



GLOBAL ENVIRONMENTAL COMMONS

Some of the essential transformations needed to meet the Sustainable Development Goals (SDGs) are elaborated in the Global Sustainable Development Report (GSDR) 2019ⁱ and the political declaration of the High-level political forum 2019. These transformations are mutually reinforcing and strongly linked to the Sustainable Development Goals (SDGs). The report identifies six entry points and four levers to accelerate progress across all 17 SDGs at the global level,¹ one of them being *Global Environmental Commons*.

I. GLOBAL ENVIRONMENTAL COMMONS IN ASIA AND THE PACIFIC

Global environmental commons refer to specific areas that fall outside of any national jurisdiction (the high seas, the atmosphere, Antarctica and outer space) as well as other commons which may lie within well-defined national or regional jurisdictions, but whose continuing existence confers benefits beyond them, such as tropical rain forests, land, biodiversity and climate.ⁱⁱ Freshwater ecosystems and all coastal and marine ecosystems also provide these benefits.

Securing the global environmental commons entails living within planetary boundaries, conserving and sustainably managing these globally shared resources and ecosystems as well as their shared vulnerabilities and risks. As these environmental commons ignore frontiers and are intrinsically linked, managing them sustainably requires concerted and integrated action.

The global environmental commons being foundational to the existence and good functioning of human societies and economies, failing to secure them would have grave consequences and seriously hamper the achievement of the SDGs, noting that global environmental commons have a direct influence on SDG 2-Zero Hunger, SDG 6-Clean Water and Sanitation, SDG 9- Industry, Innovation and Infrastructure, SDG 11- Sustainable Cities and Communities, SDG 12- Responsible Consumption and Production, SDG 13- Climate Actions, SDG 14- Life Below Water and SDG 15-Life on Land. Corollary, securing these global environmental commons would have a positive impact on accelerating progress on human well-being and capabilities, sustainable food systems, and in achieving sustainable economies, urban development and energetic systems. There is thus an urgent need to secure the environmental commons in Asia and the Pacific.

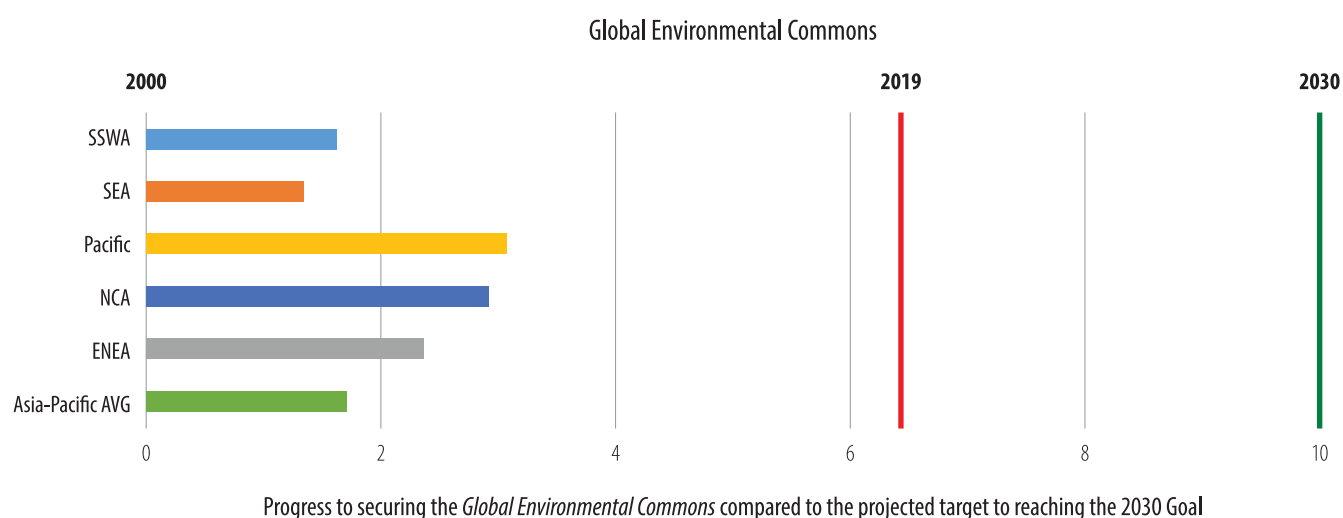
¹ Entry point 1 – Human well-being and capabilities, Entry point 2 – Sustainable and just economies, Entry point 3 – Food systems and nutrition patterns, Entry point 4 – Energy decarbonization and universal access, Entry point 5 – Urban and peri-urban development, Entry point 6 – Global environmental commons, Lever 1- Governance, Lever 2- Economy and Finance, Lever 3- Individual and Collective Action, Lever 4- Science and Technology

