United Nations ESCAP/CED/2022/INF/1

# Economic and Social Council

Distr.: General
12 October 2022

English only

**Economic and Social Commission for Asia and the Pacific**
Committee on Environment and Development

**Seventh session**
Bangkok and online, 29 November–1 December 2022
Item 3 of the provisional agenda*
**Protecting our planet through regional cooperation and solidarity in Asia and the Pacific**

## Operationalizing the environment-health nexus in Asia and the Pacific**

*Summary*

The deterioration of the state of the environment in the Asia-Pacific region negatively impacts human health. This document intends to support governments and other stakeholders in the Asia-Pacific region to minimize the converging environment-health risks and strengthen resilience of human and environmental ecosystems. It proposes recommendations for operationalizing an environmentally comprehensive One Health approach to deliver positive health and environment outcomes. Specifically, it provides an overview of critical opportunities to mainstream the environment-health nexus in public policies in Asia and the Pacific, including those pertinent to health, biodiversity loss, food systems, and climate change (section II). It also lays out pathways to strengthen the enabling factors for operationalizing a comprehensive One Health approach, including factors related to data assessment and information management, multisectoral and cross-scale governance, a human rights-based approach, stakeholder engagement, financing and regional collaboration (section III).

# I. Introduction

1. The evidence of the strain of the environment-health footprint in the Asia-Pacific region is extensively documented.[1] Environmental degradation and climate change negatively affect human health through the impacts of extreme weather events, reduced air quality, changes in the risks and spread of infectious diseases (for example coronavirus disease (COVID-19)), and unsafe and insecure food and water, among many others (figure I). It is estimated that almost one quarter of the global environmental burden of disease arises from 14 Southeast and East Asian countries alone.[2] There is an urgent need for actors from the environment and health sectors to develop joint agendas and work

* ESCAP/CED/2022/L.1.

** The present document is being issued without formal editing.

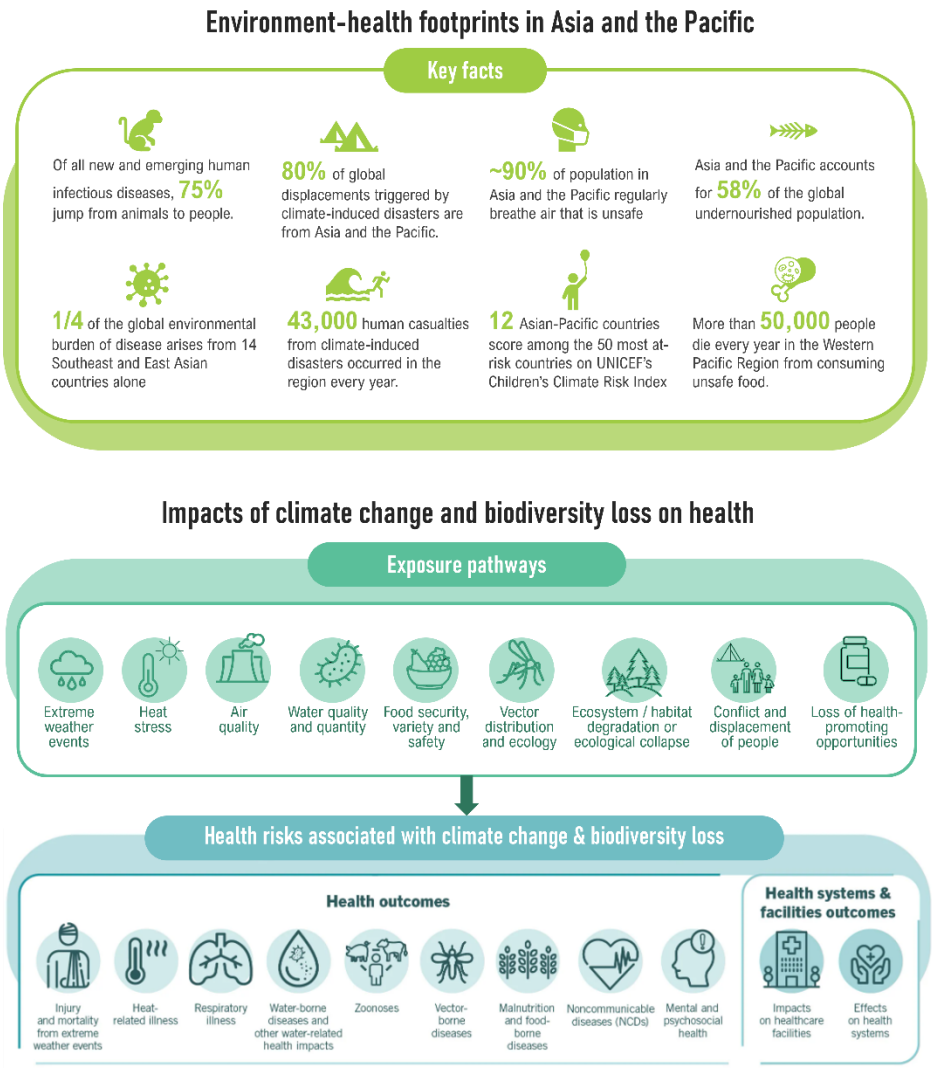
1 ESCAP. (2022). Protecting our common environment in Asia and the Pacific.

2 WHO Regional Office for the Western Pacific. (2018). Environmental Health in Selected Asian Countries. Available at https://iris.wpro.who.int/handle/10665.1/14203.

together to address the interconnected environment-health risks at the national and regional level to increase resilience, save lives, and reduce costs.

