Food and Agriculture Organization of the United Nations

Strategic Framework 2022-31

This document presents FAO's Strategic Framework 2022-31 as endorsed by Conference in June 2021, with the specific terminology changes indicated in C2021/LIM/4, Section II. Further decisions and guidance from the Conference on implementation of this Framework is to be reported in the *Adjustments to the Programme of Work and Budget 2022-23* (CL 168/3) for consideration by the Council in December 2021.

Food and Agriculture Organization of the United Nations
Rome, October 2021

www.fao.org/pwb

EXECUTIVE SUMMARY

1. As called for in the Basic Texts, since 2010 all of FAO's work is guided by a Strategic Framework prepared for a period of ten to fifteen years, reviewed every four years. The Strategic Framework 2022-2031 has been developed in the context of major global and regional challenges in the areas of FAO's mandate, including the COVID-19 pandemic.
2. A world facing escalating threats demands that we act without delay to safeguard livelihoods, future-proof our planet and lock in sustainable outcomes. The 2030 Agenda is there to guide us, but the historic consensus surrounding its adoption must be matched by political determination to deliver it. With many of the goals in the 2030 Agenda off-track, the need to engage all actors at all levels becomes all the more pressing. Today's challenges require cooperation, not only across borders but across the whole of society.
3. FAO's Strategic Framework seeks to support the 2030 Agenda through the transformation to MORE efficient, inclusive, resilient and sustainable, agri-food systems for *better production*, *better nutrition*, a *better environment*, and a *better life*, leaving no one behind.
4. The *four betters* represent an organising principle for how FAO intends to contribute directly to SDG 1 (No poverty), SDG 2 (Zero hunger), and SDG 10 (Reduced inequalities) as well as to supporting achievement of the broader SDG agenda, which is crucial for attaining FAO's overall vision. The *betters* reflect the interconnected economic, social and environmental dimensions of agri-food systems. As such, they also encourage a strategic and systems-oriented approach within all FAO's interventions.
5. Twenty Programme Priority Areas will guide FAO on filling critical gaps and putting in place the conditions needed to drive the changes that will ultimately contribute to the achievement of the selected SDG targets. By fully embracing the SDGs, FAO moves away from bespoke targets and indicators and adopts a common language.
6. FAO will also apply four cross-cutting/cross-sectional "accelerators": (i) technology, (ii) innovation, (iii) data, and (iv) complements (governance, human capital, and institutions) in all its programmatic interventions to accelerate impact while minimizing trade-offs.
7. The document also highlights the importance of a shift in FAO's working paradigm to ensure transformational change. FAO's reinvigorated, fit-for-purpose business model aims to ensure an inclusive and agile Organization that is transparent, open, innovative, responsible, effective and impactful - and that serves its Members to achieve the *four betters*. The improved programmatic approach will be supported by deepening and expanding partnerships, ensuring optimal leverage of FAO's normative strengths, seeking innovative financing mechanisms and sources, working under a unified vision (One FAO), embracing efficient and innovative approaches, and being prepared to operate in a world of increasing risk and uncertainty.
8. The Strategic Framework was developed through an inclusive and transparent process involving extensive internal and external consultations, Governing Body meetings and informal consultations. It was also guided by FAO's strategic foresight exercise, which aims to increase preparedness and effectiveness around achieving the Agenda 2030 and to share knowledge on challenges, threats and opportunities toward the transformation to more efficient, inclusive, resilient and sustainable agri-food systems.

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Director-General's Foreword

It is my pleasure to present FAO's Strategic Framework 2022-2031, which sets out my vision of building a dynamic FAO for a better world, while remaining committed to the Organization's original aspirations, mandate and mission.

I strongly believe that food and agriculture hold the key to realizing the 2030 Agenda for Sustainable Development and that agriculture in particular is the most inclusive tool to end poverty and ensure food security for all. I am ever more convinced that with its strengths, unique expertise and wealth of experience in sustainable development, FAO is well positioned to support all countries in realizing the Goals of the 2030 Agenda.

Since taking office in 2019, I have introduced various innovations to make FAO more efficient, dynamic, transparent and inclusive. As such, the Strategic Framework builds on the momentum and harmonized transformations already taking place in the Organization, including structural reforms, a new management model as well as a number of flagship activities, including the Hand-in-Hand Initiative, and the COVID-19 Response and Recovery Programme.

I welcome that this Strategic Framework has been developed through a thoroughly inclusive and transparent consultation process, including sessions of the Programme Committee, Joint Meeting of the Programme and Finance Committees, Council, Regional Conferences and Technical Committees. The consultation process also benefited from numerous informal meetings with Members and inputs from all parts of the Organization.