Asia and the Pacific hosts 17 of the 36 global biodiversity hotspots, 7 of the world's 17 megadiverse countries, the highest marine biodiversity in the world, with the longest and most diverse coral reef systems, more than half of the world's remaining mangrove areas and the highest seagrass diversity.ⁱⁱⁱ However, the region recorded the world's highest number of species in 2014.^{iv} Asia and the Pacific is also home to some of the most vulnerable areas to climate change (such as glacier high mountain or Small Islands Developing States) and exposed to unhealthy levels of pollution (air, soil, water and ocean), as well as subject to overall environmental degradation (biodiversity loss, degradation of ecosystems, etc.). For example, 10.6% of the world's total natural forest has been lost in the region, and over 40 percent of coral reefs and 60 per cent of coastal mangroves have already been lost and approximately 80 per cent of the region's coral reefs are currently at risk. While on average, territorial waters under protection increased between 2000 and 2016, they are still falling short of targets to preserve marine biodiversity.^{vi} The total forest area has increased in Asia since 1990 but this figure hides the continuing loss of natural forests behind the expansion of planted forests, and sub-regional trends differ. Further, the Asia-Pacific region is home to 6 of the top 10 global carbon emitters, contributing to over half of the world's total greenhouse gases (GHGs) and is highly vulnerable to climate-induced disasters and extreme weather events and the risk profile will continue to be altered by climate change in the next decades.^{vii} Sulphur dioxide and nitrogen oxide emissions have reduced, but ambient concentrations of ozone and fine particles (short-lived climate pollutants such as black carbon) have continued to increase. Transboundary smoke haze pollution, due to open biomass burning and improper land-use practices, is becoming the key regional air quality problem in South-East Asia. Out of the about 500 million people living within areas which experienced desertification between the 1980s and 2000s globally, the highest numbers of people affected are in South and East Asia [...].^{viii} Severe erosion also prevails on one-quarter to one third of the coastlines in South-East Asia and degradation has intensified across the region, with consequent displacement of local and indigenous people, loss of biodiversity, and reduction in important forest products. A growing concern is also pollution of soils, freshwater streams and the ocean, including, but not limited to, marine plastic litter, with half the world's plastics being manufactured in Asia.

II. PROGRESS AND KEY CHALLENGES FOR ACCELERATION IN ASIA AND THE PACIFIC

As shown in figure 1 below, progress on *Global Environmental Commons* in Asia and the Pacific is insufficient to achieve the Sustainable Development Goals by 2030, in terms of ocean protection, terrestrial biodiversity and sustainable consumption and production, despite better progress in some sub-regions (Pacific and North and Central Asia) than in others.

Figure 1: Sub-regional snapshot of progress and overall progress in Asia and the Pacific on Global Environmental Commons



Source: Economic and Social Commission for Asia and the Pacific (ESCAP), calculations based on methodology from *Asia and the Pacific SDG Progress Report 2020* (forthcoming) and data from the ESCAP Statistical Online Database. Available at http://data.unescap.org/escap_stat/ (accessed on 10 December 2019).

Note: The green line represents targets to be achieved in the 2030 Agenda. If the region was on track to achieve these targets across the six areas, the red line would have been hit by 2019.

Unprecedented economic growth has lifted millions out of poverty in Asia and the Pacific but is putting heavy pressure on ecosystems and the climate. As outlined in the 6th Global Environment Outlook (GEO-6) Regional Assessment for Asia and the Pacific,^x rapid economic growth and intensified industrialization has led to a sharp increase in natural resource use, which is both unsustainable and inefficient, and results in pollution, declining biodiversity and natural resource depletion. Asia and the Pacific's huge population and fast urbanisation rate poses significant environmental challenges. The region's population, about 60 per cent of the world's total, reached around 4 billion people in 2012 and is projected to rise to 5.1 billion by 2050.^x The region is experiencing the world's fastest urbanization rate, accounting for 48 per cent of global urban population in 2014. This is projected to increase to 63 per cent by 2050.^{xi} Lifestyle changes also drive the accelerating domestic material consumption, as is the expanding middle class (from 21 per cent in 1990 to 56 per cent in 2008). The size of the global middle class is projected to increase from 1.8 billion (2009) to 4.9 billion in 2030 with most of the growth coming from Asia. OECD predicts that the middle class's global spending will grow to US\$ 56 trillion by 2030 from US\$ 21 trillion today; more than 80 per cent of this increase in demand is expected to come from Asia and the Pacific. Food production is also projected to continue to rise. Changing dietary patterns, mostly from cereals to meat, have led to an increase in meat production by 50 per cent between 2000 and 2013.^{xii} While the region houses 60 per cent of the world's population it accounts for only 30 per cent of its land. Further, the production of biofuels, a major energy source in the region (15 per cent of total primary energy supply) increases the demand for arable land, thus worsening deforestation.^{xiii} Oil palm plantations have expanded significantly: compared to 2000, Indonesia has 3.7 times the area in 2014, Malaysia 1.5 times and Philippines 3.4 times.^{xiv} This situation is exacerbated by adverse climate change effects and an increasing intensity and/or frequency

