto Protocol and under the clean development mechanism**

(Agenda sub-item 9(a))

112. At its 1<sup>st</sup> meeting, the SBSTA agreed to defer consideration of this matter to SBSTA 52.

**B. Implications of the inclusion of reforestation of lands with forest in exhaustion as afforestation and reforestation clean development mechanism project activities**

(Agenda sub-item 9(b))

113. At its 1<sup>st</sup> meeting, the SBSTA agreed to defer consideration of this matter to SBSTA 52.

**X. Methodological issues under the Paris Agreement**

(Agenda sub-items 10(a–e))

**A. Common reporting tables for the electronic reporting of the information in the national inventory reports of anthropogenic emissions by sources and removals by sinks of greenhouse gases**

**B. Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement**

**C. Common tabular formats for the electronic reporting of the information on financial, technology development and transfer and capacity-building support provided and mobilized, as well as support needed and received, under Articles 9–11 of the Paris Agreement**

**D. Outlines of the biennial transparency report, national inventory document and technical expert review report pursuant to the modalities, procedures and guidelines for the transparency framework for action and support**

**E. Training programme for technical experts participating in the technical expert review**

**1. Proceedings**

114. The SBSTA considered these agenda sub-items at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to establish a contact group co-chaired by Xiang Gao (China) and Helen Plume (New Zealand). The co-chairs were assisted by Delphine Eyraud (France) and Seyni Nafo (Mali) (for sub-item 10(c)) and Mr. Jung and Mr. Vreuls (for sub-item 10(e)) as co-facilitators of the informal consultations held under the contact group. At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below as orally amended at the closing plenary.

**2. Conclusions**

115. The SBSTA initiated its consideration of methodological issues under the Paris Agreement to develop, pursuant to the MPGs:<sup>62</sup>

(a) Common reporting tables for the electronic reporting of the information in the national inventory reports of anthropogenic emissions by sources and removals by sinks of GHGs;

(b) Common tabular formats for the electronic reporting of the information necessary to track progress made in implementing and achieving nationally determined contributions under Article 4 of the Paris Agreement;

(c) Common tabular formats for the electronic reporting of the information on financial, technology development and transfer, and capacity-building support provided and mobilized, as well as support needed and received, under Articles 9–11 of the Paris Agreement;

(d) Outlines of the biennial transparency report, national inventory document and technical expert review report;

(e) A training programme for technical experts participating in the technical expert review.

116. The SBSTA welcomed the submissions from Parties<sup>63</sup> on these matters and took note of the views expressed by Parties at the session. The SBSTA also took note of the informal notes<sup>64</sup> prepared by the co-facilitators of the relevant informal consultations under their own responsibility, which have no status and do not reflect the consensus views of Parties. The SBSTA also noted the divergent views among Parties on the consistency of certain elements of the informal notes with the MPGs.

117. The SBSTA noted that the special events held at the session on the existing measurement, reporting and verification system, as well as on the training programme for technical experts participating in the technical expert review, contributed to the discussions on these matters at the session.

118. The SBSTA also noted that work on these matters should be guided by the principles contained in paragraph 3 of the annex to decision 18/CMA.1 and adhere fully to and be consistent with the MPGs.

<sup>62</sup> Annex to decision 18/CMA.1.

<sup>63</sup> Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.

<sup>64</sup> Available at <https://unfccc.int/process-and-meetings/conferences/bonn-climate-change-conference-june-2019/sessions/sbsta-50#eq-23>.

119. The SBSTA stressed that the work on these matters, in accordance with the request in paragraph 12 of decision 18/CMA.1, is technical in nature.

120. The SBSTA recognized that the tables, tabular formats, outlines and training programme referred to in paragraph 115 above will facilitate the operationalization of the MPGs.

121. The SBSTA also recognized that in accordance with Article 13, paragraphs 14 and 15, of the Paris Agreement, support shall be provided to developing country Parties for the implementation of Article 13 and for building the transparency-related capacity of developing country Parties on a continuous basis.

122. The SBSTA further recognized the importance of the provisions in the MPGs on flexibility for those developing country Parties that need it in the light of their capacities, and that there are various options on how to take the flexibility provisions established by the MPGs of the enhanced transparency framework into account in the methodological work described in paragraph 115 above.

123. The SBSTA agreed to have a dedicated discussion on how to operationalize the flexibility provisions defined in decision 18/CMA.1 under this agenda item at SBSTA 51.

