

Monday, 15 March 2021

7th Asia-Pacific Climate Change Adaptation Forum 8-12 March 2021

The 7th Asia-Pacific Climate Change Adaptation Forum met under the theme “Enabling Resilience for All: The Critical Decade to Scale-up Action,” with participants sharing learnings from actions towards climate-resilient development.

Forum participants developed a set of recommendations under five enabling conditions, including on:

- climate governance, the need for a whole-of-society approach to resilience;
- planning and processes, an emphasis on political will, leadership, and putting people at the center;
- science and assessment, the need for a bottom-up approach to innovation and solutions in adaptation and strengthening regional and transboundary cooperation;
- technologies and practice, the need to value capital in all its dimensions; and
- finance and investment, the need to integrate climate change into development finance and private sector investment.

The Forum deepened discussion on each enabler through four thematic resilience streams in parallel technical sessions, namely: (i) inclusive resilience; (ii) nature-based resilience; (iii) economic sector resilience; and (iv) communities and local resilience.

The Forum was hosted by the Ministry of the Environment of Japan, together with the Asia-Pacific Adaptation Network (APAN) Secretariat, which the UN Environment Programme (UNEP) provides. It was held virtually due to the ongoing COVID-19 pandemic.

Brief History of APAN and the Forum

APAN, developed and launched by UNEP in 2009 under the Global Adaptation Network, is the first regional adaptation network. It equips adaptation actors in the region with knowledge for designing and implementing adaptation measures, building capacity to access technologies and finance, and integrating climate change adaptation into policies, strategies, and plans towards building climate change resilient and sustainable human systems, ecosystems, and economies. The Asia-Pacific Adaptation Forum, APAN’s flagship event, enables adaptation practitioners to meet, share their experiences and what they have learned, and work together to address the challenges of climate change.

Since the first event in 2010, the APAN Forum has grown to become the venue for adaptation practitioners, including policymakers, scientists, donors, youth, and representatives from over 50 countries to meet, converse, and work together for adaptation action partnerships.

The 1st APAN Forum, held in 2010, emphasized stimulating regional knowledge sharing, facilitating networking, and linking local level adaptation initiatives with those at the national and regional levels.

The 2nd APAN Forum, held in 2012, focused on adaptation in action, by: showcasing knowledge, practices and experiences; providing an interactive space to promote networking in support of learning to adapting to climate change; and linking local level adaptation initiatives with those at the national and regional levels.

The 3rd APAN Forum, held in 2013, discussed: adaptation strategies; critical and neglected groups and what governments, organizations and communities are doing to better engage them in adaptation plans and actions; adaptation in sectors and systems: and knowledge management for adaptation.

The 4th APAN Forum, held in 2014, focused on adaptation actors and how they collaborate to form partnerships and

In This Issue

Brief History of APAN and the Forum	1
Report of the Forum	2
Inauguration of the 7th APAN Forum	2
High-level Plenary: Resilience for All: The Critical Decade to Scale-up Action	2
Policy and Climate Governance	2
Planning and Processes	4
Science and Assessment	6
Technologies and Practices	7
Finance and Investment	9
Closing Session: Scaling-up Action	10
Upcoming Meetings	11
Glossary	11

networks. It highlighted the ways in which actors in adaptation can influence agendas and activities from lobbying or advising to creating and following rules, norms and procedures.

The 5th APAN Forum, held in 2016: reviewed and evaluated developments in adaptation; raised awareness and understanding of potential adaptation project opportunities in the region and matching these with available climate funding resources, especially from the private sector; and identified priority knowledge, policy, and funding gaps.

The 6th APAN Forum, held in 2018, used resilience as a unifying theme and focused on learning from adaptation action and moving towards climate resilient development. Discussions were built around four streams: resilience of social and human systems; resilience of natural systems; resilience of industry and the built environment; and resilience of island communities. The special focus on island communities recognized that the numerous and diverse island communities within Asia and the Pacific face particular challenges associated with natural hazards and socio-economic shocks as a result of climate change.

Report of the Forum

Inauguration of the 7th APAN Forum

Nadya Yuti Hutagalung, Environmental Advocate and TV Presenter, opened the 7th Asia-Pacific Climate Change Adaptation Forum, on Monday, 8 March. She encouraged participants to fully use the opportunity of this flagship event to engage and participate in conversation. An ice-breaking video highlighted some of the successes and challenges in climate change adaptation under the Paris Agreement.

Hiroyoshi Sasagawa, State Minister of the Environment, Japan, welcomed participants and praised the efforts of the Asia-Pacific Adaptation Information Platform, serving as an online collaboration platform to effectively manage risks by promoting scientific knowledge, supportive tools, and capacity building. He cautioned against letting the current pandemic lead to a reversal of gains made on combating climate change. Dechen Tsering, Regional Director Asia Pacific, UNEP, highlighted the need to build back better, and to promote the transition to carbon neutrality, to address the triple crisis of climate change, biodiversity loss, and pollution.

High-level Plenary: Resilience for All: The Critical Decade to Scale-up Action

This session took place on Monday, 8 March, and was moderated by Rico Hizon, CNN Philippines. The session discussed: the urgency to scale-up adaptation action to build resilience for Asia and the Pacific; building understanding on the need to step up climate adaptation efforts; approaches to factoring climate adaptation and resilience into decision-making processes; and pursuing a transformative recovery from COVID-19 that takes into consideration the fight to end poverty, combat climate change, and prevent a mass extinction.

In a keynote video message, Ban Ki-Moon, Lead, Global Commission on Adaptation, reflected on the realities



Hiroyoshi Sasagawa, State Minister of the Environment, Japan

and challenges faced by the Asia-Pacific region due to climate change. He highlighted the launch of the decade of transformation for a climate resilient world, which includes stronger partnerships and knowledge exchange to make the best solutions and approaches available.

Joyce Msuya, Deputy Executive Director, UNEP, underscored the cost of inaction versus the cost of action, noting that the cost of adapting will soon outstrip the amount of financing available. She said failure to adapt will lead to a sharp rise in poverty and a real risk in hunger and inequality for the Asia-Pacific region. She stressed that given the daunting scale of the challenges, climate financing is critical.

Jayathma Wickramanayake, UN Secretary-General Envoy for Youth, emphasized that youth have continuously asked for stronger commitments towards climate action, particularly in public climate financing to build resilience in local communities.

Hussain Rasheed Hassan, Minister of Environment, Maldives, acknowledged the need to listen to youth, stressing that climate change is an existential threat to all.

Issa Barte, For the Future, offered a visual storytelling account of the impacts of natural disasters in the Philippines, emphasizing this is not just about resilience but the survival of people.