of disaster event, which are causing devastating human and financial losses in the region. Extreme climate events are projected to become the new normal. Heatwaves are an emergent risk in the region with heavy consequences on public health, water and energy demand and productivity. The global environmental commons in Asia and the Pacific context are also manifested in terms of the transboundary risk 'hotspots' where greater likelihood of change coincides with high concentrations of vulnerable, poor or marginalized people.

Some of the barriers for acceleration include lack of political commitment, lack of cooperation for the adequate management of the global commons, lack of information (access to data, research, transparency, education and awareness), capacity gaps to apply knowledge for planning and implementation, lack of adequate financing, adequate implementation of enforcement of environmental laws, lack of adequate technologies², and lack of engagement with all relevant users and managers of the environmental commons.

III. COUNTRY LEVEL ANALYSIS ON ACCELERATION TOWARDS SECURING THE GLOBAL ENVIRONMENTAL COMMONS

As outline in the SDG Partnership Report 2020,^{xv} Indonesia is an example of best practice regarding accelerated progress to protect significant marine areas and areas that are important for mountain biodiversity. Indonesia's success is rooted in the development and implementation of a sustainable roadmap in 2014, which enlisted the financial sector to contribute to the national commitments to address climate change. In 2018, this was followed by the adoption of Indonesia's first sovereign green sukuk (bond). The five-year issuance raised US\$1.25 billion targeting a broad range of investors. The bond has a focus on providing transparency for investors proceeds. The success of Indonesia in terms of marine biodiversity protection^{xvi} can also be attributed to the enforcement of Law 31/2004 (fisheries) and Law 27/2007 (spatial planning), which empowers local governments and to the implementation of the 2015-2020 Indonesian Biodiversity Strategy and Action Plan.

Australia is also an example of country that has managed to accelerate progress on protecting the global environmental commons, in particular through the protection of the ocean. Sound government regulations and strong enforcement coupled with active public participation have been the key factors in driving success. Successful policies, regulations and innovative initiatives in Australia include the Biodiversity Strategy 2010-2030^{xvii}, which encourages indigenous engagement, the Reef 2050 Long-Term Sustainability Plan,^{xviii} the Tasmanian Forest Conservation Fund,^{xix} the 1999 Forestry Law update, the 2009 5-year Strategic Plan for Revitalization, and Law No. 18 of 2013 on the Prevention and Eradication of Forest Degradation.^{xx}

Other examples of good practices with regards to securing the global environmental commons in Asia and the Pacific include Afghanistan's fast progress in protecting and preventing the extinction of threatened species. Acceleration has been achieved through blending development and conservation goals, through adding 15 new species to the National Environment Protection Agency's Protected Species List and by promoting community-based natural resource management that engages and empowers local communities. To be noted are Uzbekistan's efforts to improve domestic material consumption intensity, mainly driven by technological advancements in key industries that has seen many of the ageing equipment being replaced to reduce inefficiencies.^{xxi}

² including aspects related to the production, manufacturing and design of products, consumption systems and all aspects of waste collection, management and recovery

Collectively the region and in particular countries across South East Asia have increased efforts to combat marine litter through national and regional actions plans. The four Regional Seas Conventions and Action Plans, namely for the East Asian Seas, North-West Pacific, South Asian Seas, and Pacific Region have played an important role. In the frame of the East Asian Seas Action Plan, for instance, the Coordinating Body on the Seas of East Asia (COBSEA) provides an intergovernmental mechanism to support participating countries toward sustainable development and protection of the marine and coastal environment in line with global goals and regional priorities, such as addressing land-based marine pollution and marine and coastal planning and management. The countries of South-East and East Asia have stepped up their commitments to combat marine litter, specifically plastics, through novel marine litter or plastic waste management plans. These targeted national actions are accompanied by regional policy frameworks including the ASEAN Framework of Action on Marine Debris and the APEC Roadmap on Marine Debris agreed in 2019.