2. In resolution 78/1, Economic and Social Commission for Asia and the Pacific (ESCAP) Member States recognized the value of the One Health approach, the human right to a clean, healthy, and sustainable environment, and that the well-being of humanity depends on the health of nature and the ability to sustainably use, restore and protect ecosystem services. In this decision Member States emphasized the need to scale up integrated investments for resilience and called on ESCAP to take a multisectoral approach. This regional agreement follows the 2016 Manila Declaration on Health and Environment, endorsed by 36 countries as an outcome of the Fourth Asia-Pacific Regional Forum on Health and Environment which identifies points of action and policy priorities linked to the sustainable development goals. [3]

Figure I
**Environment-health nexus in Asia and the Pacific**

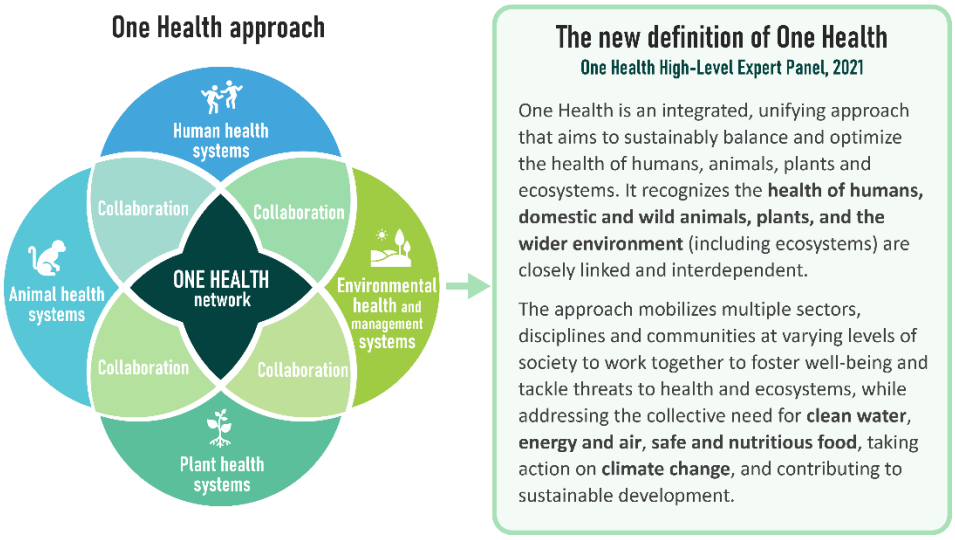



[3] WHO. (2016). Manila Declaration on Health and Environment. Available at https://apps.who.int/iris/handle/10665/273823.

3. This document intends to support governments and other stakeholders in the Asia-Pacific region to minimize environment-health risks and strengthen resilience of human and environmental ecosystems. It proposes recommendations for operationalizing an environmentally comprehensive One Health approach to deliver outcomes and address climate change, biodiversity loss, and transitioning to sustainable food systems in Asia and the Pacific.

4. This document also seeks to support a regional approach to the global One Health Joint Plan of Action.[4] To effectively and efficiently address existing and emerging environment-health risks in the region, and worldwide, countries will need to expand systems-thinking in both the environment and health domains. Since 2021, the One Health definition has moved away from a focus on infectious disease (food safety, zoonoses, microbiome diversity, and antibiotic resistance) and three sectors (human medicine, veterinary medicine, and livestock agriculture) to include the wider environment. The One Health Joint Plan of Action reflects the shifting definition of One Health (figure II).

Figure II
**The new definition of One Health**




## II. Mainstreaming the environment-health nexus in public policies

5. Policy coherence across national plans and strategies related to the environment-health nexus is critical to aligning values and perspectives, investments, and technical capacities that can lead to reduced environment-health risk for countries and the Asia-Pacific region. National plans on health, climate change, biodiversity, and food systems present opportunities to integrate and mainstream the environment-health nexus. These plans are vehicles for operationalizing an environmentally comprehensive One Health approach, implementing multilateral environmental agreements, fulfilling the Human Right to a Clean, Healthy, Sustainable Environment and achieving the 2030 Agenda. Greater harmony among these plans is the first step to operationalize the environment-health nexus. Importantly, environmental

[4] www.woah.org/app/uploads/2022/04/oh-jpa-14-march-22.pdf .

policymaking should align with health objectives at local, national, regional and global levels.[5]

## A. Public health strategies and plans

6. National public health plans would better reflect growing public health needs by expanding on the ecological drivers of disease in a national context considering the substantial role environment plays in infectious as well as non-communicable diseases. However, environmental management and links to environment-related ministries are not common in national health plans in Asia and the Pacific. In a review of 15 national health plans in the region, attention to the environment is mentioned in 10 plans, but only 1 country mentions the term “ecosystem” and 2 mention “biodiversity”. On the other hand, the environment is reflected across 11 plans in the context of climate change. Many plans reference “social determinants of health”, while only 7 consider “environmental determinants of health” or the ecological drivers of disease (figure III).

7. Food and water are central to public health planning and are two key health determinants where links to context-specific environmental degradation can be further elaborated in health strategies and plans. An understanding of the context-specific health risks associated with chemical, water and food production and consumption, and environmental change should be identified. The character of exposures, contaminants of concern, vulnerability assessments for sub-populations, and the specific environmental management responses should be elaborated more cohesively and to greater depth.

8. National health strategies and plans can lay the foundation for mobilizing action on the environment-health nexus, including promoting the involvement of health professionals in communicating and mobilize knowledge of environmental threats to human health.[6] Importantly, national health strategies should reference relevant environmental plans such as National Adaptation Plans or National Biodiversity Strategies and Action Plans in order to build greater coherence at the environment-health nexus.

## B. Biodiversity strategies and plans

9. Biodiversity decline is strongly linked to increases in prevalence and risks of zoonotic diseases.[7] In 2010, the Convention on Biological Diversity called on parties to integrate health into National Biodiversity Strategies and Action Plans (Decision X/32); and in 2018, the Convention invited integration of One Health policies, plans or projects, and other holistic approaches into national biodiversity strategies and action plans (Decision 14/4). To date, this has been done to varying degrees in the Asia-Pacific region and could be much more comprehensive.