In closing remarks, Anne-Marie Trevelyan, UK International Champion on Adaptation and Resilience for the 26th session of the Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC COP 26), urged all Asia-Pacific countries to present their climate adaptation and resilience communication plans in time for COP 26.

Plenary Session: Policy and Climate Governance

This plenary, held on Monday, 8 March, focused on sharing examples of climate governance at the international, regional, and national levels that support adaptation actions towards building the resilience of sectors and society in an inclusive manner and are cognizant of trade-offs. The session was moderated by Veronica Pedrosa, Independent Broadcast Journalist, who stressed the need to consider interlinkages between climate change, health, and biodiversity and to scale up action.



Loren Legarda, Deputy Speaker, House of Representatives, the Philippines

Loren Legarda, Deputy Speaker of the House of Representatives, the Philippines, clarified that adaptation action would yield high returns on investment, and urged that half of climate finance be spent on adaptation, including nature-based solutions (NbS). She emphasized that implementation must happen in cooperation with local communities so that underlying inequities are addressed. She concluded that policy action informed by climate justice, science, and technologies must be at the core of climate governance.

Datin Sunita Rajakumar, Climate Governance Malaysia, shed light on corporate governance and stressed the need for the private sector to adopt an effective climate transition strategy. She noted that a holistic corporate governance architecture was needed to support financial stability in the future. Muhammad Irfan Tariq, Climate Change Department, Pakistan, said his country is engaging in NbS, a key part of its robust climate agenda.

Syeda Rizwana Hasan, Bangladesh Environmental Lawyers Association, said Bangladesh stands to lose land and resources under the current climate trajectory with compounding challenges related to population growth, and fragile water reserves and ecosystems. She reiterated the importance of grassroots-driven adaptation strategies. Batjargal Zamba, Special Envoy on Climate Change, Mongolia, emphasized the importance of linking traditional knowledge with modern science in engaging local communities on adaptation.

Technical Sessions: These four sessions were held on Monday, 8 March.

Fostering Inclusive and Cross-sectoral Governance Processes for NbS for Resilience: This session, moderated by Radhika Murti, International Union for Conservation of Nature (IUCN), focused on understanding the roles of all stakeholders and relevant government sectors in promoting inclusive governance in the design and implementation of NbS for resilience.

Kazuaki Takahashi, Ministry of the Environment, Japan, highlighted his country's experience in dealing with natural disasters and urged everyone to use NbS to counter them.

Saleemul Huq, Director, International Centre for Climate Change and Development (ICCCAD), and Independent

University Bangladesh, in his keynote address, said discussion of NbS remains in an "environmental ghetto." He said cross-communication with different government and private sectors is needed to mainstream NbS to tap into greater resources.

Animesh Kumar, UN Office for Disaster Risk Reduction (UNDRR), discussed the way NbS brings coherence to disaster risk and climate change adaptation.

In the ensuing panel discussion, Kritika Rajon on behalf of Joshua Wycliffe, Permanent Secretary, Ministry of Environment, Fiji, highlighted NbS implementation in her country, which has relied on traditional ecological knowledge for hundreds of years. Pasang Dolma Sherpa, Center for Indigenous Peoples' Research & Development, highlighted the role of indigenous peoples, and their wisdom and practices in informing NbS.

Somkiat Prajamwong, Secretary-General, Office of the National Water Resources, Thailand, discussed the role of local communities in implementing NbS. Fononga Vainga Mangisi-Mafileo, The Pacific Community, stressed the need to strengthen cross-sectoral cooperation and linking local to national approaches.

Murti closed the session, highlighting the complexity of the topic with so many levels of governance involved and the promise of NbS to bring change.

Linking Adaptation and Mitigation: The Role of National Adaptation Plan (NAP) Processes in Nationally Determined Contribution Implementation Towards Climate Action for Inclusive and Enhanced Local Resilience in South and Southeast Asia: This session was moderated by Linda Anne Stevenson, Asia-Pacific Network for Global Change Research (APN), and Christmas Uchiyama, APN. It discussed NAP processes in the framework of climate action for enhanced local resilience in South and Southeast Asia.

Vositha Wijenayake, Executive Director, SLYCAN Trust, highlighted experiences and successes from NAP-related research in Bangladesh, Nepal, and Sri Lanka. Shamik Chakraborty, Hosei University, Japan, said local people often have considerable ecosystem-based traditional and local knowledge.

Binaya Raj Shivakoti, Institute for Global Environmental Strategies (IGES), highlighted education and technical capacity in the forestry sector and the importance of community participation. Juan M. Pulhin, University of the Philippines Los Baños, highlighted multi-stakeholder approaches, institutional capacity development, and integrating science and local knowledge.

Dipayan Dey, South Asian Forum for Environment, presented projects in Bhutan and India, which led to adaptive farming practices. Luong Quang Huy, Ministry of Natural Resources and Environment, Vietnam, said while there are always benefits between adaptation and mitigation, using resources appropriately is critical for them to be realized.

Gen'ichiro Tsukada, APN, in closing remarks, said APN is committed to addressing issues raised on increasing resilience through synergies.

Envisioning Resilient and Inclusive Futures for Asia and the Pacific: The Role of Policy and Climate Governance in Securing More Inclusive Resilience Practices: This session discussed how policy and climate governance can build inclusive resilience at regional, national and sub-national levels to ensure that specific resilience practices consider social vulnerabilities and differential access to power, knowledge and resources of the poor, marginalized, and other climate-vulnerable groups.

Niall O'Connor, Asia Centre Director, Stockholm Environment Institute (SEI), opened the session, emphasizing the centrality of the principle of leaving no one behind and the underlying human rights context.

Moderator Dharini Priscilla, Grassrooted Trust, led the discussion, seeking examples of empowering the poor, marginalized, and vulnerable to find and use political spaces. Lan Mercado, Oxfam, drew a parallel between the impacts of the current pandemic and climate change on vulnerable communities, illustrating the need to change to fairer, more sustainable, and more democratic decision-making processes.

Gratia Dkhar, North East Slow Food & Agrobiodiversity Society, highlighted the customary food systems of indigenous peoples and their important role for biodiversity and resilience in agriculture. Sushila Pandit, Mercy Corps, emphasized the vulnerable need to believe in their power to start changing things in their favor.

Jonathan Ensor, SEI, offered a definition for equitable resilience which depends on the recognition of different opportunities and perceptions, and a willingness to transform the relationship between actors. Josaia Jirauni Osborne, Pacific Islands Association of Non-governmental Organisations, offered examples of inclusive and successful approaches to local disaster and risk management.