Unfortunately, the Asia-Pacific region is also home to many barriers and challenges to securing the Global Environmental Commons. The lack of and lack of implementation of laws and regulations, coupled with low levels of public awareness and the push for policy promoting growth without environmental safeguards appear to be common barriers to acceleration in all these countries. Some countries in the region are being faced with the challenges in protecting ecologically significant areas and in optimizing consumption and production efficiency. Even countries which record relatively high levels of achievement towards the SDGs, are facing issues in continuing progress at this steep trajectory, in particular with respect to reducing CO₂ emissions and improving waste management.

A growing concern in Asia and the Pacific that requires urgent action is air pollution. 92% of people in the region are exposed to a level of air-pollution that poses significant health risks.^{xxii} Key roots of the transboundary issue are the common slash and burn agricultural practice and burning of forests as cultivated land encroaches on previously forested areas. Other contributors are emissions from factories, diesel and petrol vehicles, industrial emissions from inorganic chemicals, mining processes, as well as burning of waste. Unfortunately for countries such as Singapore, despite their national endeavours to tackle this issue, transboundary smoke haze is outside of their control.^{xxiii} Whilst levels are still dangerous in many cities across this region pollution, some progress is being observed.

IV. POLICY RECOMMENDATIONS FOR ACCELERATION

Urgent action is needed to reverse environmental degradation and accelerate action on securing the environmental commons in Asia and the Pacific in order to achieve the Sustainable Development Goals. Policy recommendations for acceleration include:

1. Strengthen political commitment for the integrated management and protection of the environment. Developing a shared vision for the sustainable management of the environment is critical. Transformation towards integrated and coherent policies that reconcile livelihoods and conservation, address the competing uses of land and water, allow equitable sharing of benefits, and discourage harmful investments are needed and should be supported by enforcement of laws and rules. Adequate governance and policies and management models at the national level will ensure that the right structures and processes are in place for integrated management of environmental issues across various Ministries (Environment, Energy, Agriculture, Marine Resources, Fisheries, Planning, Finance, etc.). At the local level, municipalities should have the appropriate responsibility, authority and capacity to take action on environment, climate and disaster resilience. This should be coupled with the development and implementation of policy instruments that incentivize the protection of the environment and give full recognition and support to community-based management initiatives and local actors.

2. Strengthen global, transboundary and regional cooperation. The management of the global environment commons, as shared resources, requires cooperation amongst countries. Governments should adhere to and fulfil their commitments to existing multilateral environmental agreements (i.e. the Convention on Biodiversity, the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification) and UN Environment Assembly resolutions^{xxiv} aimed at securing the global environmental commons. This includes leveraging and strengthening existing regional mechanisms on environment, such as the Regional Forum of Ministers and Environment Authorities of Asia Pacific,^{xxv} the Asia-Pacific Ministerial Summit on the Environment,³ ^{xxvi} and the Asia Pacific Ministerial conference on disaster risk reduction,^{xxvii} and the Asia Pacific Ministerial Forum on Environment and Health^{xxviii} as well as ensuring synergies with the regional Sustainable Development-related processes, such as the Asia Pacific Forum on Sustainable Development.^{xxix} New multilateral agreements that guarantee the protection of terrestrial ecosystems and effectively extend marine protected areas to at least one third of the ocean by 2030 could be explored.^{xxx} Existing mechanisms, networks and initiatives that promote transboundary and regional cooperation for ensuring effective protection of biodiversity as well as terrestrial, coastal and marine ecosystems should be strengthened and coordination across regional programmes and initiative encouraged.⁴ Better alignment between global, regional and national policies, conventions and initiatives further provides the opportunity to maximise political will and societal needs and to understand and clearly articulate the priorities for sustainable ecosystems management and restoration to a range of stakeholders.

