



13th Meeting of the UNCCD Science-Policy Interface (SPI)

Date : 29 March - 1 April 2021
Venue : Virtual meeting
Working languages : English
Working hours : 14:30 – 17:30 (CET)

- REPORT -

I. Welcome address

The Deputy Executive Secretary of the United Nations Convention to Combat Desertification (UNCCD), Ms. Tina Birmpili, welcomed all participants (see Annex 1) to the 13th meeting of the UNCCD Science-Policy Interface (SPI). In her opening speech, Ms. Birmpili emphasized that the broader impact of scientific discovery, especially for environmental and social sciences, comes when it is translated into policy and then practice. She underlined that this is only possible when experts put in the often thankless work to assess the entire body of science in order to tell the story policymakers will need to move the agenda forward.

The UNCCD Lead Scientist, Barron Joseph Orr, introduced the SPI co-Chairs, SPI objective 1 and 2 co-Leads, SPI-IPCC Coordination Activity co-Leads and the recently selected SPI Early Career Scientist Fellows.

II. Adoption of the agenda and organisation of work

The agenda was adopted without any changes (see Annex 2).

III. SPI Work Programme 2020-2021: Status SPI work and milestones – Plenary

The meeting was co-chaired by Mr. Bongani Simon Masuku, SPI co-Chair, who also serves as the Chair of the Committee of Science and Technology (CST), and Dr. Nichole Barger, SPI co-Chair of the SPI. Mr. Bongani applauded the members of the SPI and the secretariat for the ongoing work and ensuring that the SPI work programme was on track inspite the challenges posed by the COVID-19 pandemic. He highlighted the importance of the 13th SPI meeting to the 15th session of the Committee on Science and Technology (CST15).

Mr. Masuku then gave the floor to Dr. Barger, to lead the session. The SPI co-Chair introduced the session and gave the floor to the co-Leads and consultants of objectives 1 and 2 to present the status of SPI work, milestones, and expected outputs of the working sessions of the objective 1 and 2. This was followed by a brief presentation by the secretariat on the work associated with SPI coordination activities. For ease of reference, all presentations are available to SPI members and observers on the SPI Extranet¹.

¹ Meeting documents and all presentations made at the 13th meeting of the Science-Policy Interface (SPI) can be accessed by SPI members and observers by clicking [here](#).



SPI Objective 1: Integrated land use planning and landscape management and LDN (presentation)

The SPI objective 1 consultants, Stefanie Herrmann and Katharina Schulze, presented the status, progress made and way forward for the preparation of expected deliverables of the SPI objective 1 for the SPI work programme 2020–2021 (decision 18/COP.14)²: the science-based evidence on the potential contribution of integrated land use planning and integrated landscape management to positive transformative change, achieving land degradation neutrality (LDN) and addressing desertification/land degradation and drought issues. The consultants presented the chapters of the draft report, which was shared with objective 1 working group members on 22 March 2021 for their reviews, with initial comments received by 28 March 2021. It was emphasized that the ILUP-ILM continuum is a key instrument for efficiently delivering on LDN targets and the spatial aspect is key to both ILUP (“doing the right things in the right places”) and ILM (“doing the right things in the right places in the right way”). It was highlighted that there are some countries where systematic land use planning is inexistent or not fully functional and thus the systematic assessment of land and land use options required for LDN could function as a catalyst for further developing the planning system in a country. Key messages from the draft report were also presented.¹

The secretariat (Furkan Dosdogru) introduced the winner of the Group on Earth Observation Land Degradation Neutrality (GEO-LDN) Competition³, which addresses the second deliverable for SPI objective 1. The team that presented the “LUP4LDN” (Land Use Planning for Land Degradation Neutrality) tool won the competition and will receive financial and technical support valued at USD 100,000 to transform their prototype into an operational and scalable tool.

Following this, the secretariat presented the revised timeline¹ for SPI objective 1 and introduced the SPI objective 1 working sessions and the plan for the 3-day working sessions.

SPI Objective 2: Ecosystems and population resilience to drought (presentation)

The SPI objective 2 co-Lead, Mark Svoboda, and the SPI objective 2 consultant team leader, Anke Reichhuber, presented the status, progress made, outputs, timelines and milestones for the next steps of the SPI objective 2 for the SPI work programme 2020–2021 (decision 18/COP.14). This objective is about the science-based evidence on the approaches for the assessment and monitoring of the resilience of vulnerable populations and ecosystems to drought, also considering the effect of climate change on drought risk. The objective 2 co-Lead recalled the context of work of the SPI objective 2 and presented the recent progress and output. The SPI objective 2 consultant presented the chapters of the draft technical report, which was shared with the SPI Objective 2 members and advisors on 25 February 2021, with comprehensive comments received by 17 March 2021. This draft report included: (i) Introduction to droughts of different types with time and their impacts in social and natural systems, the drought risk framework and role of building resilience in the transition to risk mitigation, and stages to building resilience based on informative decisions, (ii) Inventory and analysis with results of the evidence-based matrix of ecosystem indicators and social indicators at different scale and with supporting methodologies, (iii) Technical guidance to a tiered approach at multiscale for resilience assessment and colour coding mapping approach and (iv) Policy and enabling environment to facilitate drought resilience monitoring and assessment.

² Work programme of the SPI for the biennium 2020–2021. For Decision 18/COP.14, click [here](#).

³ GEO-LDN competition: <https://www.geo-ldn.org/competition-overview>



Following this, the revised timeline for SPI objective 2 and the working session agenda were introduced to the participants.