Mohamed Nasheed, Speaker, People's Majlis, Maldives, explained how the willingness to relinquish power increases one's power, and pleaded for new and inclusive designs of adaptation measures. Richard Friend, University of York, summarized the discussion focusing on social equity and on future-proofing the resilience agenda.

Moving from 'Form to Function' for Strengthening Climate Policy and Governance in Economic Sectors: This session was moderated by Cristina Rumbaitis del Rio, World Resources Institute (WRI). It emphasized the concerted efforts made in strengthening climate governance and the challenges remaining to operationalize them in economic sectors.

Ahmed Waheed, Ministry of Environment, Maldives, called for a multifaceted approach where best practices are harnessed to inform better climate governance. Shailaja Narwade, from Swayam Shikshan Prayog, a grassroots women's empowerment organization based in Pune, India, shared her experience regarding how organized local communities, organic farming, and resilient farming practices help mitigate the impacts of natural disasters.

Nanki Kaur, International Centre for Integrated Mountain Development (ICIMOD), highlighted that smallholder

mountain enterprises contribute to climate resilience. Stefan Kohler, UN Office for Project Services, shared how resilient infrastructure underpins economic activity. Neha Rai, Food and Agriculture Organization of the UN (FAO), discussed barriers in operationalizing climate change policies and plans in the agricultural sector and private sector engagement.

Aslam Perwaiz, Asian Disaster Preparedness Center, addressed the issue of business resilience in the framework of disaster preparedness. Andreas Hofmann, German Agency for International Cooperation (GIZ), noted that disaster risk management is now a consideration in planning tourism development.

Rumbaitis del Rio closed the session, emphasizing that systems thinking should be integrated into every sector of government to increase climate change resilience.

Plenary Session: Planning and Processes

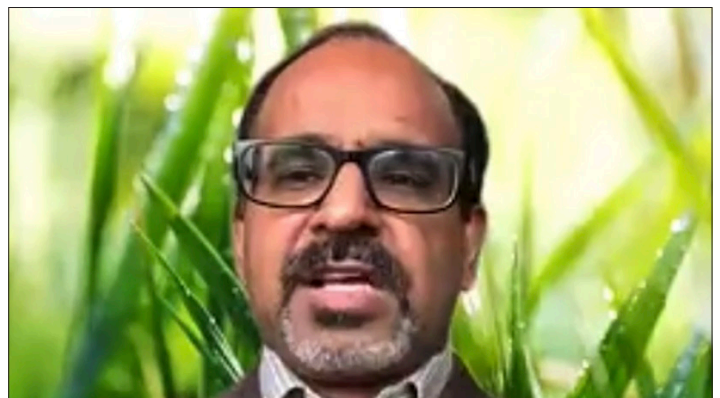
This session, moderated by Rico Hizon, was held on Tuesday, 9 March. It addressed how to apply systems thinking in development and project planning and processes to design inclusive adaptation actions that avoid trade-offs and break silos.

Muhammad Musa, Bangladesh Rural Advancement Committee (BRAC) International, stressed that people impacted by climate change must be supported the most to build resilience.

David Jackson, UN Capital Development Fund, underscored the need to mainstream climate adaptation in existing investments. Giuseppe Busini, EU Delegation to Thailand, cited the example of the EU Green Deal as a blueprint for integrating climate change adaptation in projects.

Emani Kumar, ICLEI – Local Governments for Sustainability, shared his organization's experiences in helping city governments implement actions on the ground that consider leadership and budgetary implications.

Nur Masripatin, Ministry of Environment and Forestry, Indonesia, highlighted key policy approaches, including a bottom-up and top-down process that considers both national and village levels. Nurul Quadir, North South University, Bangladesh, said his country has taken a systemic approach to climate resilience. He underscored the importance of including local levels in the planning process.



Emani Kumar, ICLEI Deputy Secretary General, and Executive Director, ICLEI South Asia

Technical Sessions: These four sessions took place on Tuesday, 9 March.

Overcoming the ‘Tragedy of Horizon’ through Climate Resilience in Economic Planning Processes: This session was moderated by Koko Warner, UNFCCC. It addressed progress made in undertaking inclusive adaptation planning in economic sectors and identifying priorities for integrating resilience considerations into broader socio-economic planning, including in COVID-19 recovery, to steer economic development in a resilient direction.

Warner led a multi-faceted discussion around identifying priorities, tools, and policies for integrated adaptation planning. Le Hoang Anh, Ministry of Agriculture and Rural Development, Vietnam, shared her country’s adaptation planning processes and provided examples for adaptation options in agriculture and agroforestry.

Mary Kim, Asian Development Bank (ADB), presented the ADB’s Pacific Private Sector Development Initiative. She engaged the audience with a discussion on how to build tourism back better on Pacific islands hit hard by both the pandemic and natural disasters. Yihong Wang, ADB, provided a case study for smart water management in 30 resilient ‘sponge cities’ in China.

Simon Lucas, Foreign, Commonwealth and Development Office, UK, demonstrated how planning for a green recovery can avoid the trade-off between infrastructure development and tourism in Nepal. Cristina Martinez, International Labour Organization, illustrated how jobs are a source of dignity. She focused on the importance of a just transition towards environmentally sustainable economies and societies for all. Iris Caluag, Youth for Asia, stressed how young people need to be included as legitimate stakeholders in adaptation planning processes.

Collaborating Efforts to Strengthening Cities Resilience to Climate and Disaster Risks: This session was moderated by Phurba Lhendup, Asian Institute of Technology, Regional Resource Centre for Asia and the Pacific (AIT RRC.AP). It focused on strategies and approaches in achieving the aims of the Making Cities Resilient 2030 (MCR2030) partnership.

In his remarks, Naoya Tsukamoto, AIT RRC.AP, said rapid urbanization continues to exacerbate the impacts of climate change in the region. Kazuhiko Takeuchi, IGES, urged for prudent measures to address challenges in a synergetic way.

Marco Toscano-Rivalta, UNDRR Regional Office for Asia and the Pacific, highlighted the enabling conditions for MCR2030, including: strengthened local climate and risk governance; risk assessments; resilience building plans; knowledge sharing; and financing. Arlene B. Arcillas, City Mayor, City Government of Santa Rosa, Laguna, the Philippines, highlighted efforts in watershed management that take into account urbanization and climate resilient land-use planning.

Inu Pradhan Salike, Tribhuvan University, said universities and local governments share expertise on various aspects of climate change and adaptation. Binaya Raj Shivakoti, IGES, reaffirmed the value of collaborations, partnerships, and knowledge sharing

at the local and regional levels on disaster risk reduction and climate change adaptation. Armen Rostomyan, AIT RRC.AP, said local needs, buy-in, and sense of ownership are key to the success of resilience strategies in cities.