124. The SBSTA noted that the existing guidelines and tables,<sup>65</sup> including those for GHG inventories, mitigation policies and measures, GHG emission projections, and financial, technology development and transfer, and capacity-building support provided, as well as the current measurement, reporting and verification system, offer a good starting point for the work referred to in paragraph 115 above.

125. The SBSTA invited Parties to submit their views on the matters related to the fulfilment of the mandate referred to in paragraph 115 above via the submission portal, preferably by 30 September 2019, including on:

(a) Experience with using the IPCC 2006 *IPCC Guidelines for National Greenhouse Gas Inventories*, the common reporting format, the transition to the 2006 *IPCC Guidelines for National Greenhouse Gas Inventories* and countries' experience with that transition, and the development of country-specific tools for facilitating GHG inventory reporting;

(b) Common tabular format tables for tracking progress in implementing and achieving nationally determined contributions;

(c) Tables for reporting on support needed and received, and support mobilized;

(d) Approaches to operationalizing the flexibility for those developing country Parties that need it in the light of their capacities, as defined in decision 18/CMA.1.

126. The SBSTA requested the secretariat to prepare a technical paper providing an overview of the existing training programmes for technical expert reviews, including lessons learned, and how they could be used for the purpose of the training courses referred to in paragraph 115(e) above, including relevant statistics, to facilitate further work under this agenda item at SBSTA 51.

127. The SBSTA invited interested developing country Parties to request access to the CRF Reporter, through the secretariat, in order to familiarize themselves with the tool.

128. The SBSTA requested the secretariat to facilitate access to and use of the CRF Reporter.

129. The SBSTA took note of the estimated budgetary implications of the activities to be undertaken by the secretariat referred to in paragraphs 126–128 above and requested that the actions of the secretariat called for in these conclusions be undertaken subject to the availability of financial resources.

---

<sup>65</sup> Including, inter alia, CRF tables as contained in annex II to decision 24/CP.19, tables 1 and 2 in the annex to decision 17/CP.8, tables 3, 5, 6(a), 8 and 9 in the annex to decision 19/CP.18 and tables 7, 7(a) and 7(b) in the annex to decision 9/CP.21.

## **XI. Matters relating to Article 6 of the Paris Agreement**

(Agenda sub-items 11(a–c))

- A. Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement**
- B. Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement**
- C. Work programme under the framework for non-market approaches referred to in Article 6, paragraph 8, of the Paris Agreement**

### **1. Proceedings**

130. The SBSTA considered these agenda sub-items at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. At its 1<sup>st</sup> meeting, the SBSTA agreed to establish a contact group chaired by the SBSTA Chair. The SBSTA Chair was assisted by Hugh Sealy (Barbados) and Peer Stiansen (Norway) as co-facilitators of the informal consultations for sub-items 11 (a) to (c), held under the contact group. At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

### **2. Conclusions**

*Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement (agenda sub-item 11(a))*

131. The SBSTA continued its work on guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement.<sup>66</sup>

132. The SBSTA agreed to continue consideration of the draft decision text on this matter<sup>67</sup> at SBSTA 51 with a view to recommending a draft decision for consideration and adoption at CMA 2 (December 2019).<sup>68</sup>

*Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement (agenda sub-item 11(b))*

133. The SBSTA continued its work on the rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement.<sup>69</sup>

134. The SBSTA agreed to continue consideration of the draft decision text on this matter<sup>70</sup> at SBSTA 51 with a view to recommending a draft decision for consideration and adoption at CMA 2.<sup>71</sup>

*Work programme under the framework for non-market approaches referred to in Article 6, paragraph 8, of the Paris Agreement (agenda sub-item 11(c))*

135. The SBSTA continued its work on the work programme under the framework for non-market approaches referred to in Article 6, paragraph 8, of the Paris Agreement.<sup>72</sup>

<sup>66</sup> As mandated in decision 1/CP.21, para. 36, and decision 8/CMA.1, para. 3.

<sup>67</sup> Available at <https://unfccc.int/documents/197875>, noting that this does not represent a consensus among Parties.

<sup>68</sup> As mandated in decision 8/CMA.1, para. 3.

<sup>69</sup> As mandated in decision 1/CP.21, para 38, and decision 8/CMA.1, para. 3.