Status of SPI coordination activities (presentation):

The secretariat (Barron Joseph Orr) presented¹ the milestones achieved thus far and the status of the coordination activities of the SPI with other intergovernmental bodies and panels (see Annex 3). These include the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Intergovernmental Panel on Climate Change (IPCC), Intergovernmental Technical Panel on Soils (ITPS), UNEP's International Resource Panel (IRP), the Global Land Indicators Initiative (GLII), and the second edition of the UNCCD's Global Land Outlook (GLO2). Robert Stefaniki, SPI observer representative from the World Meteorological Organization (WMO) made a presentation on the coordination activities relevant to the Integrated Drought Management Programme (IDMP). More detail on the roles and responsibilities that have been taken on by SPI members is available in the SPI Extranet.⁴

IPBES:

The presentation provided an overview of the most recent developments in the IPBES processes and the contributions made by the SPI to this coordination activity, which is co-led by Nichole Barger and Graham von Maltitz. These included:

- i. SPI involvement in the first review of the draft scoping reports for the Nexus (60 SPI comments) and the Transformative Change (48 SPI comments) assessments - July 2020
- ii. IPBES release of the revised drafts of the scoping reports for the second round of review aimed at IPBES members, as part of the preparatory process to IPBES-8 plenary - January 2021.
- iii. A preliminary analysis of the revised drafts provided by the secretariat. - January 2021

It was noted that the preliminary analysis of the revised draft scoping reports of the Nexus Assessment showed that (1) ecological connectivity is now reflected in the revised draft, as it makes explicit mention of “connectivity” “area networks” “ecological corridors”; (2) land and land use change are reflected in a few points and environmental restoration is mentioned; (3) the language mentioning combating desertification has been removed and there are no references to land degradation; The analysis of the revised scoping report of the Transformative Change Assessment showed that (4) Gender and youth are now more strongly emphasized in the text and both land use change and land rights are included; and (5) there are no references to land degradation or restoration. The SPI was informed that findings and outcomes of the preliminary analysis had been shared with Nichole Barger and Graham von Maltitz and presented to the 16th meeting of the MEP and Bureau (12 February to 2 March 2021) by CST Chair Bongani Simon Masuku.

Upcoming Events: The Eighth Session of the IPBES Plenary (IPBES-8 Plenary) will be held from 14 to 24 June 2021 where the scoping reports will be approved.

GLO2:

The latest information on the development of the Working Papers informing the GLO2 was shared with the SPI. The SPI has engaged in the scientific review process of 7 working papers that are now being finalized. These working papers are on (1) Youth engagement; (2) Gender equity and responsiveness; (3) Tenure security; (4) Urban-rural linkages; (5) More resilient food systems; (6)

⁴ SPI participation on different working groups can be accessed by SPI members and observers [here](#).



Perverse Incentives and repurposing subsidies; and (7) COVID-19 response and recovery. In addition, in response to a CST Bureau proposal, the secretariat is developing an eighth working paper and science-policy brief on “Restoring ecological connectivity” to inform and contribute to the development of the GLO2. A specialist in the subject has been engaged and the SPI is welcome to contribute.

GLO2 revised timeline was shared with the SPI members and observers. The revised timeline and details on GLO2 are available in the SPI Extranet¹. It was recalled that the SPI engagement in the review process is critical as the SPI has the mandate to ensure the scientific integrity of the GLO.

IPCC:

It was reported that all the SPI members were involved in the review process of the first order of the IPCC special report on Land and Climate Change as well as the Sixth Assessment Report (AR6) where SPI reviewed work compiled by the IPCC Working Group II (WGII) and Working Group III (WGIII). This work is co-led by Nijavalli Ravindranath and Graham von Maltitz. The first working session for the IPCC coordination activity was held on 25 September 2020, where an approach to analysing the IPCC Special Report on Climate Change and Land (SRCCL) for the development of policy proposals relevant to the UNCCD for presentation at the 15th Session of the Committee on Science and Technology (CST15), which feeds into the 15th session of the Conference of the Parties (COP15) was agreed. The SPI co-Chair, Nichole Barger, the SPI-IPCC co-Leads, Nijavalli Ravindranath and Graham von Maltitz, and the secretariat also met on 12 March 2021 to discuss and decide the SPI-IPCC group works on planning IPCC SRCCL documents and session in the 13th SPI meeting in which SPI members was invited to analyze the key messages of the IPCC SRCCL and its Sixth Assessment Report (AR6) relevant for the UNCCD for presentation at the fifteenth session of the Committee on Science and Technology.

During the 13th SPI meeting, the secretariat presented progress since the September working sessions and provided a timeline⁵ of upcoming reviews of the IPCC Sixth Assessment Report, particularly Working Group II and Group III. It was highlighted that

- i. The review of the IPCC WGII AR6 (IPCC Working Group II, Sixth Assessment Report) Second Order Draft (SOD) took place from 04 December 2020 to 29 January 2021. Working together with the co-Leads for this coordination activity (Nijavalli Ravindranath and Graham Von Maltitz), the SPI and selected members of the UNCCD Secretariat reviewed assigned chapters of this report. Contributions from the UNCCD-SPI (8 SPI members, 136 review comments) and the UNCCD Secretariat (8 Secretariat members, 120 review comments) were compiled into two individual review sheets, and were submitted to the IPCC following the Guidelines⁶ for Group Reviews of IPCC Working Group II Reports. It was noted that the authors will prepare a Final Draft based on the comments received during the second review. The Final Draft is distributed to governments at the time of the final government review of the Summary for Policymakers. The Final Government Distribution of the Final Draft and Government Review of the Summary for Policymakers is scheduled for 28 May 2021 – 23 July 2021. (Noted that the SPI does not contribute to the Final Draft and Government Review)
- ii. The review of the IPCC WGIII AR6 (IPCC Working Group III, Sixth Assessment Report) Second Order Draft (SOD) took place from 18 January 2021 to 14 March 2021. Working together with the co-Leads for this coordination activity (Nijavalli Ravindranath and Graham

⁵ See full updated timeline for IPCC AR6 WGII [here](#), for IPCC AR6 WGIII [here](#).

⁶ See Guidelines for Group Reviews [here](#).



Von Maltitz) the SPI reviewed assigned chapters of this report. 11 SPI Members, 129 review comments submitted to the IPCC. It was noted that the authors will prepare a Final Draft based on the comments received during the second review. The Final Draft is distributed to governments at the time of the final government review of the Summary for Policymakers. The dates for the final government review of the Working Group III contribution to the AR6 are yet to be confirmed. (Noted that the SPI does not contribute to the Final Draft and Government Review)

It was highlighted that the near-term schedule includes the following scientific review:

- i. 28 May 2021 - 23 July 2021: Final Draft and Government Review of the Summary for Policymakers.

