

ECOSYSTEM INSIDER
The Ecosystem Insider brings you news from
the IUCN Commission on Ecosystem Management



December 2021, Edition 4

Dear IUCN CEM members,

We are pleased to bring you the 4th Issue of the IUCN Commission on Ecosystem Management (CEM) Newsletter for 2021

CEM HIGHLIGHT

CEM at COP 26

This year's COP, taken place in November in Glasgow, UK, was no longer about hypothetical models and projections on future scenarios, but on practical and urgent actions which need to be applied and enforced now in order to keep the 1.5°C limit and a call for innovative governance mechanisms as well as the involvement of local and indigenous communities in the process and decision making of their territories.

During the Conference, where several SC members such as Jonny Hughes and Madhav Karki were present, as well as other members, CEM co-hosted 2 events with FEBA and the IUCN secretariat: *Accelerating Nature-based Solutions for Climate Change Adaptation through Innovative Financing* panel which discussed the potential instruments for financing NbS, including bonds for marine conservation, endowment mechanisms, the blue capital facility and highlighted the need for innovating governance as well as involving communities in the process. Likewise, the event *Celebrating Successes of Nature-based Solutions for Climate Adaptation* which was done in collaboration with other organizations, presented the main achievements of EbA during the past years.



Friday, 5 November 2021 | 10:00-12:00 GMT (Glasgow)   



Monday, 8 November 2021
19:00-21:00 BST (Glasgow)     Supported by:
Nature-based Solutions, Nature Commission
and the UK Government
based on a division of the German Broadcasting

The *Powering Nature: Creating the Conditions to enable Nature based Solutions* event, in collaboration with WWF reflected on the institutions and legal frameworks needed for successful implementation as well as the need to make NbS economically viable and empowering local communities, managing trade-offs and the opportunity for NbS of mainstreaming across different sectors.



Last but definitely not least, during COP26, the IUCN announced the first International Standard Committee (ISC) for the Nature-based Solutions Standard, composed of a geographically diverse group of leading experts in local community practices, indigenous knowledge, conservation action, donor leadership and private engagement. Angela Andrade, CEM Chair, was appointed as first Chair for the ISC.

The International Standard Committee

International Standard Committee composition:

- **Balanced region and gender representation**
- **Representation of different stakeholders & expertise**

Angela Andrade

Stewart Maginnis

Nathalie Seddon

Manuel Pulgar Vidal

Mathias Bertram

Zingisa Motloba

Weihoa Xu

Cissy Gore-Birch

Saleemul Huq

The ISC will act as the global authority in providing leadership, latest knowledge and insights on applying the IUCN NbS Global Standard, facilitating lessons learnt and importantly, improving the Standard itself as it is implemented more widely. This will ensure the safeguarding of the Standard as the leading operative framework for the concept, supporting the much-needed transition to sustainable models for development and protecting and enhancing biodiversity. Most of the policy work regarding NbS focused on contributing to the advocacy for the inclusion of a specific text on Nature based Solutions in the final COP decision, considering the key role that CEM played as co-developer of the IUCN Global NbS Standard.

THEMATIC AREAS

Rewilding

The Rewilding Thematic Group recently held a 2-day retreat at the Natural Capital Lab, Birchfield, a rewilding project located in the Scottish Highlands close to Loch Ness. The core team of Steve, Ian, Sally, Adam & Rene were joined by RTG member Jessica Rothwell and also 'veteran rewilders' Alan Watson Featherstone & Mick Drury, both formerly from Trees for Life. The team is aiming to engage the broader CEM community with the guidelines process, and they be in touch soon asking for your support. Steve and Ian have also been in discussions with the recently establishing cross-commission rewilding working group to develop a collaborative approach as the working group progresses post-WCC Marseilles. Many thanks to our rewilding retreat host at the [Natural Capital Laboratory](#) and the [Birchfield](#) site owners, Roger & Emi!