[5] Willetts, L et al. (2022). Health in the Global Environmental Agenda: A policy guide. International Institute for Sustainable Development. Available at www.iisd.org/publications/health-global-environment-agenda-policy-guide (accessed on 11 October 2022)

[6] WHO (2021). Effective risk communication for environment and health: a strategic report on recent trends, theories, and concepts.

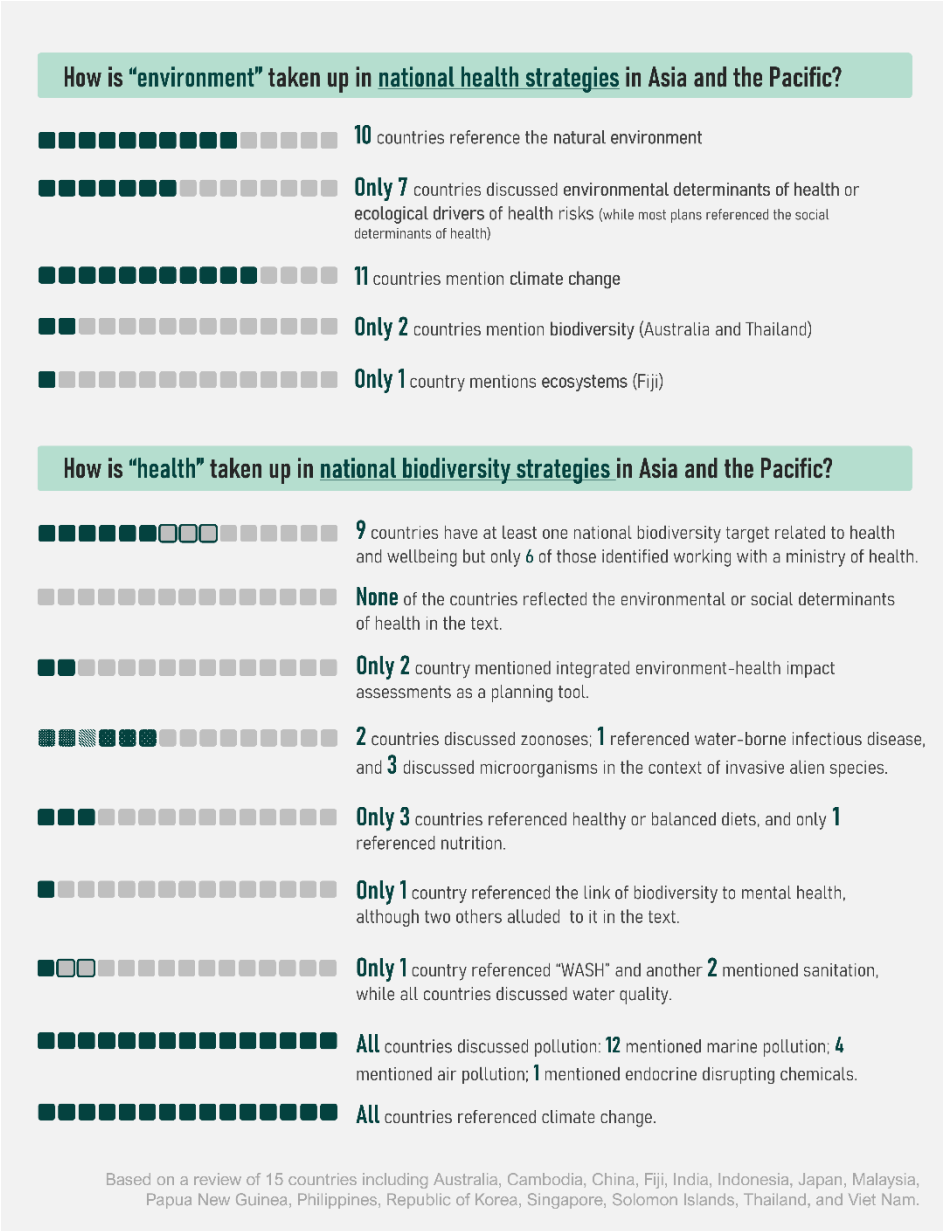
[7] WHO. (2022). A health perspective on the role of the environment in One Health.

10. An analysis of 15 National Biodiversity Strategies and Action Plans in Asia and the Pacific, shows that few countries reference environment-health risks. Where present, such references are typically single-issue concerns, such as health risks of living modified organisms, from invasive alien species, or vector-borne disease. A comprehensive assessment of health risks associated to the state of the environment would add great value to these plans. Furthermore, while human and animal infectious disease is most often specified, and is sometimes detailed by exposure to water-borne, vector-borne or zoonotic disease, health outcomes are not generally referenced. Non-communicable or chronic disease and mental health are also not often, presented, despite the connections between ecosystem health and nutrition, and spiritual, cultural, and overall wellbeing (figure III).

11. Many National Biodiversity Strategies and Action Plans in Asia and the Pacific require an update. Most of the plans reviewed were created prior to 2016, with the most recent published in 2020. The 15th United Nations Biodiversity Conference in December 2022 aims to adopt the post-2020 global biodiversity framework which will outline new global biodiversity targets for 2050, serving as a stimulus for new plans. This is an opportunity for countries to update their National Biodiversity Strategies and Action Plans in Asia and the Pacific to include a vision for environment-health risk reduction, to align with or strengthen the environmental dimension of a One Health approach, to design a target inclusive of health and wellbeing, and to incorporate health into framing of the value of biodiversity and ecosystem services at country-level to support cross-sectoral planning and implementation.