ITPS:

Following up on the decision 16/COP.14, and in collaboration with the Global Soil Partnership (GSP), ITPS and FAO, the SPI, in work co-led by led by Rattan Lal and Marijana Kapovic Solomun, contributed to the review of three reports focussing on the management of soil organic carbon (SOC), including:

- i. Technical Specifications for the preparation of the Global Soil Organic Carbon Sequestration Potential Map (GSOCseq).
- ii. GSOC MRV Protocol: A protocol for measurement, monitoring, reporting and verification of soil organic carbon in agricultural landscapes” to assess Soil Organic Carbon Sequestration and Green House Emissions in Agricultural Landscape.⁷
- iii. Manual of Good SOC Practices: Current SPI members, as well as former SPI members involved in the Objective 1.1 from the SPI work programme 2018-2019, have contributed to the review of this ~1000-page document coordinated by the GSP secretariat, which began in July 2020 and will be released on 22 June 2021.

SPI contribution to the Technical Manual on Good SOC Practices:

- The SPI o-organized Global Symposium on Soil Organic Carbon in 2017, which led to the decision to develop this Technical Manual on SOC.
- 400 authors from 54 countries.
- Intensive review: 6 rounds, with a tremendous amount of work for current and former SPI members.
- Review composed of more than 40 experts from the GSP’s ITPS, the FAO departments of forestry, livestock and agroecology, the 4p1000 Initiative’s Scientific and Technical Committee, the UNCCD SPI, and invited independent experts.
- The manual will present a total of 73 sustainable soil management practices in cropland, grassland, wetland, forestry and urban soil systems, complemented by 78 case studies, all developed according to a unique factsheet structure.

Upcoming activities:

- Co-organization of the Global Symposium on Soil Biodiversity (GSOBI 21) – postponed to 19-22 April 2021 (online). Rattan Lal and Nichole Barger will make presentations. The Executive Secretary of the UNCCD will deliver a keynote address during the opening and high-level segment.
- The 9th Plenary Assembly of the Global Soil Partnership will be held on 22 – 24 June 2021 at FAO Headquarters in Rome. It was noted that if any SPI members are planning to attend, they could volunteer to represent the SPI in the meeting.

⁷ The GSOC MRV Protocol was published in September 2020: <http://www.fao.org/global-soil-partnership/resources/highlights/detail/en/c/1308261/>



- Global Symposium on Salt Affected Soils - postponed to 27-29 October 2021. SPI members interested in contributing to this event should engage the secretariat (Furkan Dosdogru) and Ronald Vargas.
- Eurosoil Virtual Congress, 23 – 27 August 2021, Geneva, Switzerland. After being postponed several times due to the pandemic and is now set to be a virtual event. The deadline for “[late breaking contribution submissions](#)” is 3 May 2021.
- ITPS may request SPI input to the preparation of a report “Gender and sustainable soil management” based on the online consultation implemented already by the GSP, with the aim to complete this by mid-2021.

GLII:

The secretariat shared information that the secretariat initiated a consultancy focused on bridging existing SDG indicators on land tenure and gender and the UNCCD reporting process, which determined that there are SPI members with a direct interest as well as a number of other experts reviewed the resulting report, which explored options for the integration of SDG indicators relevant to the UNCCD Gender Action Plan into the UNCCD reporting process including gender-relevant indicators for UNCCD strategic objectives 1–5. The report, which was reviewed by the SPI, concluded that systematically collected data on gender that could be used to disaggregate data on DLDD are limited, particularly quantitative data at the national level. The secretariat and the GM responded by developing a method to assess exposure to land degradation disaggregated by gender and age (particularly youth). A Methodological Note entitled “Trends in Population Exposure to Land Degradation: A Disaggregated Approach by Gender” was sent out for review. The GLII coordination activities are being co-led by Peter Verburg and Xiangzheng Deng.

UNEP-IRP:

The presentation introduced the SPI and IRP coordination activities since the 12th SPI meeting, which are being co-led by Nichole Barger and Armando López Santos. It was shared that

- Assessments on Environmental Conflicts and Migration: The SPI co-chair and UNCCD staff (UNCCD-ERPA) participated in the IRP working group meetings and contributed the joint IMO-UNCCD publication on Land Degradation and Migration;
- Review report on Mineral Resources Governance and its promotions: The SPI co-Chair and responsible members were invited to participate in the regional Global consultation virtual meetings. The UNCCD staff participated in the webinar in February 2021;
- Assessment on Environmental Conflicts and Migration: The external review on this assessment report will start in May 2021, UNCCD can recommend experts to join in the external review; and
- Assessment on Leveraging Resources for Low Carbon, Climate Resilient Development: It has been changed into the development of a think piece under working programme 2022-2025.

IDMP:

The presentation made by SPI observer representative Robert Stefanski from WMO provided an overview on both contributions of the SPI through review to the two knowledge products publications, which are being co-led by Sergio Vicente-Serrano and Ana Vukovic, and the contributions of the IDMP activities to the UNCCD process. Robert Stefanski is leading the development of two publications on integrated drought management and on drought and water scarcity, and he noted that



the drafts of these two publications have been reviewed by SPI members in objective 2 in November 2020 and will be published in July 2021.

Regarding the WMO-IDMP coordination activities, an overview of the Global Drought Classification System (GDCS) was provided. It is noted that the GDCS will be a contribution to WMO Global Multi-Alert Hazard System (GMAS), Hydrological Status and Outlook System (HydroSOS) and UNCCD indicator (Strategic Objective 3). It was also underlined that the Global Drought Indicator (Cg-18 - Res 17) be renamed Global Drought Classification System. He introduced the Weather Modification Programme (WMP) Standardized Precipitation Index (SPI) Manual, probability of recurrences (WMO No. 1090) which classifies mild, moderate, severe and extreme dryness. It was presented that the system will include new countries in the near future. The IDMP and WMO products presented and their timeline can be found in the Master 13th SPI Meeting Presentation (Day 1) in the SPI Extranet¹.