Integrating Nature-Based and Ecosystem-based Elements in National Adaptation Planning: This session, moderated by Lis Mullin Bernhardt, UNEP, highlighted how NAPs under the UNFCCC represent the primary national strategy document for adaptation. Jessica Troni, UNEP, highlighted UNEP’s ecosystem-based work in supporting disaster mitigation and the importance of ecosystem-based adaptation (EbA) in the NAP process. Paul Desanker, UNFCCC, noted NAPs are essential for adaptation planning and communication.

In the ensuing panel discussion, Julie Greenwalt, Go Green for Climate, on behalf of the NAP Global Network, highlighted opportunities to strengthen EbA in NAP processes. Alexandre Meybeck, Center for International Forestry Research, underscored the importance of a FAO publication on forestry and agroforestry in support of integrating forests and trees in NAP processes. Cristina Romanelli, World Health Organization, discussed how to embed health and biodiversity concerns in policy-development processes, such as NAPs, noting that drivers of ecosystem loss also impact human, social, and health systems.

Several panelists described their experience with NAPs and challenges, related to, for example, access to funding and lack of capacity. Srijana Shrestha, Ministry of Forests and Environment, Nepal, discussed her country’s experience, while Jennifer DeBrum, UN Development Programme (UNDP), presented on EbA implementation in the Marshall Islands. Chompunut Songkhao, Ministry of Natural Resources and Environment, Thailand, highlighted that climate change concerns have been integrated into water and natural resource management, human settlement, and security policies in Thailand. The session concluded with Alejandro Jimenez, UNEP, introducing the Guidelines on Integrating EbA in NAPs.

Supporting Human Rights-based Inclusive Resilience for All: This session, moderated by Kavita Naidu, Edith Cowan University, Australia, addressed the adverse impacts of climate change on the effective enjoyment of vulnerable peoples’ rights.



Cristina Romanelli, Programme Officer, World Health Organization

Saad Alfarargi, UN Special Rapporteur on the Right to Development, delivered a keynote on how widely human rights are impacted by climate change. Referring to the Sendai Framework for Disaster Risk Reduction, he called for a participatory, differentiated, and transparent approach to adaptation planning.

Camille Pross, SEI, explained that vulnerability stems from stereotype roles, practices and norms, and called for an intersectional human rights-based approach to build inclusive resilience. Sunishma Singh, UN-Habitat, illustrated how successful adaptation can be hindered by discrimination and marginalization. Louise Mabulo, The Cacao Project, the Philippines, presented on regenerative agriculture and livelihoods as methods to live with a changing climate and promote gender equality.

Tishiko King, Seed Indigenous Youth Climate Network, Australia, emphasized that the respect of human rights – including social justice, cultural belonging, and self-determination – must be the ultimate goal of development. Emily Dwyer, Edge Effect, advocated that humanitarian and development organizations work in genuine partnerships with sexual and gender minorities to break up roles, practices and norms responsible for exclusion and discrimination. Abia Akram, National Forum of Women with Disabilities, reiterated that stereotypes need to be challenged, norms changed, and persons with disabilities systematically included in adaptation planning and beyond.

Plenary Session: Science and Assessment

This session, held on Wednesday 10 March, was moderated by Veronica Pedrosa. Discussions focused on available knowledge of climate science and innovative approaches on data and assessment. In his keynote address, Anand Patwardhan, University of Maryland, elaborated on a multi-pronged approach to research that ensures evidence-based decisions.

Nicola Willey, Foreign and Commonwealth Office, UK, highlighted support for the Southeast Asia region, which includes science, seasonal forecast, and the delivery of better advice on the impact of extreme weather events on development, welfare, and well-being. Nambi Appadurai, WRI, emphasized that good science leads to good policy and the need to demystify science. He also highlighted the work of National Innovations on Climate Resilient Agriculture, which aims to enhance the resilience of agriculture in India.

Johanna Nalau, Fellow at Griffith University and member of the Science Committee of UNEP, pointed out that science needs to include local and indigenous knowledge, for example when bird migration indicates an increased likelihood of cyclones in the Pacific islands. Pema Gyamtsho, ICIMOD, used the example of the Hindu Kush Himalayan region – the ‘water tower’ of Asia – to illustrate how transboundary effects of climate change need to be tackled cooperatively irrespective of borders.

Robert Watson, Scientific Advisory Group for UNEP’s [Making Peace with Nature](#) report, stressed that mitigation is the best adaptation strategy, and that actions on climate change,



Kristie Ebi, Professor, Department of Global Health, University of Washington

biodiversity loss, and pollution need to be integrated and coordinated.

Technical Sessions: These four sessions took place on Wednesday, 10 March.

Enhancing Resilience across Borders: Using Science to Call for Regional Action in the Hindu Kush Himalaya: This session was moderated by Sivapuram Prabhakar, IGES. Presentations sought to highlight scientific understanding on climate risks, their transboundary impacts, and implications for inclusive climate resilience, as well as NAPs and commitments from the Hindu Kush Himalaya region.

Kristie Ebi, University of Washington, provided the background for the discussion by describing observed and projected climate-induced changes in the Hindu Kush Himalayan region at the physical, ecosystem, and socio-economic levels. She listed key enablers for climate resilience and sustainable development, including intensified transboundary cooperation and better education.

Arun Shrestha, ICIMOD, provided further context on the climate and reoccurring natural hazards in the region and warned that even 1.5°C warming would reduce the volume of its glaciers by one third. Frida Lager, SEI, emphasized that global resilience requires a just transition for adaptation by offering a powerful example of how food market distortions induced by climate change can quickly reach a global scale.

Mozahurul Alam, UNEP Regional Office for Asia and the Pacific, urged that NAPs must also incorporate climate change risks from a transboundary perspective and not only focus on biophysical impacts. Dhruvad Choudhury, ICIMOD, emphasized the need for a better understanding and management of transboundary risks from climate change.

Closing Adaptation Knowledge Gaps to Scale up Nature-based Action in the Asia-Pacific Region: This session was moderated by Alvin Chandra, UNEP. It addressed lessons learnt across the Asia-Pacific region with a focus on ways to stimulate collaborative actions, bridge knowledge gaps, and translate learning across transboundary settings.

Youssef Nassef, Director, Adaptation, UNFCCC, highlighted work accomplished under the Lima Adaptation Knowledge Initiative, a joint action pledge between the UNFCCC Secretariat

and UNEP, which involves multi-stakeholder expert groups to identify, categorize, and prioritize climate change adaptation knowledge gaps for specific subregions and sectors.