3. Adopt adequate economic models and financing strategies. New accounting models that fully assess and value natural capital need to be adopted. This should go hand in hand with the implementation of financial policy instruments; incentivizing sustainable consumption and production practices, eradicating incentives that promote environmental degradation, and the adoption of production standards/safeguards and trade policies with positive impact on the environmental commons (i.e. fair-trade, remove restrictions on the use of farmer's own seeds, combatting illegal wildlife trade, etc.). The mobilization of additional funds for sustainably managing the global commons is also needed, should it be through public financing, Official Development Assistance (ODA), global regional and national environmental funds; or through innovative and creative financing strategies, including those involving the private sector (green and catastrophic bonds, public private partnerships, blended finance tools, etc.). Ensuring the greening of *Integrated national financing frameworks* for the SDGs (INFFs) can include working with private banking sector to integrate climate and environment considerations into bank operations; greening stock exchanges; developing national capacities to issue green and blue bonds; strengthening environmental impact assessments and promoting integration of disaster impact assessment components to ensure investments are risk-informed and contribute to prevention and mitigation efforts.

4. Develop and strengthen partnerships, education and outreach. Given the wide spectrum of actors that have an impact on managing the environmental commons from local to global levels, meaningful engagement of all actors and strengthening partnerships is critical. Key strategies to increase protected areas and broader action on environment include expanding the role of the private sector, civil society as well as indigenous peoples and local communities through innovative and diverse participatory governance models that will allow the co-development of integrated environmental

³ Convened jointly by ESCAP and UNEP in 2017 as both the Ministerial Conference on Environment and Development in Asia and the Pacific and the Regional Forum of Ministers and Environment Authorities of Asia Pacific.

⁴ There are numerous initiatives, networks and mechanisms to tackle marine and coastal ecosystem protection (i.e. the Regional Seas Programme, Conventions and Action Plans, the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, COBSEA, NOWPAP, the South Asia Co-operative Environment Programme (SACEP), the work of the Secretariat of the Pacific Regional Environment Programme (SPREP), Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)), forest protection (i.e. Heart of Borneo initiative), biodiversity conservation (i.e. UNESCO sites including transboundary Biosphere reserves, wildlife corridors, initiatives on invasive alien species and on illegal wildlife trade), clean air (the Asia Pacific Clean Air Partnership), reduction of dust and sand storm (i.e. ESCAP's North-East Asian Sub-regional Programme for Environmental Cooperation), management of acid deposition (Acid Deposition Monitoring Network in East Asia (EANET)), ecosystem-based adaptation to climate change (Asia Pacific Adaptation Network) and other sub-regional initiatives, such as the North-East Asian Sub-regional Programme for Environmental Cooperation (NEASPEC).

policies that take into account the synergies and trade-offs between different sectors as well as social aspects. Collaboration can also be strengthened in information sharing, best practices and transfer of technology. Inclusive policies that leave no one behind (landless farmers, indigenous people, women and girls, people with disabilities) should be promoted and developed in partnership with all relevant stakeholders. Partnerships should further be encouraged to create synergies for tackling and interlinking multiple Sustainable Development Goals. In parallel, education systems and awareness campaigns should be strengthened to build public knowledge on the role of biodiversity and ecosystems for societies, and on the co-benefits of action on biodiversity, ecosystems, disaster risk reduction and climate change.

5. Focus on science, data, monitoring and technology. National capacities for monitoring and reporting on the environmental and disaster-related dimension of the SDGs need to be strengthened urgently, including on status, trends, risks, threats and conservation needs for biodiversity and all ecosystems in Asia and the Pacific. There is currently too little data to formally assess the status of 63 of the 93 environment-related SDGs indicators (68 per cent),^{xxxii} with some indicators without available data corresponding to issues that have not received enough attention in terms of SDGs implementation. Efforts are needed to bring together traditional and new data sources (including big data) for better and faster data on the environment. Common definitions and consistent standards and methodologies for measurement and monitoring should also be supported, such as the development and implementation of harmonized National Marine Litter and Microplastic Monitoring Programmes under COBSEA.^{xxxiii} In addition, science diplomacy in global and regional policy processes requires strengthening, and needs to be extended to the management of ungoverned spaces, such as the seabed, space and cyberspace.^{xxxiii} This includes the assessments of the Intergovernmental Panel on Climate Change and of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services. Periodic scientific assessments, for instance on transboundary climate risks, or on slow on-set disasters, will help policymakers to understand and diagnose their complexity and to identify potential risk hotspots. Science helps to unpack complex land-system dynamics and their governance and supports transformations to sustainability especially where it includes local, lay and indigenous knowledge, such as the Global Land Programme of Future Earth^{xxxiv} Finally, experimentation and innovation leads to technological developments that support sustainability, for instance in fishing, agriculture (agro-ecology) and manufacturing (green construction materials, sustainable textiles, etc.).

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END NOTES

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