IV. Working sessions of the SPI objectives 1 and 2 - Parallel break-out groups

SPI meeting participants split into Objective 1 and Objective 2 working groups to discuss the respective deliverables of the SPI Work Programme for the biennium 2020–2021.

SPI objective 1 working sessions

Over the three days, four SPI objective 1 working sessions were held. Participants discussed the draft report which was shared with them on 22 March 2021 for their reviews. The working group sessions were chaired by SPI objective 1 co-Lead, Peter Verburg. During the first working session, the working group discussed and refined the draft key messages in the recently completed zero draft of the technical report. The second working session focused on the draft policy proposals. The third working session focused on the chapters of the report and the approach to how information from case studies should best be integrated. The fourth working session focused on ILUP/ILM tools and approaches, the typology that has been developed to link these to LDN, and the decision trees designed to help guide readers in the use of the tools and approaches.

The discussions in the first two working sessions led to the in-session refinement of the draft key messages and policy proposals. The co-Lead underlined that the discussion was highly productive and noted that all the suggestions, comments and questions received during the meeting will be fully considered in the development of the next draft of the report. He also noted that more technical parts will be included in the Annexes.

The discussion in the third working session confirmed the current structure of the report, though some information may be shifted to increase the readability of the report. There was general agreement that the case being made for the link between LDN and ILUP/ILM was strong. A key decision was made on an approach that should maximize the information that has been collected in a variety of case studies, which will involve the liberal use of “snippets” (concise and context specific illustrative examples) designed to demonstrate how concepts/typology elements/approaches/tools introduced in the text of the report have actually been employed effectively in practice (e.g., one snippet might illustrate how a particular tool/approach was chosen in response to a particular land use system; another one might illustrate how the use of a tool is embedded in an approach guided by principles, such as applying a participatory process). The idea would be to help the reader understand the “guidance” behind the introduced concept/typology element/approach/tool through an example of how it has been applied well and with a positive influence on the planning process. While this would not bridge directly to LDN (because LDN is relatively new and thus such specificity is not yet available in practice), considering that ILUP is fully embraced by conceptual framework for LDN



embraced by Parties, this should provide insight into how LDN could be integrated into ILUP in the planning of land-based interventions, effectively mainstreaming land degradation work into larger land use planning processes in each country.

The fourth working session focused on ILUP/ILM tools and approaches, the typology and the decision trees in the zero draft report. The discussion focused on how these report elements can support the practitioners to stimulate and improve land use planning process and better integration of LDN as tools bring more science into the land use planning processes. The working group agreed that the report needed to make clear how approaches which, for example, help ensure social and environmental safeguards are considered in land use planning (e.g., participation, gender responsiveness, LDN “like for like” principle) and tools that quantitatively help optimize the what and where of land use decisions needed to be used together to satisfy the guiding principles of LDN. The group suggested that the report should be published in the form of an e-Book with embedded with dynamic content so that aspects such as the decision trees can be more interactive.

SPI objective 2 working sessions

The working group sessions were chaired by SPI objective 2 co-Lead, Mark Svoboda. Over the three days, the objective 2 working group discussed the comments received on the zero draft, focusing on ecosystem resilience indicators and colour coding assessment approach on aggregated social and ecosystem resilience, and the policy proposals. The first working session of this SPI meeting focused on the colour coding approach and how a coloured coded resilience map can feed the need of the decision-makers. The second working session concluded the discussion on colour coding assessment and then focused on the social resilience indicators and technical guidance. The third session focused on the rationale, conceptual framework and concept, and glossaries. The fourth working session made a review on the first two days and highlighted the need to link the chapter of inventory on indicators with the Chapter on technical guidance by introducing cases at national level.

The working session discussions lead to outcomes of agreed direction guiding the consultant team to further revise the technical report by chapters, as well as some issues for further discussion including reflecting new publication in the SPI report and discussion on the function of technical guidance to Parties.

Firstly, it clarified the rationale of the overall structure with a flow of logic starting from 1) context of the COP14 decision request, followed by 2) an overview of the concept of drought of different types and their propagation in time, and the impacts of drought in natural and social aspects, under a changing climate, different land-water use and management, and gender scenario, 3) an analysis through a drought risk conceptual framework of the need for improving resilience to enable proactive risk mitigation, and 4) resulting the recognition of the stages of building resilience, which need starting from the establishment of science-based indicators and methodologies for assessment and monitoring for informative decision making.

Secondly, it improved consensus between the consultant team and the working group on specific issues to be improved (i) Chapter 1: The group suggested further narrow down targeting group and improve infographic on drought propagation and impacts with consideration of the overlap of agriculture and ecological drought, and elaboration of the relation of resilience and vulnerability. (ii) Chapter 2: The group suggested a wider consideration the ecosystem resilience indicators in four aspects with addition of water-related indicator and agreed to use a matrix to further analyze the applicability of indicators at different scale and ecosystems. For social resilience indicators, the group



recommended the consultants to consider a minimum indicators approach and availability, accessibility of data source to improve applicability. (iii) The group emphasized the need for tying the results of inventory as a basis to develop technical guidance, and further improvement the guidance on tiered approach at multiscale. The consultant agreed to further develop the decision trees to enable users to be guided to select indicators and methodologies for different scale assessment, and use minimum indicators or quick assessment according to different capacity and data availability, accessibility and/or potential investment for data collecting. On colour coding assessment and mapping method on drought resilience, the group suggested to introduce real cases or use hypothetical countries assumed in different climatic zones and economic situations to demonstrate the usage of the aggregated social and ecosystem resilience assessment and coding mapping methodology. (iv) Chapter 4: The group emphasized the proposed policy proposals should focus on how to facilitate drought resilience monitoring and assessment. The group suggested that the proposals be tailored to three major targeting groups, policy makers, practitioners and science communities.