Figure III

**Reference to environment in national health strategies and reference to health in National Biodiversity Strategies and Action Plans in selected Asia-Pacific countries**




## C. Food strategies and plans

12. Food security, food safety and healthy nutrition are priorities for health system adaptation to environmental and socioeconomic hazards in the Asia-Pacific region. The achievement of sustainable food system outcomes requires an integrated approach that encompasses several national planning tools related to food (figure IV). On the other hand, One Health strategies will not be realized without a comprehensive approach to environment-health challenges and risks associated to the food system, which contributes significantly to environmental degradation and environment-health risks. In Asia and the Pacific, there is considerable opportunity to expand and deepen comprehensive considerations of biodiversity-food-health interlinkages in national strategies. In a review of 15 national biodiversity strategies and action plans in the region, only three referenced the term "diet" or "nutrition". At the same time, of 15 national health plans reviewed in the region, only three

mention “biodiversity” or “ecosystems.” Health plans should promote sustainable ecosystems as a pillar of food security.

13. A risk management approach that links environmental drivers of malnutrition to disease prevention strategies would be cost-effective, deliver co-benefits, and make a stronger case for investment. For example, strategies for the management of coral reefs[8] would entail integrated assessment of climate change impacts, fish stocks, and the associated risks to population nutrition. Additionally, food security risks should be clearly outlined in environmental strategies. For example, in China and India, climate change is expected to impact on the production of different crops through changes in fungal pathogen spread, locust populations, and water cycle.[9] To enhance environment-health resilience, specific nutrient deficiencies could be outlined in these climate projections, and be linked to near- and long-term public health preparedness guidance. Moreover, emphasis on shifting consumer demand towards sustainable and healthy diets is also important. Food environments – including supermarkets, wet markets, school canteens, and other settings where people acquire and consume food – need to make nature-positive and climate-smart food crops more accessible.[10] This is also fundamental for disease prevention, such as to avoid non-communicable disease, or conditions related to unsafe food, such as consumption of pathogens or toxins. Risk management guidelines for the infectious disease component to food systems (food safety, zoonotic disease, antimicrobial resistance) can be used as a framework for broader food system action. These guidelines center on coordinated surveillance and response.

14. National reporting and communications between countries and the United Nations Framework Convention on Climate Change (UNFCCC), such as adaptation plans and mitigation ambitions, can be useful vehicles for elaborating on the links between food and environmental risks and identifying response actions. For example, climate-smart agricultural practices, such as for conservation of water or soil management techniques, could reference health resilience and preventative health outcomes. A recent global analysis indicates significant room to improve organization of nutritional health in adaptation plans.[11] The food dimension of nationally determined contributions can be significantly expanded to support mitigation and adaptation as well as co-benefits to the health sector and public health.

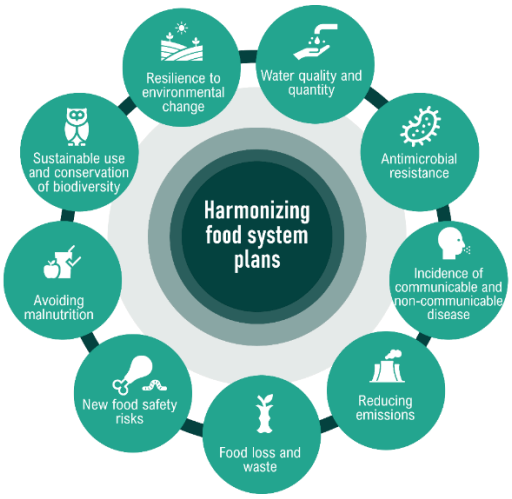
[8] FAO. (2022). Framework for Action on Biodiversity for Food and Agriculture. FAO Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cb8338en.

[9] ESCAP. (2021). Asia-Pacific Disaster Report. www.unescap.org/sites/default/d8files/knowledge-products/Asia-Pacific%20Disaster%20Report%202021-Full%20report.pdf.

[10] FAO - WHO. (2019). Sustainable Healthy Diets: Guiding principles. www.fao.org/3/ca6640en/ca6640en.pdf.

[11] WHO. (2021). Health in National Adaptation Plans. www.who.int/publications/i/item/9789240023604.

Figure IV
**Governance at the environment-health nexus of food systems must harmonize a spectrum of converging needs**




## D. Climate strategies and plans

15. Among all the regions, Asia and the Pacific is most affected by increasing natural hazards and climate change, carrying severe economic implications.[12] The urgency to address such risks and vulnerabilities features prominently as a priority in climate change policies, plans and regulatory frameworks of countries in the region. 19 Asia-Pacific countries have developed national strategies to address health and climate change. [13] A subsequent analyses of the enabling environments of 14 Asia-Pacific countries[14] shows a strong bottom-up approach to addressing climate change and health at the national level. Reporting frameworks under the UNFCCC, such as Nationally Determined Contributions, National Adaptation Plans, and Adaptation Communications have provided an opportunity for inter-ministerial and stakeholder coordination that has contributed to well-developed integration of climate change and health in the region (figure V).

16. Health National Adaptation Plans led by the ministry of health are important tools for multisectoral governance for mitigation and adaptation planning.[15] In Asia and the Pacific, 7 countries have or are completing a Health National Adaptation Plans. These plans can outline inter-ministerial monitoring and evaluation of climate-sensitive risks, coordinate management of environmental determinants of health, and outline targeted environmental management actions and health sector capacity and response. Vulnerability and adaptation assessments are important components to addressing context-specific health equity and avoiding maladaptation, and should be

[12] UN ESCAP. (2021). Asia-Pacific Futures in 2040: Raising ambitions for a healthy environment. www.unescap.org/kp/2021/asia-pacific-futures-2040-raising-ambitions-healthy-environment.

[13] ESCAP. (2021). Resilience in a riskier world. Asia-Pacific Disaster Report 2021. www.unescap.org/sites/default/d8files/knowledge-products/Asia-Pacific%20Disaster%20Report%202021-Full%20report.pdf.