In the ensuing panel discussion, Espen Ronneberg, Secretariat of the Pacific Regional Environment Programme (SPREP), highlighted examples of practical adaptation projects in the Pacific region referring, in particular, to a project in Palau which succeeded as a result of local knowledge sharing. Neera Shrestha Pradhan, ICIMOD, highlighted successful regional experiences on disaster risk resilience and integration of traditional knowledge and science.

Malia Talakai, FAO, outlined the use of traditional knowledge in forecast and in disaster preparedness. Mokhesur Rahman, Center for Natural Resource Studies, said although many people know what climate change is in Bangladesh, they lack clarity on the issue and what it means. Tshering Yangzom, National Environment Commission Secretariat, Bhutan, said traditional and local beliefs in her country promote and protect their environment.

Status and Challenges for Linking Scientific Knowledge to Strengthening Socio-economic Resilience to Climate-related Disasters: This session was moderated by Peter King, IGES. It addressed progress to strengthen processes for assessing climate risk and communicating and disclosing risk information to inform investments in adaptation critical for resilient economic development. Koizumi Shinjiro, Minister of the Environment, Japan, emphasized the need to enhance scientific knowledge in the Asia-Pacific region to better inform decision-making processes.

Kazuhiko Takemoto, UN University Institute for the Advanced Study of Sustainability, provided a summary of a panel organized in Japan addressing how to prepare for natural disasters intensified by climate change. Anaa Hassan, Ministry of Environment, Maldives, discussed different challenges faced in adaptation planning in her country, especially in the tourism sector.

Masaaki Nagamura, Tokio Marine & Nichido Fire Insurance Co., emphasized that the insurance industry needs to upgrade climate resiliency plans. Keiko Yoshikawa, National Institute for Environmental Studies, described systems for vulnerability evaluation. Radhika Murti, IUCN, stressed that when seeking solutions, looking back at the origins of conservation actions and approaches is necessary.

In the following panel discussion, Hassan underscored that understanding the specific country-level context is essential to designing climate adaptation measures. Murti emphasized the importance of creating spaces for conversations that include marginalized groups and leveraging the power of nature.

Toward Locally Led Adaptation: Fusion of Local and Scientific Knowledge and the Role of Universities in Strengthening Community Resilience: This session was moderated by Saleemul Huq. It focused on: the importance of fusing traditional and scientific knowledge; the need to translate highly technical climate data and information into meaningful and simple user-friendly climate services products; and the

role universities can play in building the capacity of local stakeholders.

Ugyen Yangchen, Royal University of Bhutan, highlighted her university's efforts in climate education, community resilience through student placements, and knowledge sharing on agriculture and waste management practices. Glenn Banaguas, Environmental and Climate Change Research Institute, outlined advancements made in the Philippines, including engaging with communities on climate change. He highlighted assessments that involve impact, policy, demographics, and trends.

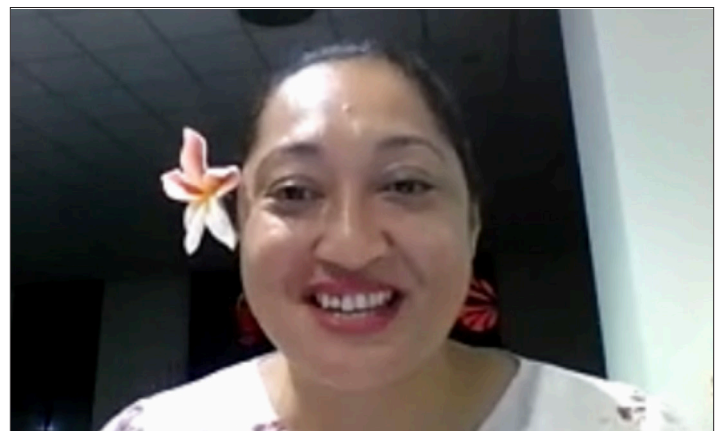
Siosinamele Lui, SPREP, highlighted the systematic collection of weather, climate and disaster-related traditional knowledge from across the Pacific islands in a project that utilizes local knowledge and, over time, can be verified by science. Joel Rogers, University of Wisconsin-Madison, highlighted a network of 70 universities that work on community engagement while building the capacity of students. David Lewis, London School of Economics (LSE), outlined findings of a LSE study in Uganda, Bangladesh and Germany, which found that universities did not incentivize researcher involvement in community projects.

Plenary Session: Technologies and Practices

This session, held on Thursday, 11 March, was moderated by Veronica Pedrosa, and highlighted good examples of technologies and practices for adaptation to climate change that reflect long-term adverse impacts on environment and development. In his keynote address, Ashok Khosla, Development Alternatives and TARA Life, India, discussed the need for society to decouple growth from the impact on nature through behavioral changes and technology choices.

Wali Haider, Roots for Equity, highlighted that community engagement in this area is still very poor and, generally, technologies are not in line with community knowledge and capacity. He recognized that technology can help the most vulnerable mitigate the impacts of natural disasters.

Kotchakorn Voraakhom, Landprocess and Porous City Network, emphasized that technologies applied without knowledge of landscape, culture, and people can be damaging. Suil Kang, UNFCCC, discussed that planning and use of technologies for adaptation should involve both local and national governments.



Siosinamele Lui, SPREP

Technical Sessions: These four sessions took place on Thursday, 11 March.

Building Community Resilience by Scaling up Women's Access to Technologies and Strengthening Voice and Leadership: This session was moderated by Nadya Yuti Hutagalung. It offered tangible and concrete experiences of the value of gender-responsive measures on resilience building through access to technology and enhanced voice and leadership.

Mohammad Naciri, UN Women, stressed the gender impacts of climate change, gender integration in climate-smart technologies, and good practices in gender mainstreaming in climate-resilient development.

Åsa Hedén, Embassy of Sweden, Thailand, said the Swedish Government has a feminist foreign policy that considers rights, respect, rule of law, and the promotion of full enjoyment of human rights by all women and girls. Joyashree Roy, AIT, said no one has agency by themselves and that women need an enabling environment to thrive.

In the ensuing panel discussion, Soma Dutta, International Network on Gender and Sustainable Energy, said economic empowerment of women almost always leads to social empowerment. Nguyen Van Anh, Director, Center of Help for Indigenous Value Promotion and Sustainable Environment, outlined the impact COVID-19 has had on ethnic minority women in Vietnam who account for 80% of agricultural labor. Buena Bernal, Channel News Asia, elaborated on the value of good storytelling in generating empathy on topics related to women and the human experience in climate-related events.