The co-Lead underlined that the discussion was highly productive, constructive and innovative and noted that all the suggestions, comments and questions, references and case studies received before and during the meeting will be fully considered in the development of the next draft of the report. Some scientific issues would be further discussed during drafting process, internal and external reviews with consideration of the comments of reviewers.

V. Plenary and working sessions of the SPI's IPCC coordination activity working group

The SPI co-Chair Nichole Barger introduced the session. The SPI-IPCC co-Leads Graham von Maltitz presented the SPI's IPCC coordination activity focused on analysing the IPCC Special Report on Climate Change and Land (SRCCL). This included an update of progress to date and a description of the approach planned for five parallel working sessions designed to refine the current set of conclusions/key messages and to develop draft policy proposals. He noted that the SPI-IPCC co-leads, with support from the secretariat, have already analysed the IPCC SRCCL report and identified the key issues that have relevance to the UNCCD. He shared an example to show the main conclusions drawn from the IPBES LDRA which are relevant in the UNCCD context, and the policy proposals the SPI developed in the last biennium related to these. The co-Leads organized the work into 5 key clusters of issues identified: (1) Risks of Mitigation through Large-scale Bioenergy (BECCS) and Afforestation: (competition for land); (2) Climate Change and Desertification / Land Degradation: (direct climate impacts); (3) Climate Change Adaptation-Mitigation and Combating Desertification / Land Degradation-LDN and Climate Change Adaptation and Mitigation (implementation synergies); (4) Policies and Institutions for Sustainable Land Management for Adaptation and Mitigation: (*policy synergies*); and (5) Climate change and drought (*climate impacts on drought*).

SPI meeting participants split into 5 working groups based on issue clusters to discuss the key messages from SRCCL and to focus on the aspects of the synergies between climate change objectives and UNCCD objectives in terms of project implementation identified from the SRCCL and that have important implications for the UNCCD. (In essence, it is about achieving policy synergies between the Rio conventions.)



VI. Report back to Plenary on SPI Objectives 1 and 2 of the SPI Work programme 2020-2021

The working groups for the SPI Objectives 1 and 2 reported back to plenary the key outcomes from their respective working sessions.

SPI Objective 1:

SPI Objective 1 co-Lead, Xiangzheng Deng, presented the outcomes of the SPI objective 1 working sessions (Master 13th SPI Meeting Presentation (Day 4) in the SPI Extranet¹). He described the progress made by the working group on the chapters of the draft report which will include a globally and technically comprehensive typology of land use planning and landscape management tools and methodologies, with an emphasis on optimization, trade-offs and synergies. He also summarized the progress made on refining (1) the key messages and policy proposals; (2) the approach of using case studies and (3) the ILUP/ILM tools and approaches, typology and decision trees.

The co-Lead, Peter Verburg, emphasized that the report should clearly show the relationship between and ILUP/ILM and UNCCD-recommend process for addressing DLDD and achieving LDN. It was suggested that the link between LDN, climate and biodiversity targets with other environmental targets should be addressed. It was highlighted that, for example, implementing LDN and biodiversity targets separately would be more costly and conflicting and cause inefficient use of limited sources. It was also suggested that the approaches which ensure social and environmental safeguards are addressed in the application of the tools in an ILUP/ILM process should be addressed in the report.

SPI Objective 2 working sessions:

SPI Objective 2 co-Lead, Caroline King-Okumu, presented the outcomes of the working sessions. (Master 13th SPI Meeting Presentation (Day 4) in the SPI Extranet¹). She highlighted the general comments for SPI to consider 1) how the SPI technical guidance to be more useful by the decision makers, in what format to express, 2) to what extent the technical guidance should be practical by parties, 3) how to balance the integrity and objectivity of science process with a broad consideration of policy needs and what to recommend to the COP, and 4) how the technical report function is positioned and to ensure its usefulness to parties.

The outcomes of the discussions are summarized as firstly, an agreement on how to revise the Technical Report on 1) Soil moisture indicator and one or two other essential indicators of ecological resilience will be further considered to complement the parallel process of Good Practices Guidance (GPG) on UNCCD SO3 and SDGs relevant indicators. 2) wider suite/framework of indicators and technical guidance to reflected scale and tiers approaches with indication of data source. 3) improving the colour-code graphic and the methodology to produce colour-coded aggregated drought resilience map for decision makers 4) using case studies to show the existing methodologies of colour-coded mapping in provision of scientific information for decision makers.

She also highlighted the issues still need be discussed that (i) considering the connection and synergies of the SPI technical guidance with the new publication of the United Nations System of Environmental-Economic Accounting (SEEA) and detail of the revision of GPG on SDG15.3; and the forthcoming launch of UNDRR Special Report on Drought and CRIC recommendations on IWG drought interim report; (ii) What policy recommendations the CST could provide to the COP15, with proposed key points include **to incentivize transdisciplinary integrated, multisectoral resilience assessment and decision-making through a focus on: a) Decision trees for policy & Integrated**



drought risk mitigation planning at different scales; b) Recommendations for: including vulnerable populations, selecting indicators and sources for methodological guidance, c) Iterative capacity building and learning.

Presentation of the peer-review process by the secretariat:

The secretariat, Barron Joseph Orr, presented the SPI peer-review process. It was recalled that any scientific output prepared under the supervision of the SPI should undergo an international, independent review process; and that any output published under the name of the UNCCD should be reviewed by the COP Bureau to publication (Decision 19/COP.12). It was also recalled that the generic modalities for review of SPI products typically involve an internal and two external stages. Revised modalities for the biennium 2020-2021 was shared with participants and noted that (1) internal working group review ends on 1 April 2021; (2) scientific review begins on 10 May 2021 and ends on 30 May 2021; (3) COP Bureau review begins on 27 June 2021 and ends on 18 July 2021; and (4) the whole process will be completed on 15 August 2021. Details on external scientific peer-review, COP Bureau review, the pathway towards CST15/COP15 and documentation forecast were shared with participants. The details and timelines can be found in the SPI Extranet^{Error! Bookmark not defined.} (Master Presentation for day 4).