<sup>70</sup> Available at <https://unfccc.int/documents/197876>, noting that this does not represent a consensus among Parties.

<sup>71</sup> As footnote 68 above.

<sup>72</sup> As mandated in decision 1/CP.21, paras. 39–40, and decision 8/CMA.1, para. 3.

136. The SBSTA agreed to continue consideration of the draft decision text on this matter<sup>73</sup> at SBSTA 51 with a view to recommending a draft decision for consideration and adoption at CMA 2.<sup>74</sup>

## **XII. Market and non-market mechanisms under the Convention**

(Agenda sub-items 12(a–c))

### **A. Framework for various approaches**

### **B. Non-market-based approaches**

### **C. New market-based mechanism**

137. At its 1<sup>st</sup> meeting, the SBSTA agreed to defer consideration of these matters to SBSTA 52.

## **XIII. Cooperation with other international organizations**

(Agenda item 13)

### **1. Proceedings**

138. The SBSTA considered this agenda item at its 1<sup>st</sup> and 3<sup>rd</sup> meetings. It had before it document FCCC/SBSTA/2019/INF.2. At its 1<sup>st</sup> meeting, the SBSTA agreed to its Chair's proposal of drafting conclusions in consultation with interested Parties. At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the conclusions below.

### **2. Conclusions**

139. The SBSTA welcomed the summary of the secretariat's cooperative activities with United Nations entities and other intergovernmental organizations since SBSTA 48.<sup>75</sup>

140. The SBSTA also welcomed the special event at this session organized by the secretariat on its cooperation with United Nations entities and other intergovernmental organizations.

141. The SBSTA noted the importance of the secretariat's cooperation, within the scope of existing mandates provided by the governing bodies, with relevant United Nations entities and other intergovernmental organizations to supporting Parties' efforts to enhance ambition on climate actions, including with regard to mitigation, adaptation and means of implementation, and in contributing to the implementation of the 2030 Agenda for Sustainable Development.

142. The SBSTA recognized that the United Nations Framework Convention on Climate Change and the Paris Agreement adopted under the Convention are the primary international, intergovernmental forums for negotiating the global response to climate change.

## **XIV. Other matters**

(Agenda item 14)

143. No other matters were raised.

---

<sup>73</sup> Available at <https://unfccc.int/documents/197873>, noting that this does not represent a consensus among Parties.

<sup>74</sup> As footnote 68 above.

<sup>75</sup> FCCC/SBSTA/2019/INF.2.



## **XV. Closure of and report on the session**

(Agenda item 15)

### **1. Administrative and budgetary implications**

144. At the 3<sup>rd</sup> meeting of the SBSTA, the Deputy Executive Secretary provided a preliminary evaluation of the administrative and budgetary implications of the conclusions adopted at the session, in accordance with rule 15 of the draft rules of procedure being applied. He informed the SBSTA that several activities resulting from the negotiations at the session called for more secretariat support and required resources over and above the core budget:

(a) Under agenda item 5 “Koronivia joint work on agriculture”, EUR 427,000 in funding will be required in 2020 for an intersessional workshop between SB 51 and 52 to contribute to delivering the outcomes of the KJWA and to prepare a report on the workshop for consideration at SB 52.<sup>76</sup> This activity falls under budget category 3: temporary or short-term activities;

(b) Under agenda item 10 (sub-items (a–d)) “Methodological issues under the Paris Agreement”, funding of EUR 180,000 in 2019, EUR 109,000 in 2020 and EUR 109,000 in 2021 will be required to make the CRF Reporter available. This activity falls under budget category 3: temporary or short-term activities.

145. The Deputy Executive Secretary noted that the amounts presented were preliminary and based on the information available at that time. He expressed the hope that the secretariat can count on the continued generosity of Parties in providing funding for activities in a timely and predictable manner. He also noted that without such contributions the secretariat will not be in a position to provide the requested support.

### **2. Closure of and report on the session**

146. At its 3<sup>rd</sup> meeting, the SBSTA considered and adopted the draft report on the session and authorized the Rapporteur to complete the report with the assistance of the secretariat and to make it available to all Parties.