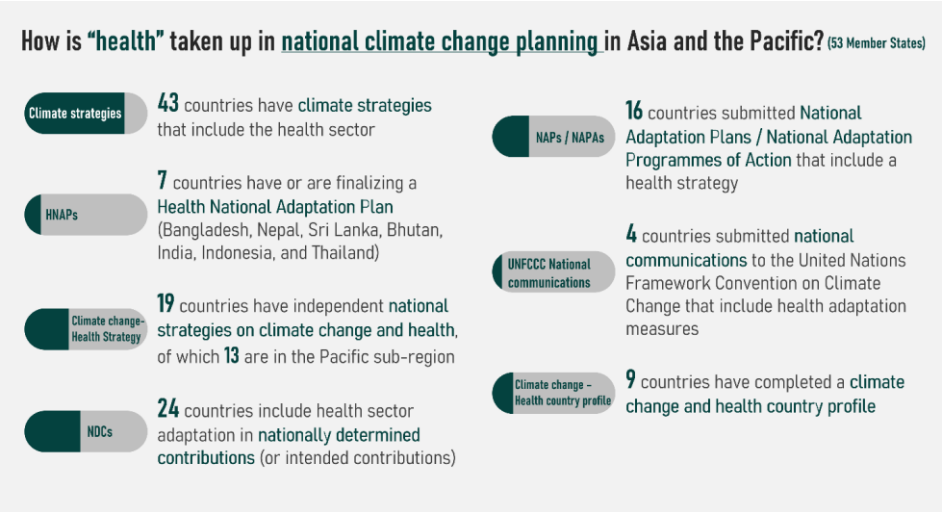
[14] Climate, health, and development plans, as well as in their National Adaptation Plans and Nationally Determined Contributions were reviewed for the following selected countries: Australia, Cambodia, China, Fiji, India, Indonesia, Japan, Malaysia, Singapore, Solomon Islands, South Korea, Thailand, Tuvalu, Uzbekistan.

[15] See WHO website, www.who.int/news/item/10-02-2021-who-publishes-quality-criteria-for-health-national-adaptation-plans.

included in Health National Adaptation Plans. These Plans should consider a wide variety of climate-sensitive health risks that lead to acute, slow-onset, and chronic physical and mental health conditions, as well as the resilience of health sector services and infrastructure. Health sector institutions should be informed and health professionals trained on the climate change effects on health.

17. Climate change and health country profiles can help create baseline assessments and tracking of multisectoral governance on climate change and health. Formal, inter-ministerial agreements with the ministry of health can enhance and mobilize climate action. This includes agreements between ministries of health and agriculture, as well as between energy, electricity, transport, water, sanitation, and hygiene, and social services. Additionally, several countries in the Asia-Pacific region have developed integrated climate change and disaster risk reduction strategies as a cost-effective means of addressing cascading and multiple hazards. These strategies often rely on cross-ministry collaboration with each sector contributing to the parts pertinent to its jurisdiction and priorities – such collaboration methods can be clearly reflected in key policy documents.

Figure V
**"Health" in national climate change planning in Asia and the Pacific**




# III. Strengthening the enabling factors for operationalizing a comprehensive One Health approach

18. Strong commitment, collaboration, flexibility, and a deeply rooted sense of equity and justice are at the core of what is required to drive transformational change. Countries in the Asia-Pacific region are well positioned to drive that change given their experience dealing with multiple hazards, the resilience of their peoples, their sense of solidarity and their commitment to becoming stronger together. The region needs to act now, despite uncertainties, taking advantage of existing institutions, expertise and funding streams, building towards incremental knowledge, experience and change.

19. Systemic and structural transformation is needed to fully integrate the environmental dimension into One Health, supported by the following enabling factors: (a) integrating environment and health data and assessments; (b) enhancing multisectoral governance that maximizes co-benefits and minimizes trade-offs; (c) accountable governments driven by respect for

human rights; (d) stakeholder engagement and behavioral change directed towards healthier, more sustainable and equitable choices; (e) reliable funding streams and cost-effective institutional arrangements; and (f) strong regional cooperation.

## A. Integrate environment and health data assessment and information management

20. The COVID-19 crisis has shed light on the importance of strengthening environment-health risk and vulnerability mapping in order to build a shock-responsive and shock-prepared society. Major investment in integrated data is required to promote preventative management strategies, identify priority interventions that can deliver co-benefits, and ensure environmental justice and effective programming. Spatial data and artificial intelligence are unexplored and underdeveloped tools to enhance data and risk mapping across environment and health domains, and for assessing vulnerable communities and populations. Environmental justice will be increasingly important to managing risk. The Global Atlas of Environmental Justice which produces various maps, including by country, to describe cases of social conflict on environmental issues, is one tool enabling targeted assessments.[16]

21. Significant opportunity exists to mainstream integrated environment-health impact assessments.[17] These assessments are needed to inform and improve evidence-based national strategies, and to harmonize state reporting and communications required across different multilateral environmental agreements. This data is also essential to rapid response to environment-health threats, such as emerging zoonotic pathogens, heat waves, and air pollutant levels. Equally important is data that expresses the cumulative health burden on the health system and health economy in terms of exposure, disease outcome, and cost. Increased understanding of the environmental burden of disease will strengthen policy decisions and action.

22. Advancements in valuation to account for the role of ecosystem services in supporting positive health outcomes will also be important to agenda-setting on One Health. For instance, at the national level, national ecosystem assessments could be undertaken and linked to health benefits, in terms of disease incidence. This information is valuable to various ministries and should be integrated into cross-sectoral planning and implementation. Ultimately, ecosystem services are environmental determinants of health and health equity, and these ideas should be integrated and taken up across sectors (figure VI). While there are some ecosystem services that are directly health-supporting, all ecosystem services underpin health and well-being.