VII. Report back to Plenary on SPI-IPCC working group of the SPI Work programme 2020-2021

The SPI-IPCC co-Lead, Nijavalli Ravindranath presented the outcomes of the 5 breakout groups. The groups developed conclusions and recommendations from SRCCL on (1) Competition for Land; Risks of Mitigation through Large-scale Bioenergy (BECCS) and Afforestation; (2) Climate Change and Desertification / Land Degradation: (direct climate impacts); (3) Climate Change Adaptation - Mitigation and Combating Desertification / Land Degradation and LDN; (4) Policies and Institutions for Sustainable Land Management for Adaptation and Mitigation; and (5) Climate change and drought (climate impacts on drought). Inputs from SPI-IPCC breakout groups can be found the SPI Extranet¹.

VIII. Brief introduction to CST 15 / COP 15

Roadmap to CST 15 / COP 15

The UNCCD Deputy Executive Secretary, Tina Birmpili, shared that the fluidity of the pandemic is making planning for COP 15 difficult. While a few options are being considered for a possible rescheduling of the COP15 in 2022, an official decision will not be taken until consideration of the COP Bureau.

Introduction to “Science Day”

The SPI co-Chair, Nichole Barger, described the experience of organizing and hosting a “Science Day” during COP 14 in 2019. She introduced preliminary plans for this event, which will be designed to provide a forum for science presentations and interactive discussions; create an opportunity to highlight recent assessment work by UNCCD-SPI relevant partners, and provide an opportunity for the broader UNCCD-stakeholder community to discuss SPI findings. She also invited the SPI members to join planning and coordination activities. A number of SPI members have already shown interest to join the “Science Day Team”.



IX. Other matters

The SPI co-Chair, Nichole Barger, facilitated a discussion on other matters.

Roadmap for developing the next SPI Work programme (2022-2023): The secretariat presented the roadmap for developing the next SPI Work programme, including steps for identifying emerging issues and ranking priorities and topics collected from within the SPI, the secretariat/GM, and potentially from Parties.

Next steps: It was noted that:

- SPI Objective co-Leads will work with consultants to move the reports from “zero” draft to a first draft that can be sent out for scientific review, which will start on 10 May 2021. The secretariat will support any needed working group meetings.
- IPCC SRCCL co-Leads will transform the conclusions and policy recommendations into a zero draft that can be share. The secretariat will support them in developing the background for the Official Document.
- All other SPI coordination activities continue, and much of it will involve scientific review. You will be hearing from Jia Xiaoxia (IDMP, IRP), Furkan Dosdogru (ITPS, GLII, IPCC) and Vittoria Semplici (IPBES, GLO2).
- Normally the second SPI meeting in a COP year would be at the COP itself. Therefore, it would be best to wait the COP Bureau meeting, which was held on 8 April 2020, to schedule the 14th Meeting of the SPI.

X. Closing remarks

The SPI co-Chairs made a summary of the meeting outcomes and afforded the secretariat an opportunity to sketch a way forward based on the overall work programme. This was complemented by closing remarks by the UNCCD Deputy Executive Secretary, who thanked the SPI for their dedication and hard work. Following this, the SPI co-Chairs officially closed the 13th meeting of the Science-Policy Interface (SPI).



Annexes-

Annex 1 - List of Participants of the 13th Meeting of the Science-Policy Interface of the UNCCD

	Objective 1	Objective 2
Facilitators	Peter Verburg Ermias Betemariam Xiangzheng Deng	Mark Svoboda Armando López Santos Caroline King-Okumu
Participants	Nichole Barger Graham Paul von Maltitz Zahurul Karim André Francisco Pilon Noel Oettlé Vera Boerger Everlyne Nairesiae Robert Lewis-Lettington Ratko Ristic Anna Luise <u>Consultants:</u> Graciela Metternicht Stefanie Herrmann Katharina Schulze	Rattan Lal Bongani Simon Masuku Nijavalli Ravindranath Sergio Vicente-Serrano Ana Vukovic Robert Stefanski Katrin Ehlert Adam Fysh Karma Dema Dorji Pablo Viegas Ronald Vargas <u>Consultants:</u> Anke Reichhuber (team lead) Lisa Schipper Bunafsha Mislimeshoeva Renuka Srinivasan Alisher Mirzabaev
SPI Early Career Scientist Fellows	Felicia Akinyemi Helene Gichenje	Felicia Akinyemi Helene Gichenje
Secretariat support	Barron Joseph Orr Furkan Dosdogru Vittoria Semplici Lawrencia Eposi Michael Tighe Johns Muleso Kharika Tina Birmpili	Jia Xiaoxia Lawrenica Eposi Michael Tighe Johns Muleso Kharika Tina Birmpili <u>Interns:</u> Nan Li Huiwen Zhang Yuanyuan Xiao



Annex 1.1 - SPI-IPCC SRCCL break-out groups

Group 1 Competition for land	Group 2 Direct climate impacts	Group 3 Implement synergies	Group 4 Policy synergies	Group 5 Impacts on drought
1. Peter Verburg 2. Bongani Simon Masuku 3. Caroline King-Okumu 4. Ermias Betemariam, 5. Jia Xiaoxia	1. Graham Paul von Maltitz 2. Pablo Viegas, 3. Everlyne Nairesiae 4. Xiangzheng Deng 5. Sergio Vicente-Serrano 6. Furkan Dosdogru	1. Nijavalli Ravindranath 2. Ratko Ristic 3. Rattan Lal 4. Noel Oettlé 5. Zahurul Karim 6. Felicia Akinyemi 7. Vittoria Semplici	1. Nichole Barger 2. Anna Luise 3. Armando López Santos, 4. Vera Boerger 5. André Francisco Pilon 6. Helene Gichenje 7. Johns Muleso Kharika	1. Mark Svoboda, 2. Ana Vukovic 3. Robert Lewis-Lettington 4. Adam Fysh, 5. Katrin Ehlert 6. Barron Joseph Orr



Annex 2 – 13th SPI meeting annotated agenda

13th Meeting of the Science-Policy Interface (SPI)

Date: 29 March – 1 April 2021
Venue: Virtual meeting
Working languages: English
Working hours: Monday 29 March 14:30 – 17:30 (CET)
Tuesday 30 March 14:30 – 17:30 (CET)
Wednesday 31 March 14:30 – 17:30 (CET)
Thursday 1 April 14:30 – 17:30 (CET)

Provisional Annotated Agenda

I. Welcome address

The Deputy Executive Secretary will welcome all participants, followed by members of the Science, Technology and Innovation unit to present views with regard to the SPI and the purpose of this meeting and targeted outputs (draft technical reports for SPI Work Programme objectives 1 and 2).