ECOSYSTEM RESTORATION

CEM's Ecosystem Restoration Thematic Group (ERTG) has been working closely with the Society for Ecological Restoration and the FAO-led Best Practices Task Force of the United Nation's Decade on Ecosystem Restoration to develop information products to support the UN Decade. The first product from this collaboration, [Principles for Ecosystem](#)

[Restoration to Guide the United Nations Decade 2021-2030](#), was released in September, after a global consultation through the UN Decade website.

The ERTG is now working with these partners to develop Standards of Practice (SoPs) to support implementation of the Decade principles. The first step in developing SoPs is stocktaking of existing SoPs for all types of activities defined as ecosystem restoration under the Decade, including rehabilitation, reclamation, forest landscape restoration, ecological restoration, sustainable or ecological agriculture and forestry, rewilding, other effective conservation measures (OECMs) on terrestrial or in aquatic ecosystems, among others. For this, the ERTG is requesting CEM members' assistance by asking those members whose work involves SoPs for any type of restorative activity (for any biome, region or sector) to complete a brief survey to share knowledge about the SoP. The survey is available [here](#) and will be open until January 18th. If you have any questions, you can contact Cara Nelson at cara.nelson@umontana.edu.

RED LIST OF ECOSYSTEMS

As part of the ICCB, on December 15th, the Red List of Ecosystems held two important events. The first one was a symposium on *Red List of Ecosystems in Africa and the globe: application in policy, practice and planning*. During an interactive session from African-based scientists, the RLE shared how its work has been applied extensively in over 3000 ecosystems, with a strong focus on African case studies.

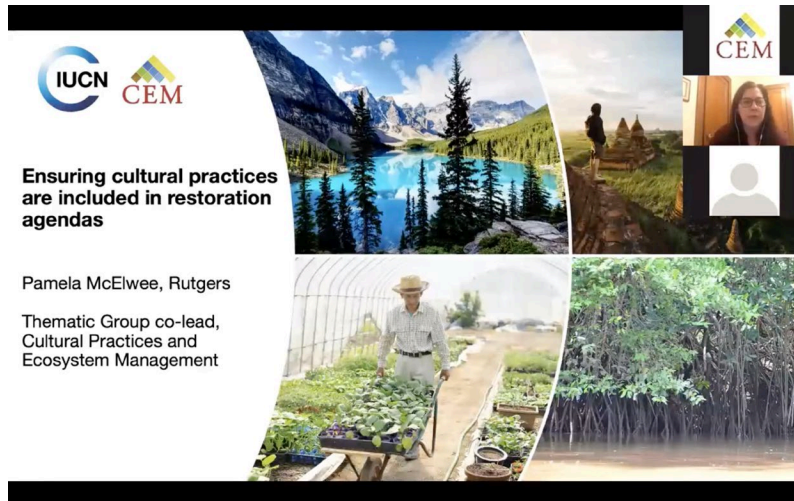
A workshop was also held on the IUCN Global Ecosystem Typology, the new [IUCN Global Ecosystem Typology](#) published in 2020. This workshop brought together professionals from different sectors, researchers and students interested in ecosystem conservation and monitoring to better understand the typology and its potential applications.



On November 26th, members from the Disaster Risk Reduction Thematic group from TH Köln – University of Applied Sciences and UNU-EHS jointly hosted the “Disaster risk communication related to the 2021 floods in Germany” session during the [European Forum for Disaster Risk Reduction](#). The event discussed whether intensive land use and climate change were among the triggering factors, what conclusions can be drawn for future flood events, outlined approaches for better risk communication through participatory mechanisms, and questioned what role risk communication can play in the context of ecosystem-based disaster risk reduction and adaptation.