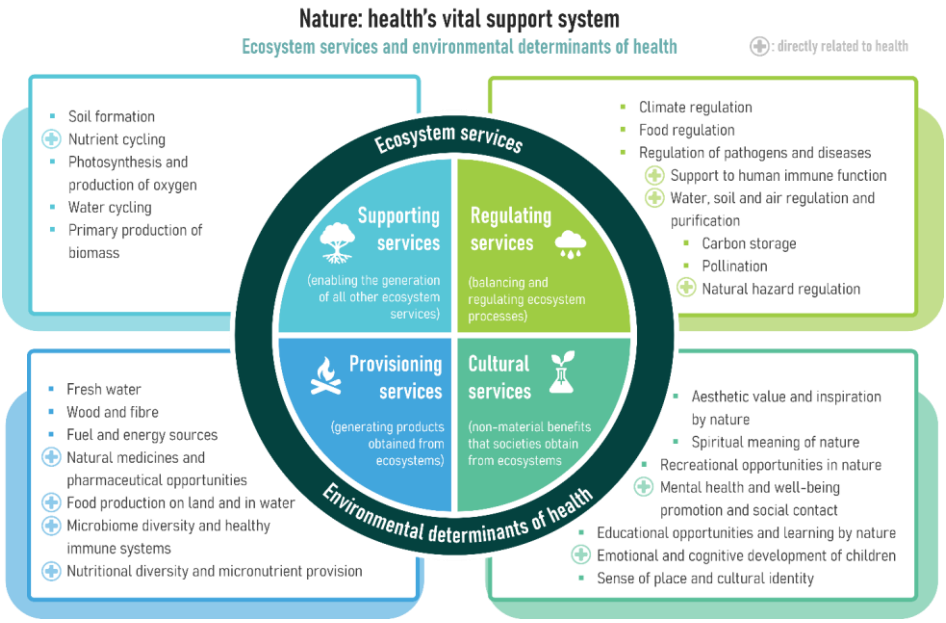
23. Capacity for managing and interpreting information on the environmental determinants of health needs to be strengthened. Regional institutions can facilitate country inputs into the Quadripartite Global One Health Intelligence System, which aims to improve intelligence to address environment-health threats by linking and expanding existing information and alert networks and systems into one framework. An optimal intelligence framework is also based on robust national information that is sector-specific,

[16] For more on this tool see https://ejatlas.org/.

[17] Dora, C, Pfieffer, M, & Racioppi, F. (2013) Lessons from Environment and Health for HiAP. In Health in All Policies: Seizing opportunities, implementing policies. Available at www.euro.who.int/__data/assets/pdf_file/0007/188809/Health-in-All-Policies-final.pdf (accessed on 11 October 2022).

reliable, transparent, obtained in close-to-real time, and delivered in a timely way.

Figure VI
**Nature's benefits for health and well-being: ecosystem services and environmental determinants of health**
(adapted from World Health Organization (WHO)[18] and the Millennium Ecosystem Assessment[19])




## B. Enhance multisectoral governance on environment-health

24. Non-health sectors play a key role in the effectiveness of many public and global health outcomes. Multisectoral health governance is a foundational strategy for sharing responsibility for healthy people and planet, and to ensuring health equity. It is considered the framework for addressing the role of health – as a precondition, an outcome, and indicator of sustainable development - in achieving the sustainable development goals.[20] Investment in strategies to adopt common terminologies at the environment-health nexus is critical to aligning perspectives, agendas, assessments, investments, and objectives, as well as to adopting a shared vision of resilience.

25. A foundation of work on multisectoral health governance has been done in the health sector through the Health in All Policies approach, which is largely focused on human health. According to the WHO, Health in All Policies and One Health are considered "the most formalized approach to addressing health determinants," with One Health being the advanced version.[21] The Health in All Policies Framework for Country Action (2014) describes

[18] WHO Regional Office for Europe. (2021). Nature, biodiversity and health: an overview of interconnections. Copenhagen. ISBN: 9789289055581.

[19] Millennium Ecosystem Assessment. (2005). Ecosystems and Human Well-being: Synthesis. Island Press, Washington, DC. Available at www.millenniumassessment.org/documents/document.356.aspx.pdf (accessed on 11 October 2022).

[20] WHO. (2018). Health in All Policies as part of the primary health care agenda on multisectoral action. Technical series on primary health care. www.who.int/publications/i/item/WHO-HIS-SDS-2018.59.

[21] Ibid.

enabling factors include a lead agent (ministry, head of government office, or public sector agency), vertical and/or horizontal integration, a supportive committee focused on intersectoral health, links to existing agendas and normative governance, legal, financial, rights-based, or international frameworks, and accountability mechanisms.[22] Other essential elements to action Health in All Policies are integrated assessments, shared indicators, and implementation science.[23]

26. Lessons for multisectoral governance can also be drawn from COVID-19 responses at the national level, where most countries in Asia and the Pacific set up multisectoral health committees that, in addition to health, included other sectors such as employment and agriculture. Such committees may benefit from multidisciplinary bodies that bring knowledge on environment and health together, and for timely recommendations and warning. These institutional arrangements can be used as building blocks for a comprehensive One Health approach with stronger attention to the environment and climate change dimension and broader health remit on the governance and funding arrangements.

27. Successful multisectoral governance of the environment-health footprint in Asia and the Pacific is connected to robust urban planning. Adopting sustainable urban design that promotes healthy lifestyles and sound environmental management was one of five priority actions in the 2016 Manila Declaration. Poor urban planning will inevitably maximize the social and environmental drivers of disease, while minimizing opportunity to avoid maladaptive coping strategies. Many urban dwellers in the Asia-Pacific region live in informal, underserviced neighborhoods, meaning environment-health challenges will be absorbed by limited clinical and other health services. Urban planning experts cite the need for adequate frameworks and legislation at the national or sub-national level and better alignment between local needs and national urban planning frameworks.[24]

28. Nature-based solutions should be taken up as tools of multisectoral governance, strategically investing in the health of targeted ecosystems and ecosystem functions to reduce health risks and improve health outcomes. Nature-based solutions could offer one way to meet simultaneous objectives across ministries for protection of ecosystem services and environmental determinants of health, including those related to climate change, biodiversity loss, food and urban systems. With careful planning, cross-sector coordination, and standardization, nature-based solutions could address inter-related risks in a cost-effective way.