The co-Chair will introduce SPI Early Career Scientist Fellows who has recently joined the group, with a quick round of introductions by all SPI members.

II. Adoption of the agenda and organisation of work

The agenda and organisation of work will be proposed by the SPI co-Chairs for adoption. The virtual meeting expert will give an overview of the virtual SPI meeting and how it is structured.

III. SPI Work Programme 2020-2021: Status SPI work and milestones – Plenary

The SPI co-Leads of objective 1 and objective 2 will introduce progress made and outline expected outputs of the working sessions. This will be followed by a brief presentation by the secretariat on the work associated with SPI coordination activities.

- i. Objective 1: Integrated land use planning & landscape management and LDN (presentation and discussion)
- ii. Objective 2: Ecosystems & population resilience to drought (presentation and discussion)
- iii. Updating the Status of SPI Coordination activities (brief presentation)

IV. Working sessions of the SPI objectives 1 and 2 - Parallel break-out groups



A total of two working sessions will take place where each objective 1 and 2 and respective consultants will participate, and then the IPCC SRCCL working session. Each working session will be moderated by the co-Leads and facilitated by the secretariat. The virtual meeting expert will guide the SPI members to break-out groups.

V. Plenary and working sessions of the SPI's IPCC coordination activity working group

A six-hour timeslot will be dedicated to analysis of the IPCC its Special Report on Climate Change and Land (SRCCL) and the development of policy proposals relevant to the UNCCD.

VI. Report back to Plenary on objectives 1 and 2 working group of the SPI Work Programme 2020-2021

The co-Chairs will facilitate a wrap-up discussion on all that has been discussed with respect to the work programme objectives. This wrap-up will begin with a report back to the plenary from each one of the working sessions (highlighting progress made and future plans, followed by a discussion on how to potentially bring the two reports of SPI Work Programme objectives 1 and 2 together, and maintain synergies among these two objectives).

The co-Leads (who coordinated the sessions for each SPI objective) will facilitate the recap of the key points captured in the working sessions and input for way forward.

The secretariat will facilitate a discussion for keeping track of timeline on each objective.

VII. Report back to Plenary on SPI-IPCC working group of the SPI Work programme 2020-2021

The co-Leads (who coordinated the sessions for each IPCC SRRCL will facilitate the recap of the key points captured in the session and input for way forward.

The secretariat will facilitate a discussion for keeping track of timeline.

VIII. Brief introduction to CST 15 / COP 15

The co-Chairs, supported by the secretariat, will describe the key milestones between now and CST 15 / COP 15, including roles and responsibilities. They will also introduce preliminary plans for an SPI "Science Day" during the COP.

- i. Roadmap to CST 15 / COP 15
- ii. Introduction to "Science Day"

IX. Other matters

The co-Chairs will facilitate a discussion on other matters.

- i. Roadmap for developing the next SPI Work programme (2022-2023)
- ii. Next steps, including timing of any upcoming working group meetings and the 14th SPI meeting
- iii. Any other matters

X. Closing remarks



The co-Chairs will make a summary of the meeting outcomes. The secretariat will provide remarks on the meeting and the way forward. The Deputy Executive Secretary will make closing remarks. The SPI co-Chairs will close the meeting.

Tentative schedule of work

Monday, 29 March 2021	
14:30 – 15:00	I. Welcome address i. Welcome by the Deputy Executive Secretary ii. Introduction of SPI Early Career Fellows by co-Chair and a quick round of introductions by all SPI members
15:00 – 15:05	<i>Group photo</i>
15:05 – 15:10	II. Adoption of the agenda and organization of work
15:10 – 16:00	III. Status of the objectives of the SPI Work Programme 2020-2021 i. Presentation by objective 1 co-Lead(s) ii. Presentation by objective 2 co-Lead(s)
	<i>10-minute break</i>
16:10 – 16:30	iii. Brief presentation of the status of IPBES/IPCC/ITPS/IRP/GLII/IDMP/GLO2 coordination activities
First SPI Objectives working session	
16:30 – 17:30	IV. Working sessions on the objectives of the SPI Work Programme 2020-2021 (parallel break-out groups)
Tuesday, 30 March 2021	
Second SPI Objectives working session	
14:30 – 16:00	IV. Working sessions on the SPI objectives continues (parallel break-out groups)
16:00 – 16:10	<i>10-minute break</i>
Third SPI Objectives working session	
16:10 – 16:50	IV. Working sessions on the SPI objectives continues (parallel break-out groups)
16:50 – 17:30	V. Plenary session of the SPI's IPCC coordination activity focused on analysis of the IPCC Special Report on Climate Change and Land (SRCCL)
Wednesday, 31 March 2021	
Fourth SPI Objectives working session	
14:30 – 15:40	IV. Working sessions on the SPI objectives continues (parallel break-out groups)
15:40 – 15:50	<i>10-minute break</i>
1st IPCC SRCCL working session	