Inclusive Community-focused Adaptation Efforts for Sustained Resilience and Development: This session was moderated by Senashia Ekanayake, SLYCAN Trust. Klaus Schmitt, GIZ, pleaded for a "system boundaries" approach for adaptation measures in coastal areas, which integrates aspects such as mangrove planting, dyke stabilization, floodplains restoration, and local governance. Neera Shrestha Pradhan, ICIMOD, presented a best practice example of how to include local communities and vulnerable segments of the population in the design and implementation of a river flood early warning system.

Christmas Uchiyama, APN, provided further case studies on innovative, scalable, and adaptable water management practices, emphasizing the need for local co-production of knowledge rather than a top-down transfer. Lok Mani Sapkota, Regional Community Forestry Training Center for Asia and the Pacific, demonstrated how inclusive resilience building in agroforestry leads to a local mobilization of resources, multiple co-benefits, project ownership, and trust between actors.



Joyashree Roy, Bangabandhu Chair Professor, AIT

Arthur Webb, UNDP, illustrated how the modern mapping of Tuvalu's islands made for a sound baseline for adaptation efforts, leading to more targeted and appropriate responses. Bremley Lyngdoh, Worldview Impact Foundation, offered a glimpse into the collaboration with mountain communities on protecting their ecosystems and responding to the changing climate by means of centuries-old practices, such as building living bridges with fast-growing fig tree roots.

Harnessing Climate Technologies and Practices to Strengthen Nature-based Resilience: This session was moderated by Clara Landeiro, Climate Technology Centre and Network (CTCN). Rose Mwebaza, CTCN, shared successful approaches in integrating NbS in the CTCN's work, noting it is garnering a lot more support from policymakers and practitioners.

In the ensuing panel discussion, Sanjay Srivastava, UN Economic and Social Commission for Asia and the Pacific, said the use of machine learning and technological innovations, such as coastal digital innovation models, can help countries integrate NbS. Hak Mao, Ministry of Environment, Cambodia, illustrated practical implementation of NbS on resilient water supply, natural resource management, and coastal protection at the community level.

Maija Bertule, UNEP-DHI Centre on Water and Environment, emphasized the importance of understanding ecosystem services used by communities and their role in sustaining NbS approaches. Trupti Jain, Naireeta Services Private Limited, highlighted NbS pilot projects in Vietnam and Bangladesh, which used straw-like devices for large scale irrigation. Roland Treitler, GIZ, emphasized the importance of utilizing existing strategies at the country level to integrate NbS.

Taking Climate Resilient Economic Development to Scale through Technology and Practice: This session was moderated by Suruchi Bhadwal, The Energy and Resources Institute (TERI). Ian Noble, Australian National University, clarified that technology does not have to be very sophisticated and can also draw on local agricultural practices. He illustrated how technology is enhanced if integrated into a local context, as well as scaled if translated into other areas.

Kirsten Mandala, Mercy Corps, presented the nexus approach, an integrated model combining increased local income, better land management, and reduced disaster risk by focusing on crops such as sugarcane, vanilla, and bamboo. Siwakorn Odochao, Farmer and Coffee Producer, demonstrated the benefits of improved rotational farming practices within widely forested hills in Myanmar.

Charlotte Hicks, UNEP World Conservation Monitoring Centre, visualized how projects to restore eroding coastal areas in Indonesia are scaled up in an exemplary collaboration between international organizations, national and regional governments, local farming communities, and field schools. Joost Beckers, VanderSat, explained that satellite-based remote sensing could record accurate environmental data such as soil moisture, which could inform new insurance models and in turn help strengthen the resilience of the agricultural sector.

Carlyne Yu, Regional Integrated Multi-Hazard Early Warning System for Africa and Asia, showed how accessible and reliable digital agro-meteorological forecasting can enhance farmers' data literacy, and lead to increased production. Bijan Khazai, Hotel Resilient Certifications, demonstrated a free online platform, which helps hotels assess and manage their risks from multiple hazards, including those induced or increased by climate change.

Plenary Session: Finance and Investment

This session, held on Friday, 12 March, was moderated by Rico Hizon, CNN Philippines. Saleem Huq described the evolution of adaptation in global development, acknowledging an initial struggle to recognize it as a key climate change issue. He urged finance ministers to allocate one percent of national budgets in the next five to ten years to promote national research and knowledge generation for adaptation by local experts to build long-term resilience.

Oyun Sanjaasuren, Green Climate Fund (GCF), elaborated on the prioritization of adaptation projects under the GCF, which was established with a 50/50 mitigation and adaptation delivery goal. She admitted the challenge of maintaining a balance, especially for vulnerable countries, as the GCF has to allocate a minimum percentage flow to small island developing states, least developed countries, and other vulnerable countries.

Preeti Bhandari, ADB, outlined the Bank's support for adaptation via capacity building and institutional strengthening, both at the domestic and global scales. She highlighted the ADB's approach, which enables countries to develop adaptation pathways in the Pacific islands. Tiza Mafira, Climate Policy Initiative Indonesia, lamented the private sector does not value adaptation initiatives as much as mitigation efforts due to many factors, including lack of universal impact metrics to measure adaptation costs and benefits.

Abid Qaiyum Suleri, Sustainable Development Policy Institute, said part of the problem of gauging investment in adaptation is that some governments are not classifying activities under adaptation, even though they have invested in and continue to promote adaptation on the ground.

Technical Sessions: These four sessions took place on Friday, 12 March.

Financing and Investments: Complementary Roles of Public and Private Sources of Climate Finance for NbS: This session was chaired by Chris Dickinson, GCF, and moderated by Ben Vickers, FAO. Takayuki Hagiwara, FAO, interweaved moments of his personal and professional journey with FAO's efforts to cooperate with the private investment sector in supporting small-scale farmers to realize their agricultural and agroforestry projects.

Frank Rijdsberman, Director-General, Global Green Growth Institute, pointed to positive examples in Colombia and Peru, where public-private partnerships combined green jobs growth, poverty reduction, and accelerated action on climate change. He emphasized that a greater percentage of official development

assistance funding needs to be allocated to "green" projects, including NbS.

Farzana Chowdhury, Green Delta Insurance Company Limited, highlighted the massive potential impacts from climate change on economic growth in Southeast Asia, and provided specific examples of digitalized crop and livestock insurance models for farmers in Bangladesh. Ania Grobicki, GCF, stressed the importance of providing the private sector with the metrics to measure success in adaptation finance, thereby increasing investment certainty and the overall amount of finance allocated to adaptation projects. She also hinted to the enormous potential of "debt for nature" swaps between donor and recipient countries, and that small-scale farmers and civil society can now more easily access funds via the Sub-national Climate Finance Initiative.