29. A high degree of policy coherence can be attained by using existing institutions to integrate health into environmental policies, such as inter-ministerial coordination committees on climate change and biodiversity. Policy coherence at the national level is likely to also promote greater alignment among multilateral environmental agreements by extension. Once countries reflect environmental determinants of health in their multilateral environmental agreements reports and communications, commonalities and distinctive features of the environment-health nexus can be identified and acted

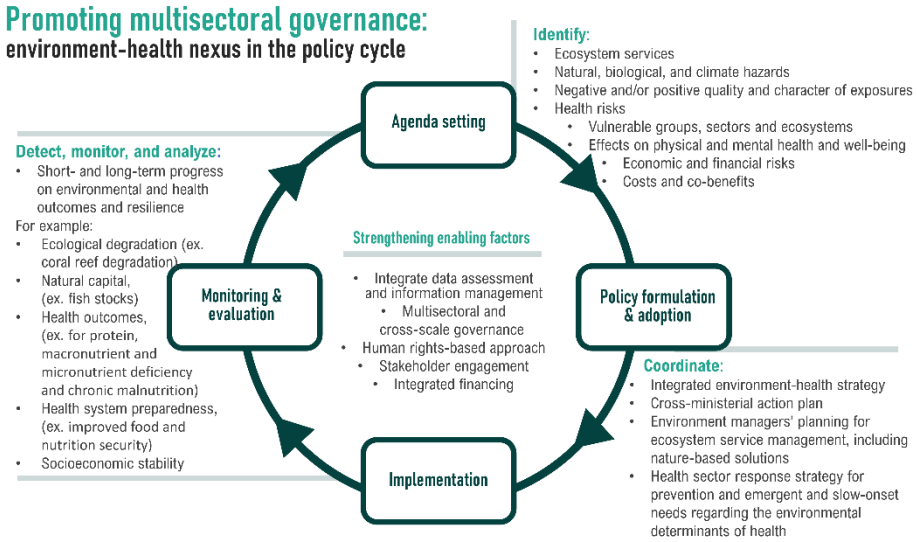
[22] WHO. (2014). Health in All Policies (HiAP) Framework for Country Action. www.afro.who.int/sites/default/files/2017-06/140120HPRHiAPFramework.pdf.

[23] WHO. (2018). Health in All Policies as part of the primary health care agenda on multisectoral action. Technical series on primary health care. www.who.int/publications/i/item/WHO-HIS-SDS-2018.59.

[24] See UN Habitat website, https://unhabitat.org/asia-and-the-pacific-region.

upon at the global level. Multisectoral governance can be strengthen by applying the environment-health nexus at every stage of the policy cycle, including agenda setting, policy formulation and adoption, implementation, and monitoring and evaluation (figure VII).

Figure VII
**Promoting multisectoral governance: environment-health nexus in the policy cycle**




## C. Promote a human rights-based approach to the environment

30. A clean, healthy and sustainable environment is a matter of justice. The fulfillment of people's rights is at risk when the environment is at risk. The relevance of the United Nations General Assembly's recognition of the human right to a clean, healthy and sustainable environment[25] in 2022 is that it consolidates the international legal foundation for the environment-health nexus. This, along with the right to water and to food, is anticipated to accelerate environment-health integration across society and sectors. The resolution also affirms that the promotion of the right to a healthy environment requires full implementation of all multilateral environmental agreements.

31. National constitutions, policy, planning and regulatory frameworks in the Asia-Pacific should be assessed for gaps or inconsistencies with regards to the right to a healthy environment and to their coherence and integration with health objectives, particularly in light of the Framework Principles on Human Rights and the Environment.[26]

32. Human rights are inherent to all human beings regardless of status. The identification and protection of the rights of vulnerable and marginalized groups – including women, children, indigenous communities, among others – are particularly vital due to their exposure to multiple environment-health hazards and impacts that can result from system socio-cultural bias. A human rights-based approach requires specific attention to identifying inequality and vulnerability, empowering people to know and claim their rights, and creating

[25] UNGA, A/RES/76/300. (2022).

[26] UN Human Rights, Special Procedures, Framework Principles on Human Rights and the Environment. (2018).

avenues for accountability so people can seek remedies when their rights are violated.

## D. Promote stakeholder engagement in the One Health approach

33. The right of people to take part in the conduct of public affairs includes participation in decision-making related to the environment,[27] including the development of policies, laws, regulations, projects and activities on the environment and their impacts on health. Ensuring that these environmental decisions take into account the views of those who are affected by them – including women, children, indigenous communities – increases public support and promotes sustainable development . States should provide for and facilitate public participation in decision-making related to the environment and take the views of the public into account in the decision-making process.

34. Public access to environmental information enables individuals to make decisions to protect themselves and their ecosystems. States should regularly collect, update and disseminate environmental information, including information about: the quality of the environment, including air and water; pollution, waste, chemicals and other potentially harmful substances introduced into the environment; threatened and actual environmental impacts on human health and well-being; and relevant laws and policies.[28] Imminent environment-health threats should be communicated in real-time to enable timely public response and minimization of risks. Heat waves, tsunami threats, and COVID-19 spikes alert systems are good examples, but this list can be expanded to include other environment-health risks and to identify the most vulnerable populations. Integrated education frameworks, such as the Planetary Health Education Framework,[29] can be taken up into national plans, policy frameworks, and institutions.

## E. Finance a healthier, greener, inclusive and resilient future

35. Whole-of-economy and whole-of-government approaches to manage environment-health risks are gaining popularity, particularly following the COVID-19 pandemic which forced convergence on decision-making across sectors. This shift is part of an essential transition for streamlined and efficient approaches to common risks, but also reflects the need for new financial strategies to mobilize a healthier, greener, more inclusive and resilient future. Integrated policies must demonstrate high returns on investment including through delivering co-benefits across sectors, with attention to hidden costs of environment-health risks in the short term and over the long term. Furthermore, new investment in capacity-building to “see” the nexus comprehensively and analyze the inter-workings of successful enabling factors across environmental domains is needed.