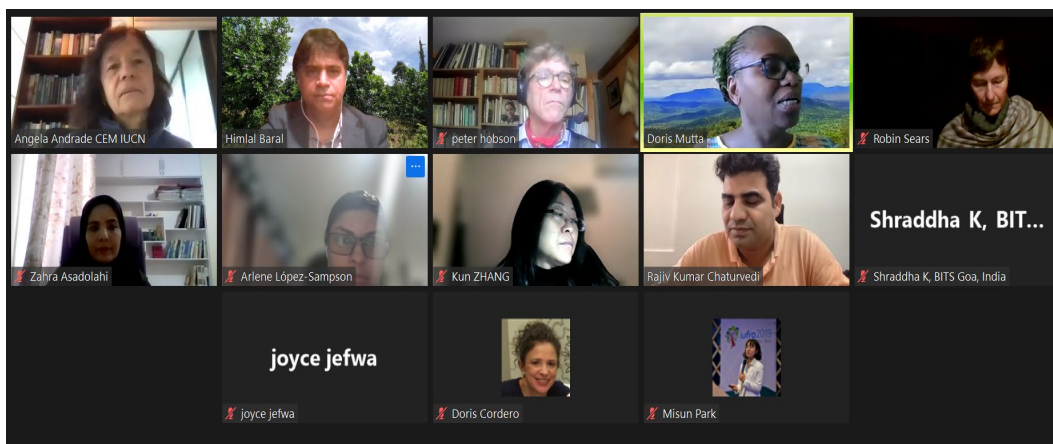
CULTURAL PRACTICES AND ECOSYSTEM MANAGEMENT

Pamela McElwee, co-lead for the Cultural Practices and Ecosystem Management presented the webinar "*Ensuring Cultural Practices are Included in Restoration Agendas*" which is part of the online series of the Ecosystem Restoration Thematic Group. Watch the full event [here](#).



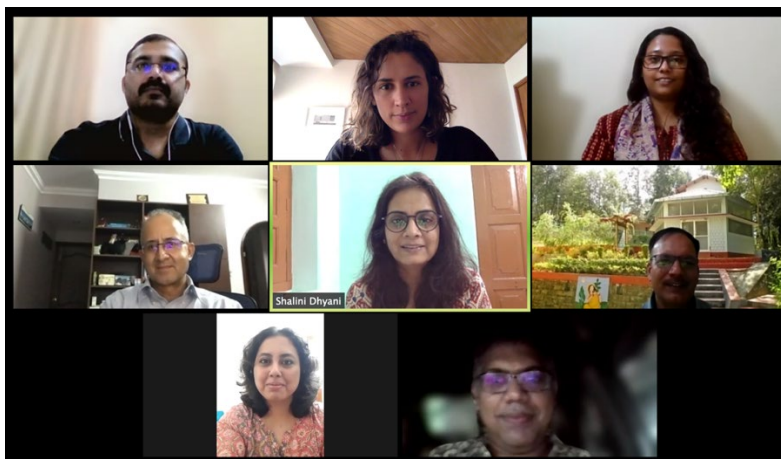
FOREST ECOSYSTEMS

The IUCN CEM Forest Ecosystems Specialist Group held a virtual meeting on December 1st in order to introduce the new group and discuss the proposed work themes for the upcoming period. Ten core group members attended, calling in from all four quadrants of the globe. Hosted by group lead Himlal Baral, the meeting focused on introducing the group to the CEM mission and structure and defining our place in advancing the IUCN goals. CEM Chair, Angela Andrade shared the broad institutional context, highlighting key issues to be addressed, including conservation of intact forest, forest management for a broad set of critical ecosystem services, and critical support to Indigenous peoples and local communities as forest stewards. Work is now underway to firm up the workplan for the term, centering on the goal of highlighting the essential role of forests in maintaining planetary ecosystem function while meeting global development targets.



CEM DIALOGUES

As is known by most of you, every month CEM leads a webinar on different subjects and recent publications hosted by members. During October, the space was led by the IUCN South Asia region who hosted the 9th CEM Dialogue on *Harnessing Nature*, a multi-author blog aimed for sharing the latest updates on South Asian member activities.



The blog has become a platform for CEM members across different thematic groups to exchange knowledge and generate awareness on diverse matters as well as for sharing relevant articles on ecosystem-based approaches for climate adaptation, disaster risk reduction, ecosystem-based management, restoration, natural & green infrastructure, ecosystem governance, agriculture, forests among others. Watch the full webinar [here](#).