Richard McNally, Dutch Fund for Climate and Development, observed that the intensified funding of adaptation projects by development finance institutions will increase private sector investment. However, he agreed with Grobicki that challenges for private investors need to be addressed, particularly the lack of metrics, an insufficient investment pipeline, and high investment risk due to the complex political and natural environment.

Partners not Beneficiaries – Empowering Local Communities as Climate Finance Actors: This session was moderated by Yusuke Taishi, UNDP, and Terence Hay-Edie, GEF Small Grants Programme (SGP). The first part of the session focused on community representatives' experiences in accessing climate financing. Grace Balawag, Tebtebba (Indigenous Peoples' International Centre for Policy Research and Education), recognized the strict requirements to access finance from existing funding mechanisms. She called for approaches in financing that build on traditional and local knowledge and strengthen partnerships with civil societies, academia, and others.

Tamara Greenstone-Alefaio, Micronesia Conservation Trust (MCT), shared MCT's experience in accessing climate finance. With MCT being an accredited entity to the GCF and the Adaptation Fund, she said the toughest challenge in the reporting and application requirements lies in the availability of data to support scenarios.

Loau Donald Kerslake, Saoluafata Mangrove and Marine Protected Area, Samoa, explained the process his village went through to secure a SGP grant, noting that the application itself required technical assistance which was not readily available in his community. He reaffirmed the value of data, effective communication, and the use of local language in the process of securing funds.

In the second part of the session, climate finance representatives shared their perspectives. Farayi Onias Madziwa, Adaptation Fund, said from the beginning, the Fund was tailored for "embraced risk" and designed to promote direct access. This, he said, included entrusting national governments to nominate their national entities thereby devolving decision-making authority to the local level.

Joy Amor Bailey, ADB, highlighted the work of the Urban Climate Change Resilience Trust Fund, which supports community-led initiatives and utilizes community assessment and resilience planning.

Climate Finance in Flux: How Can Finance Flows Steer Resilience Pathways that Truly Leave No One Behind? This session was chaired by Naoya Tsukamoto, AIT RRC.AP, and moderated by Mario Tabucanon, AIT. It addressed insights and lessons learnt from individuals with experience in project design, stakeholder engagement, and resource mobilization on



Saleem Huq, Director, ICCCAD, and Professor, Independent University, Bangladesh

ongoing efforts, models, and priority areas to increase inclusion in resilience-building activities as enabled by finance and investments.

Cristi Marie Nozawa, The Samdhana Institute, shared her experiences in “ensuring no one is left behind.” In this regard, she emphasized: small is beautiful; innovating to fund the “unfunderable”; flexibility is crucial; and grant making based on a “chain of trust.”

Peter King, IGES, emphasized that inclusive participation is “easier said than done” and, without identifying local stakeholders and needs, many adaptation projects could fail.

Yossef Zahar, SEI, explained the policy changes required for inclusive climate financing, including guidelines and development of criteria for climate investments. Eloise Burnett, Carbon Trust Singapore, discussed gender dimensions as a means to deliver social justice. Patrick Jasper, National Bank for Agriculture and Rural Development, addressed the significant financial challenges of responding to climate change in India. Demetrio Innocenti, GCF, discussed how social inclusion can be embedded in climate investments. He also stressed, echoing King, that the right drivers of change must be identified at the project level.

In the ensuing discussion, Burnett emphasized that gender inclusion is a UK donor requirement. Regarding project development, Innocenti stressed the need to explain through a theory of change how most vulnerable communities can benefit from adaptation projects.

Climate Finance for Catalyzing Transformative Economic Development: This session, held on Friday, 12 March, and moderated by Preeti Bandhary, ADB, addressed how effective implementation of climate resilience actions requires sustainable finance and investments in the public and private sectors. Barbara Buchner, Climate Policy Initiative, stressed that current investment trends still need to shift to low emissions and greater emphasis must be placed on how the benefits of investing in climate adaptation outweigh the costs.

Paola Alvarez, Department of Finance, the Philippines, underscored enhancing convergence across sectors and between the national and local government financing levels. Sophie De Coninck, UN Capital Development Fund, described the Local Climate Adaptive Living Facility, a financing mechanism for subnational climate adaptation enabling local authorities and communities to contribute to implementation of the Paris Agreement and NAP goals, and scaleability.

Kisa Mfalila, International Fund for Agriculture Development, emphasized that climate resilience practices that incorporate NbS contribute to the resilience of smallholder farmers through improved land management, availability of water, and greater human capacity to deal with climate risks. Mikko Ollikainen,

Adaptation Fund, said the application of climate resilience practices has also contributed to COVID-19 resilience.

In the ensuing “burst talk” on innovative solutions, Charlotte Benson, ADB, described the contingent disaster liquidity facility which would coordinate access to loans from both the private and public sectors in the event of disasters. Sejal Patel, International Institute for Environment and Development, proposed debate management for nature and climate. Roberto Leva, ADB, described the Halotrader pilot to test a financial technology to transform supply chain finance.

Closing Session: Scaling-up Action

During the closing session on Friday, 12 March, moderator Antoinette Taus, UNEP Goodwill Ambassador for the Philippines, performed a song and rap about the Sustainable Development Goals. She then introduced the session and its three segments: Forum summary, closing high-level plenary, and APAN partner commitments.

Forum Summary: Youseff Nassef, UNFCCC, presented a summary of the Forum under five enabling conditions.

- On climate governance, he highlighted the need for: a whole-of-society approach to resilience; promotion of systems thinking; targeted interventions across sectors; inclusion of the private sector; and strengthening institutional capacity.
- On planning and processes, he noted the emphasis on putting people at the center of both, political will, and leadership.
- On science and assessment, he emphasized a bottom-up approach to innovation and solutions in adaptation, strengthening regional and transboundary cooperation, and systemic changes and coordinated efforts.
- On technologies and practice, he highlighted: the need to value capital in all its dimensions; adoption of innovative and disruptive technology; engaging with all actors; and promoting cross-disciplinary learning.
- On finance and investments, he emphasized the need to: integrate climate change into development finance and private sector investment; shift to a long-term horizon for projects and planning; boost up-front technical assistance; and increase the understanding of incremental costs and benefits.

High-level Closing Plenary: Elizabeth Maruma Mrema, Executive Secretary, Convention on Biological Diversity (CBD), stressed the importance of synergies between the different conventions, acknowledging that the very issues discussed at this Forum are considered under the CBD. She emphasized that building resilience through NbS is critical.