[27] Principle 9, Framework Principles on Human Rights and the Environment, Available at www.ohchr.org/sites/default/files/Documents/Issues/Environment/SREnvironment/FrameworkPrinciplesUserFriendlyVersion.pdf (accessed on 11 October 2022).

[28] Ibid.

[29] See The Planetary Health Education Framework. Available at www.planetaryhealthalliance.org/education-framework (accessed on 11 October 2022).

36. Financial mechanisms and institutions, including the World Bank[30] and the Global Environment Facility[31] are supporting projects with multiple co-benefits, including for health and well-being, which could leverage funding for One Health at the national level. Using existing inter-ministerial committees to advance One Health would be a cost-effective means of integrating health into environmental deliberations and vice versa. Furthermore, funding streams must be organized, coherent, and long-lasting. Budget contributions from different government sectors may be brought together and aligned around joint inter-ministerial objectives. This requires coordination and elevation of environment-health nexus issues to the top of government leadership. A regional analysis of models for integrative financing, such as through shared funds, or through agenda convergence, is advisable. Sharing inter-ministerial funding strategies such as through national reports and communications to multilateral environmental agreements, could be helpful.

## F. Regional collaboration

37. Global environmental changes such as climate change and biodiversity loss, are systemic and transboundary, as are their impacts to health and well-being. The report of the United Nations Secretary General "Our Common Agenda" points out that both global health and a healthy planet are essential global public goods, the delivery of which must be strengthened by reinvigorated multilateralism that is "inclusive, networked and effective."[32] There is a great need for international cooperation to strengthen the application of the principles of a comprehensive One Health approach with an intentional action to reinvigorate multilateralism in this arena. Specific cooperation measures can aim to support countries with lower capacity to respond, and support vulnerable groups which face heightened risks in the face of climate change, environmental degradation and other aspects of environmental change. Joint action to identify and mitigate transboundary environment-health risks may be stepped up.

38. The Asia-Pacific region has a rich history and tradition in regional cooperation through well-developed regional intergovernmental bodies, processes and initiatives, as well as financial mechanisms. Thus, the existing institutional regional architecture and experience puts the region in a privileged situation to finding innovative solutions for resilient, equitable and sustainable development that can lead the way for environmentally comprehensive One Health. Regional institutions and mechanisms could facilitate the sharing of environment-health nexus experiences and ideas from across diverse ecosystems and in the context of diverse climate change risks. These regional entities can project a cohesive voice from the region to the global level, aggregate country strategies and reflect them in regional portfolios, lead region-wide monitoring, evaluation and learning efforts, and serve as regional facilitators for periodic assessment and learning among peers and partners (figure VIII).

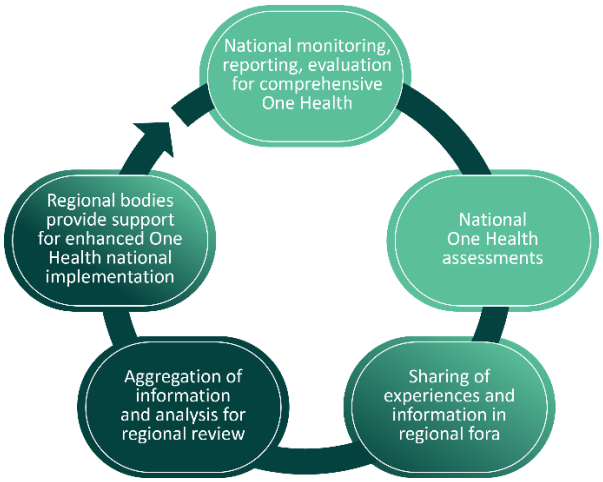
[30] See World Bank, Climate Change co-benefits financing strategy (2021). Available at www.worldbank.org/en/news/feature/2021/03/10/what-you-need-to-know-about-climate-co-benefits.

[31] See Integrated Programming in the Global Environment Facility (2021). Available at www.thegef.org/newsroom/publications/integrated-programming-global-environment-facility-learning-gef-6-iap (accessed on 11 October 2022).

[32] United Nations (2021). Our Common Agenda – Report of the Secretary-General. (United Nations, New York). Available at www.un.org/en/content/common-agenda-report/assets/pdf/Common_Agenda_Report_English.pdf.

39. Some existing regional processes include initiatives from the Asia-Pacific One Health Quadripartite – an alliance between Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), WHO, and the United Nations Environment Programme (UNEP) – which is developing a regional action framework that draws on the global One Health Joint Plan of Action and seeks to strength capacity to address complex multidimensional health risks in Asia and the Pacific. The Asia-Pacific Regional Forum on Health and Environment also presents an opportunity for countries to share environment-health nexus experiences and strengthen synergies among relevant government departments to address environment and health issues in the region. At sub-regional level, organizations such as the Association of Southeast Asian Nations (ASEAN) have established relevant strategies and institutional mechanisms for coordination around the environment-health nexus. Countries could make use of these regional platforms and processes to exchange experiences and coordinate action to address the common environment-health risks.

Figure VIII
**Regional collaboration supports national implementation**




40. The 7th ESCAP ministerial session of the Committee on Environment and Development may wish to consider the type of support that Members need to strengthen the environmental dimension of One Health, including addressing climate change, pollution and ecosystem-related threats that exacerbate or cause acute, slow-onset, and chronic physical and mental health conditions. Members could also consider technical support to develop normative frameworks and institutional capabilities, capacity-building activities, such as analyzing environment-health data and metrics to establish adequate baselines and understand co-benefits, and identify priorities and vulnerable populations. Further, Members could consider means to engage relevant stakeholders and sectors to develop regional development strategies that minimize environment-health risks including by undertaking periodic assessments on implementation of the environment and climate change dimension of One Health and making recommendations to support informed decision-making.