The 10th CEM Dialogue, which took place in November, was led by the Fisheries Expert Group on Conservation Issues in the marine capture fisheries sector: OECM's and GBF. The webinar touched on how Other Effective area-based Conservation Measures (OECMs) into economic sectors like fisheries, together with Marine Protected Areas (MPAs), are an important element of the 30x30 IUCN target for 2030 and of the Draft CBD Post-2020 Global Biodiversity Framework (GBF). Watch the full webinar [here](#).

Introduction to Other Effective Area-Based Conservation Measures (OECMs)

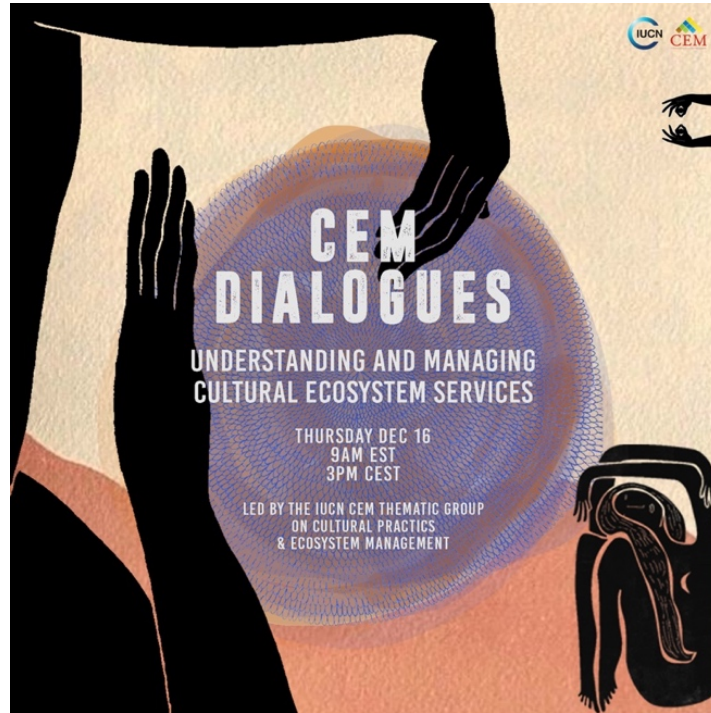
Joe Appiott and Marketa Zackova
Secretariat of the Convention on Biological Diversity

Convention on Biological Diversity

Joe Appiott (CBM)

CBM

[Challenges to Understanding and Managing Cultural Ecosystem Services in the Global South.](#)



[here.](#)

Also, at the beginning of February, we will have our first 2022 council meeting. We hope it to be a productive one and we will keep you updated once we have more news on this subject.

REGIONAL NEWS

1st Biodiversity Congress in Costa Rica

Between November 15 and 19, 2021, the 1st Scientific Congress of Biodiversity and Conservation of Costa Rica was held virtually. The Congress was organized by the five public universities of the country, the Tropical Science Center, and had the support of the CEM. The main objective of the event was to analyze and discuss the role of academia and research in the conservation of the country's biodiversity, within the framework of the biodiversity relevance for socioeconomic development. The Congress addressed biodiversity conservation states in the country, ecosystem services and global change impacts, as well as transformative change and the future of higher education on biodiversity conservation and management. During the event, the First Meeting of Young