15:50 – 17:30	V. IPCC SRCCL working sessions (parallel break-out groups)
Thursday, 1 April 2021 Plenary	
14:30 – 15:20	VI. Plenary: Report back on SPI objectives: i. Report by objective 1 co-Lead(s) ii. Report by objective 2 co-Lead(s)
15:20 -15:50	iii. Presentation of the peer-review process by the co-Chair and secretariat
15:50 -16:00	<i>10-minute break</i>
16:00 – 16:40	VII. Plenary: Report back on Key messages and policy proposals on Climate Change and Land from the SPI-IPCC SRCCL working group
16:40 -17:00	VIII. Plenary: Brief introduction Update towards the CST/COP15 i. Roadmap to CST 15 / COP 15 ii. Introduction to “Science Day”
17:00 – 17:15	IX. Plenary: Next SPI meeting and other matters i. Roadmap for developing the next SPI Work programme (2022-2023) ii. Next steps, including timing of any upcoming working group meetings and the 14 th SPI meeting iii. Any other matters
17:15 – 17:30	Plenary - Summary and closing remarks i. Summary of the 13 th SPI meeting by the co-Chairs ii. Additional remarks on the meeting and the way forward by the secretariat iii. Closing remarks by the Deputy Executive Secretary



Annex 3 - Science-Policy Interface work programme for the biennium 2020–2021

Objectives and deliverables

<i>Objective</i>	<i>Deliverable</i>
1. Provision of science-based evidence on the potential contribution of integrated land use planning and integrated landscape management to positive transformative change, achieving land degradation neutrality (LDN) and addressing desertification/land degradation and drought issues.	A technical report providing science-based evidence of how, in the context of working to achieve or exceed LDN, integrated land use planning and integrated landscape management can contribute to positive transformative change, including examples of cases where these approaches have been applied. A demonstration, resulting from an open call, of how LDN can be incorporated into existing open source land use planning and trade-off analysis tools. Provision of scientific assistance to the Global Mechanism to support decisions on the technical feasibility of LDN transformative initiatives.
2. Provision of science-based evidence on the approaches for the assessment and monitoring of the resilience of vulnerable populations and ecosystems to drought, also considering the effect of climate change on drought risk.	A technical report, based on a review of existing synthesis reports and the primary literature, which would provide science-based guidance on approaches for the assessment and monitoring of the resilience of vulnerable populations and ecosystems to drought, including understanding the influence of climate change on drought risk.

Coordination activities

<i>Activity</i>	<i>Sub-activities</i>
1. Contribute to the work of the Intergovernmental Science–Policy Platform on Biodiversity and Ecosystems Services (IPBES) rolling work programme up to 2030 in accordance with the procedures established by IPBES and the Memorandum of Cooperation between the secretariats of the IPBES and the United Nations Convention to Combat Desertification (UNCCD).	The Science-Policy Interface (SPI) will follow up on two of the prioritized topics of the IPBES rolling work programme up to 2030: (a) Understanding the importance of biodiversity in achieving the 2030 Agenda for Sustainable Development; and (b) Understanding the underlying causes of biodiversity loss and determinants of transformative change and options for achieving the 2050 Vision for Biodiversity, contributing scientific review and analysis of key messages if these reports become available in time for the SPI to complete the review.
2. Cooperate with the Intergovernmental Panel on Climate Change (IPCC) within the framework of its agenda, particularly regarding its Special Report on Climate Change and Land (SRCCCL) and its Sixth Assessment Report (AR6).	The SPI will analyse the key messages of the SRCCCL and AR6 relevant for the UNCCD for presentation at the fifteenth session of the Committee on Science and Technology.
3. Follow up on current cooperation and explore future means and topics for cooperation with the Intergovernmental Technical Panel on Soils (ITPS).	The SPI will cooperate with the ITPS on topics to be jointly confirmed by the SPI and the ITPS, bearing in mind the importance of soil organic carbon to land degradation neutrality (LDN). The SPI should be involved in any follow-up activities emerging from the conclusions of the Global Symposium on Soil Organic Carbon (2017) and the Global Symposium on Soil Erosion (2019). The SPI should explore with the ITPS potential participation in future symposiums relevant to the



	UNCCD, including the Global Symposium on Soil Biodiversity (2020).
4. Cooperate with the International Resources Panel of the United Nations Environment Programme (UNEP-IRP) in accordance with the procedures established by UNEP-IRP and within the framework of its 2018–2021 work programme.	<p>The SPI will follow up on relevant portions of three of the prioritized topics of the UNEP-IRP 2018–2021 work programme, particularly two thematic assessments:</p> <p>Resource Implications of Environmental Conflict and Migration, and Leveraging Resources for Low-Carbon, Climate-Resilient Development, and the think piece, Resource Governance in Light of Fundamental Transitions in Systems of Production and Consumption, contributing scientific review and analysis of key messages if these reports become available in time for the SPI to complete the review.</p> <p>Furthermore, the SPI will contribute in a review capacity to work on mineral resource governance following the approval of the United Nations Environment Assembly resolution 4/L23 on the topic, which calls for further consultation on governance structures around resource extraction.</p>
5. Cooperate with the Global Land Indicators Initiative (GLII) of United Nations Human Settlement Programme to ensure harmonization of land indicators developed by the GLII to measure tenure security globally and at country level, and land indicators used for measuring progress towards LDN.	<p>The SPI will provide inputs to the GLII to ensure harmonization of land indicators developed by the GLII and land indicators used by the UNCCD on the basis of existing data sources and standards that are globally collectible and comparable.</p>
6. Cooperate with the Integrated Drought Management Programme (IDMP), a joint initiative of the World Meteorological Organization and the Global Water Partnership on scientific issues related to drought.	<p>The SPI will ensure the coherence and relevance of SPI work on drought, particularly towards the IDMP's second pillar of drought management, which focuses on vulnerability and impact assessment, and collaborate on two planned publications: a framework document on integrated drought management and a brochure on drought and water scarcity.</p>
7. Assume a primary role in the quality assurance of the second edition of the Global Land Outlook (GLO 2), and review and, as appropriate, contribute to the development of other UNCCD evidence-based communications.	<p>The SPI will be a member of the GLO steering committee, contribute to and undertake a scientific review of the GLO 2 and all related documents, will approve the final versions prior to publication, and will be invited to review and, as appropriate, contribute to the development of other UNCCD evidence-based communications.</p>