Tina Birmbili, Deputy Executive Secretary, UN Convention to Combat Desertification (UNCCD), stressed that “land is life” and that the UNCCD seeks to address social and economic challenges of climate change under the Framework for Land Degradation Neutrality.

Bambang Susantono, ADB, addressed scaling-up adaptation to economic sectors. Ken O’Flaherty, COP 26 Regional Ambassador to Asia-Pacific and South Asia, stressed that the COP 26 campaign approach intends to be inclusive, and champion and amplify all voices, not just those of decision makers. Ovais Sarmad, Deputy Executive Secretary, UNFCCC, emphasized that the focus of the Convention in 2021 will be on implementation.

In the follow-up discussion, Mrema emphasized that biodiversity conservation has become a greater priority this past year, and that the [Leaders’ Pledge for Nature](#) demonstrates that countries are ready to address the interconnectedness of biodiversity loss and climate change. Birmbili underscored that land can contribute to climate mitigation. Sarmad stressed the importance of supporting contingency measures to address



Antoinette Taus, UNEP Goodwill Ambassador for the Philippines

the multifaceted climate change impacts. O'Flaherty noted that climate change disruptions will be long-lasting even if all emissions stopped today. He underscored the urgency of addressing natural disaster vulnerabilities in the region with a focus on the most marginalized communities.

APAN Partner Commitments: Stewart Maginnis, IUCN, recognized that NbS have gained support and traction but that financing is needed. Niall O'Connor, SEI, stressed the importance of good governance for implementation. Akiko Yamamoto, UNDP, emphasized the commitment to locally-led adaptation in the region. Dhruvad Choudhury, ICIMOD, expressed support for climate action aimed at pursuing inclusive resilience.

Yasuo Takahashi, IGES, emphasized his organization's work on capacity building in climate adaptation in the region. Isabelle Louis, UNEP Asia and the Pacific Office, expressed UNEP's commitment to identifying climate resilience solutions. Kazuaki Takahashi, Ministry of Environment of Japan, thanked everyone for their efforts and participation.

Mozaharul Alam closed the session and the 7th APAN Asia-Pacific Climate Change Adaptation Forum, and thanked all participants for their contributions.

Upcoming Meetings

Asia-Pacific Forum on Sustainable Development (APFSD) 2021: APFSD 2021 will be held under the theme "Sustainable and resilient recovery from the COVID-19 pandemic in Asia and the Pacific." **dates:** 23-26 March 2021 **location:** Bangkok, Thailand **www:** <https://www.unescap.org/apfsd/8>

ECOSOC Youth Forum: The UN Economic and Social Council's (ECOSOC) 2021 Youth Forum will take place in April 2021 in New York, during ECOSOC's 2021 session. The [2020 Youth Forum](#) was deferred to the ECOSOC 2021 session due to the COVID-19 pandemic. **dates:** 7-8 April 2021 **location:** New York City, US **www:** <https://undocs.org/en/E/RES/2021/1>

52nd Sessions of the UNFCCC Subsidiary Bodies: The 52nd sessions of the UNFCCC Subsidiary Body for Implementation and Subsidiary Body for Scientific and Technological Advice were originally expected to convene in Bonn, Germany, in June 2020. On 23 June 2020, the Bureau [decided](#) to postpone the meetings until 2021. **dates:** tbc **location:** tbc **contact:** UNFCCC Secretariat **phone:** (49-228) 815-1000 **fax:** (49-228) 815-1999 **e-mail:** secretariat@unfccc.int **www:** <https://unfccc.int/calendar> <https://unfccc.int/event/1st-sessional-period-2021>

Regional Climate Weeks 2021: These Virtual Thematic Sessions will focus on partnering for whole society engagement in implementation, managing climate risks, and seizing transformation opportunities. They will include workshops, virtual exhibitions, and side events. In light of the COVID-19 pandemic, the Regional Climate Weeks in 2021 are planned in different segments and will mainly take place virtually, with the option of some physical meetings if the status of the pandemic allows, with different levels of in-person participation according to the region. The Virtual Thematic Sessions are the second segment of the Climate Weeks.

Climate Weeks 2021: Latin America and the Caribbean Climate Week 2021 ([LACCW2021](#)) from 11-13 May, hosted by the Government of the Dominican Republic; Africa Climate Week 2021 ([ACW2021](#)) from 15-18 June, hosted by the Government of Uganda; and Asia-Pacific Climate Week 2021 ([APCW2021](#)) from 6-9 July, hosted by the Government of Japan. **dates:** various **location:** virtual **www:** <https://www.regionalclimateweeks.org/>; <https://unfccc.int/about-the-regional-climate-weeks>

High-level Political Forum on Sustainable Development (HLPF): The 2021 session of the High-level Political Forum on Sustainable Development (HLPF) is [expected](#) to take place over eight days, from 6-15 July 2021. **dates:** 6-15 July 2021 **location:** New York City, US **www:** <https://sustainabledevelopment.un.org/hlpf>

UNFCCC COP 26: UNFCCC COP 26 was originally scheduled to take place from 9-19 November 2020, in Glasgow, UK. On 28 May 2020, the COP Bureau decided that it would take place from 1-12 November 2021, in Glasgow, UK. The Italy-hosted Pre-COP and 'Youth for the Climate' event are also postponed. **dates:** 1-12 November 2021 **location:** Glasgow, Scotland, UK **contact:** UNFCCC Secretariat **e-mail:** secretariat@unfccc.int **www:** <https://unfccc.int/calendar>

Glossary

ADB	Asian Development Bank
AIT RRC.AP	Asian Institute of Technology, Regional Resource Centre for Asia and the Pacific
APAN	Asia-Pacific Adaptation Network
APN	Asia-Pacific Network for Global Change Research
CBD	Convention on Biological Diversity
COP 26	26th session of the Conference of the Parties to the UNFCCC
CTCN	Climate Technology Centre and Network
EbA	Ecosystem-based Adaptation
FAO	Food and Agriculture Organization of the UN
GIZ	German Agency for International Cooperation
IGES	Institute for Global Environmental Strategies
MCR2030	Making Cities Resilient 2030
MCT	Micronesia Conservation Trust
NbS	Nature-based Solutions
ICCAD	International Centre for Climate Change and Development
ICIMOD	International Centre for Integrated Mountain Development
IUCN	International Union for Conservation of Nature
SEI	Stockholm Environment Institute
SGP	Small Grants Programme
SPREP	Secretariat of the Pacific Regional Environment Programme
UNCCD	UN Convention to Combat Desertification
UNDP	UN Development Programme
UNDRR	UN Office for Disaster Risk Reduction
UNEP	UN Environment Programme
UNFCCC	UN Framework Convention on Climate Change
WRI	World Resources Institute