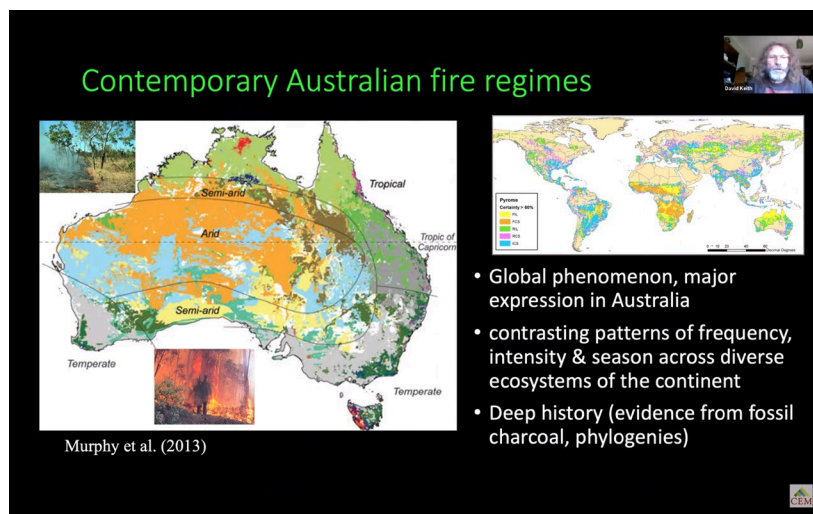
Scientists took place, a space that allowed to discuss the barriers and perspectives of youth for a more active integration in global biodiversity research.

The event was attended by many active members of the CEM in the region. Two talks addressing current priority areas of the Commission were presented by Dr. Liette Vasseur, Professor, CEM Deputy Chair, who spoke on transformative change and Dr. Carlos Zambrana-Torrel, Leader of the thematic group on Human Health and Biodiversity, who addressed the link between biodiversity degradation and human health.

The technical report of the Congress will be available next year. Details related to the program, organizers and the recordings of all the sessions, is available at the following link (only available in Spanish) <https://www.costaricabio.com/>. If you require more information, you can contact Dr. Bernal Herrera-Fernández, President of the Scientific Organizing Committee and member of the Steering Committee of the Commission at bernal.herrera.f@gmail.com.

Oceania Regional Webinars

The Oceania Regional Webinar on Bushfires and Ecosystem Management was hosted on 25th October. The event featured talks on Aboriginal cultural burning by Den Barber, ecosystem collapse and recovery by David Keith, new developments in remote sensing of fire by Rebecca Gibson and climate change impacts on bushfire by Dr Hamish Clarke. The webinar can be viewed [here](#).



Eureka Prize of Applied Environmental Research awarded to David Keith - RLE

On this same note, we want to highlight the award given to David Keith, along with other members of the NSW Bushfire Risk Management Research Hub who were awarded the prestigious Eureka Prize in the category of Applied Environmental Research, for their work unravelling the causes and consequences of the devastating Black Summer fires of 2019-2020. Their work was pivotal in informing a government inquiry into the fires and directly

influenced many of the inquiry's recommendations that set the direction for future fire management in NSW. Congratulations David and team!

Alejandro Angel Escobar Award for Environment and Sustainable Development - RLE

Likewise, the *Alejandro Angel Escobar Award for Environment and Sustainable Development*, considered the most prestigious scientific award in Colombia was granted to a team of Colombian researchers, led by Professor Andres Etter from the Javeriana University and supported by organizations such as Conservation International Colombia and IUCN CEM Chair, Angela Andrade. The team was recognized for their work on the project *“Colombian Ecosystems: Threats and risks. An application of the Red List of Ecosystems for continental, terrestrial ecosystems”*, which assessed the status of 13 ecosystems throughout the country. As a result, out of the 81 areas assessed, 20 showed critical levels of risk, 16 at risk, 14 vulnerable and only 31 were established as “low risk” ecosystems, highlighting priority areas for conservation and restoration as well as regulating ecosystem-degrading practices and taking action towards more sustainable practices.