147. At the 4<sup>th</sup> meeting of the SBSTA, which was held jointly with the 5<sup>th</sup> meeting of the SBI, the SBSTA and SBI Chairs invited statements from NGOs. Statements were made on behalf of business and industry NGOs, environmental NGOs, indigenous peoples organizations, local government and municipal authorities, research and independent NGOs, trade union NGOs, women and gender NGOs and youth NGOs. At the same meeting, the SBSTA and SBI Chairs invited statements from Parties. Statements were made by representatives of 16 Parties, including 13 on behalf of groups of Parties: the African Group; the Alliance of Small Island States; the Arab Group; Argentina, Brazil and Uruguay; Brazil, South Africa, India and China; the Coalition for Rainforest Nations; the Environmental Integrity Group; the European Union and its member States; the Group of 77 and China; the Independent Association for Latin America and the Caribbean; the least developed countries; the Like-minded Developing Countries; and the Umbrella Group.

148. At the end of the joint plenary, the Chair closed the session.

<sup>76</sup> The same costs are reported under SBI 50 agenda item 8.

## **Annex**

### **Terms of reference for the 2019 review of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts**

#### **I. Mandate**

1. Decision 4/CP.22 provides recommendations regarding the review of the WIM.

#### **II. Objective**

2. By the same decision, the 2019 review will consider, inter alia, progress on the implementation of the workplan of the WIM Executive Committee, as well as its long-term vision that guides ways in which the WIM may be enhanced and strengthened, as appropriate.

#### **III. Scope**

3. Parties will review the WIM since its establishment in 2013, taking into account those segments of the population that are already vulnerable in accordance with decision 3/CP.18, paragraph 7(a)(iii).<sup>1</sup>
4. The review will focus on, inter alia:
  - (a) The performance of the WIM and its functions as set out in decision 2/CP.19 and how it continues to promote the implementation of approaches to address loss and damage associated with the adverse effects of climate change;
  - (b) The structure of the WIM;
  - (c) The usefulness and use of the outputs of the WIM, including for developing country Parties;
  - (d) Collaboration, coherence and partnerships with bodies, entities and work programmes, and with relevant stakeholders within and outside the Convention;
  - (e) The progress on the implementation of the workplan of the Executive Committee;
  - (f) The response of the WIM to relevant decisions and the Paris Agreement.<sup>2</sup>
5. In their assessment, Parties will consider:
  - (a) The effectiveness and efficiency of the WIM, including timeliness, relevance, usefulness, visibility, coherence, complementarity, comprehensiveness, responsiveness and resourcing;
  - (b) Barriers and gaps, challenges and opportunities, and lessons learned.

#### **IV. Inputs and sources of information**

6. Being guided by the best available science, the inputs to the review are as follows:

---

<sup>1</sup> The approach taken for the 2019 review does not prejudice the approach taken for future reviews.

<sup>2</sup> Inclusion of references to the Paris Agreement in the terms of reference does not prejudice the outcome of the consideration of the matters related to the governance of the WIM.

(a) The technical paper on sources of and modalities for accessing financial support, as provided through and outside the Financial Mechanism, for addressing loss and damage,<sup>3</sup> as referred to in paragraph 2(f) of decision 4/CP.22;

(b) The annual reports of and outputs by the Executive Committee and the reports of its substructures;<sup>4</sup>

(c) Views relevant to the WIM submitted by the Parties referred to in paragraph 3 above and previous submissions on the review of the WIM;

(d) The workplan of the Executive Committee;

(e) Relevant decisions and the Paris Agreement.

7. Sources of information for the review may include:

(a) Relevant scientific and technical reports of national, regional and international organizations;

(b) Relevant national and regional strategies, plans and reports;

(c) Relevant outputs of constituted bodies and from events organized under the UNFCCC process;

(d) Views relevant to the WIM submitted by other stakeholders.

## V. Modalities

8. The modalities to be used in conducting the review are:

(a) The calls for the submissions referred to in paragraph 6(c) above;

(b) An event to be held in conjunction with SB 51 and organized by the secretariat under the guidance of the Chairs of the subsidiary bodies;

(c) The undertaking of the review by the subsidiary bodies, which will be informed by, inter alia, the above-mentioned event.

## VI. Expected output

9. On the basis of the assessment of progress undertaken in accordance with paragraphs 1–8 above, a draft decision will be prepared at SB 51, including a set of recommendations that respond to the objective of the review as referred to in paragraph 2 above.

---

<sup>3</sup> FCCC/TP/2019/1.

<sup>4</sup> Expert groups, subcommittees, panels, thematic advisory groups and task-focused ad hoc working groups.