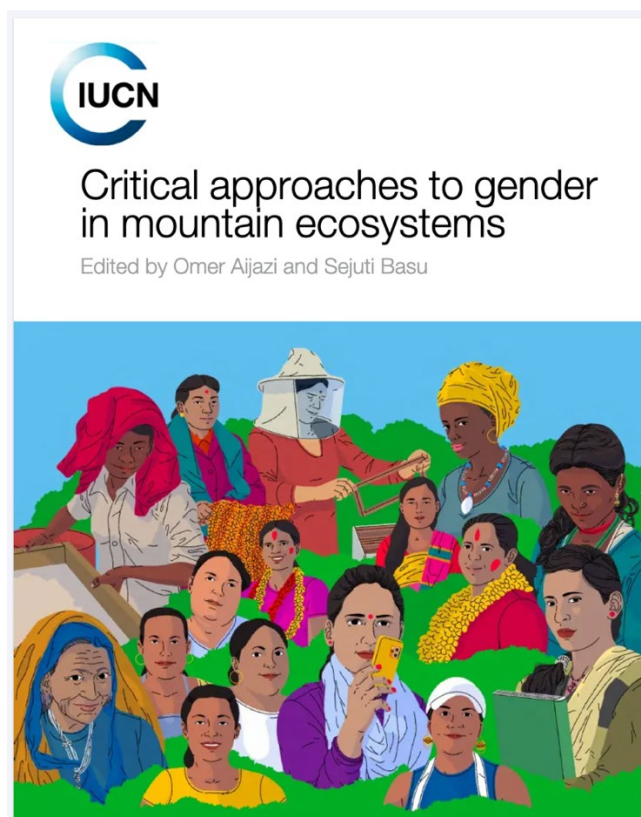
This publication is the culmination of a process of over 25 years of ecosystem mapping and evaluating the transformation processes of Colombian ecosystems, where the work of the IUCN Red List of Ecosystems has played a crucial role.

PUBLICATIONS

Critical Approaches to Gender in Mountain Ecosystems

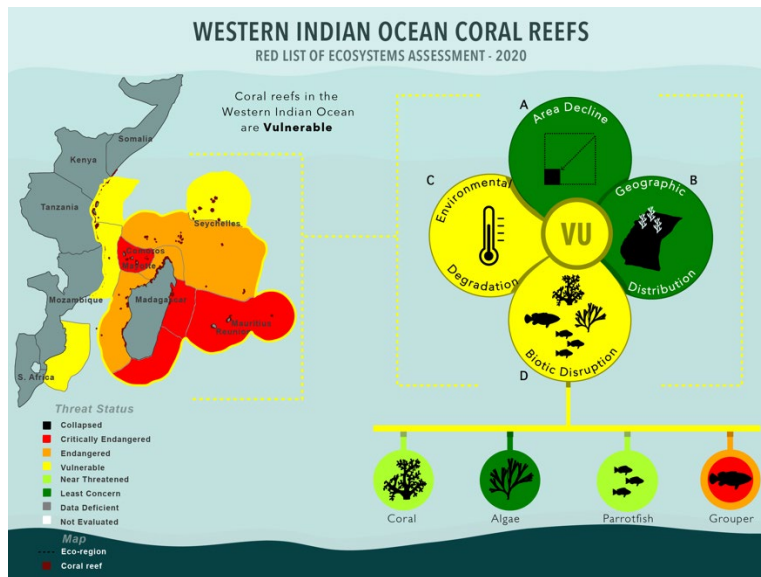
We are happy to share two of our latest publications which were developed by our members. Firstly, the Mountain Ecosystem Specialist Group released its latest publication titled *“Critical Approaches to Gender in Mountain Ecosystems”*. Edited by Omer Aijazi and Sejuti Basu, lead and co-lead of the group, the publication draws from the group's diverse

global membership ranging from academic researchers to government officials and civil society members. It is a good reminder that there is much more to be learnt and achieved when it comes to gender and pushes for even greater integration of critical feminist approaches with mountain ecosystem management, presented from successful interventions in South Asia, Europe, North America, and West Africa. The full publication can be downloaded [here](#).



Using ecosystem risk assessment science in ecosystem restoration: a guide to applying the Red List of Ecosystems to ecosystem restoration

Also, a new publication on *Using ecosystem risk assessment science in ecosystem restoration: a guide to applying the Red List of Ecosystems to ecosystem restoration* was launched on December 9th and led by Marcos Valderrabano and in collaboration with Cara Nelson and Emily Nicholson among other members, explores how the Red List of Ecosystems and ecosystem restoration can be jointly deployed to reduce risk of ecosystem collapse. Read the full publication at <https://doi.org/10.2305/IUCN.CH.2021.19.en> and the accompanying storymap at <https://tinyurl.com/RLE-Restoration-Story>.



Social-Ecological Systems and Panarchy

SERT member Dr. Ahjond Garmestani, along with colleagues, have recently published two papers on social-ecological systems and panarchy. *Panarchy* is a key concept in resilience that examines, among other things, how system transformation requires working within and across smaller and larger system scales. Along with Dr. Craig Allen and Dr. Lance Gunderson, Dr. Garmestani has a new book in press, *Applied Panarchy*, and scheduled for release in April 2022. The book explores how practitioners have used panarchy in environmental stewardship and integrates law, economics, and urban planning, among other things. You can find the publications in the following links:

[Iterative scenarios for social-ecological systems](#)

[Panarchy and management of lake ecosystems](#)

[Applied Panarchy: Applications and diffusion across disciplines](#)

Climate Change Adaptation Checklist for Climate Smart Projects

EcoAdapt, a highly regarded non-profit consultancy in the United States, has just published a [Climate Change Adaptation Checklist for Climate Smart Projects](#). The Checklist guides users through a simple process to determine if given climate change a project will continue to deliver intended benefits. In three steps that are easy to complete with the information available, users identify climate risk factors, explore potential impacts of those risk factors, and develop adaptation options to avoid, minimize or ameliorate negative impacts.



Systems Thinking for Sustainability

As part of his contributions to SERT, Dr. Bryan Jenkins recently published [Systems Thinking for Sustainability](#) in the Journal of Systems Thinking. The paper provides a sustainability framework based on nested, adaptive socio-ecological systems. It aims to generate management interventions that address systemic failures, and speaks to both transformation and resilience. Historical examples of erosion and famine illustrate the framework and help to think about agroecosystems. Both problems have existed for millennia, and have well-known sustainability strategies. However, decision-makers have not adequately implemented these strategies. From a system's view, understanding this stagnation requires examining not only sustainability, but also issues of power, wealth, and governance. The framework has wide applicability to conservation and biodiversity loss, as well as climate change and pollution.

Resilience Best Practice Principles

SERT members Mike Jones (former lead) and Dr. Bryan Jenkins, together with a transdisciplinary team of academics and professionals, have just published [Principles for Including Resilience Assessment in Environmental Impact Assessment](#). The main opportunity for this study came in 2020, when the Covid-19 pandemic spurred the International Association of Impact Assessment leadership to convene a group to prepare these principles. The document sets out international best-practice principles for resilience assessment being undertaken within an IA of some project, plan, program, or

policy (in this context, its function may be different to that of a self-standing resilience assessment).

Challenges to Understanding and Managing Cultural Ecosystem Services in the Global South

Several Cultural Practices and Ecosystem Management Group members are part of a new special issue in press with Ecology and Society on [Challenges to Understanding and Managing Cultural Ecosystem Services in the Global South](#). The paper focuses on several potential categories of Cultural Ecosystem Services (CES) including cultural diversity, spiritual and religious values, knowledge systems, educational values, inspiration, aesthetic values, social relations, sense of place and recreation and ecotourism. The Millennium Ecosystem Assessment (MEA 2005) defined CESs as the “intangible and non-material benefits that people enjoy from ecosystems” and since its release, there has been a large increase in attention to how CES are defined, identified, valued, and conserved in policy and projects, reflecting their importance as a concept to multiple groups of people.

MEMBERSHIP RENEWALS

Lastly, we are happy to announce we have successfully completed over 45% of the pre-existing memberships. Even though the deadline for membership renewals has been extended until January, we ask you to do so as soon as possible to avoid any last-minute complications. We also encourage all Technical leaders and Regional Chairs to consult their lists of members and invite those who have not renewed yet. Additionally, the link for new members is already open and available for applications, you can find all the info [here](#).

Ultimately, we want to thank you all for your endless commitment and dedication to the Commission. CEM’s accomplishments and achievements are possible only through your efforts and collaboration. We wish you all a merry Christmas and a happy new year, and we hope to continue counting with your participation during the upcoming year.