The Strategic Framework puts at its centre the transformation to MORE efficient, inclusive, resilient and sustainable agri-food systems for better production, better nutrition, a better environment, and a better life - the four betters - leaving no one behind.

The Framework is anchored in the 2030 Agenda and guided by SDG 1 No poverty, SDG 2 No hunger, and SDG 10 Reducing inequalities. Given their interconnectivity, the Framework also highlights the importance of all SDGs in achieving FAO's overall vision.

We have introduced twenty Programme Priority Areas, which embed FAO's comparative advantages and will guide our interventions, representing the Organization's strategic contribution towards the SDGs.

The development of this Strategic Framework took place during a period of unprecedented challenges driven by the COVID-19 pandemic - a global crisis, which highlighted the critical mandate of FAO to ensure functioning and sustainable agri-food systems that allow for sufficient production and consumption of food. It has also been a period of increased efficiency, a blossoming digital FAO, as well as breaking down silos, removing administrative layers and innovating work processes. A new FAO is emerging and we will continue on this path, seeking ways to achieve more tangible results and better delivery with an innovative business model.

The Strategic Framework builds on this positive momentum, and clearly sets the direction of the Organization for the next decade. I look forward to working with all our Members and partners to realize global food security and the wellbeing of all.

QU Dongyu
Director-General

Introduction

1. This document presents the Strategic Framework 2022-2031, which has been developed in the context of recent global developments, global and regional trends and major challenges in the areas of FAO's mandate.

2. As called for in the Basic Texts, since 2010 all of FAO's work is guided by a Strategic Framework prepared for a period of ten to fifteen years, reviewed every four years and including *inter alia* an analysis of the challenges facing food, agriculture and rural development and populations dependent thereon, including consumers; a strategic vision, the goals of Members in areas of FAO's mandate, as well as Strategic Objectives to be achieved by Members and the international community with support from FAO.[1]

3. The Strategic Framework was developed through an inclusive and transparent process involving extensive internal and external consultations, Governing Body meetings and informal consultations. This document builds on the *Outline of the Strategic Framework 2022-2031 and Outline of the Medium Term Plan 2022-25*,[2] and guidance received from the Programme Committee, Joint Meeting of the Programme and Finance Committees, and the Council at their sessions during November-December 2020,[3] as well as guidance provided by 2020 Regional Conferences and Technical Committees and various informal meetings with Members.

4. FAO's Strategic Framework has been developed during an uncertain economic outlook for the medium term. As highlighted by the International Monetary Fund,[4] COVID-19 has triggered the deepest global recession in decades, with an estimated -3.5 percent change in global GDP[5] growth in 2020. The pandemic is resulting in GDP growth contractions across developed countries, the vast majority of emerging markets (estimated at -2.4%) and developing economies (with estimates for Latin America -7.4%, Middle East and Central Asia -3.2%, and sub-Saharan Africa -2.6%) and cause lasting damage to output loss,[6] labour productivity and jobs. This will potentially increase the number of extreme poor by between 88-115 million in 2020 with an additional potential increase of between 23 million and 35 million in 2021.[7]

5. In this scenario, global coordination and cooperation, as well as a reinforced commitment to sustainable policies and to undertaking the reforms necessary to support long-term prospects are critical.

6. The Strategic Framework is guided by FAO's vision and the three Global Goals of Members and is firmly anchored in the SDGs. It also highlights the importance of FAO being a modern and efficient Organization and an agile enabler of change and outlines areas of FAO's focus for building an optimal enabling environment.

7. Other elements which guided the development of the Strategic Framework include:

a) A review of *global trends and challenges* that will influence food and agriculture in the coming decades, attempting to gain a deep understanding of the challenges that agriculture, rural development and agri-food systems are facing now and in the future, and ensuring they are appropriately addressed in how FAO does its work.

b) The *new vision* articulated by the Director-General for a dynamic and innovative FAO in a world where challenges are complex and inter-related and in which food and agriculture, people's livelihoods and wellbeing, as well as preservation of natural resources cannot be addressed in isolation.

[1] C 2009/REP
[2] CL 165/3
[3] CL 165/9, CL 165/10, CL 165/REP
[4] World Economic Outlook, January 2021, IMF
[5] Gross domestic product (GDP)
[6] Estimated around USD 11 trillion over 2020-21 to USD 28 trillion over 2020-2025 for cumulative loss
[7] World Bank, *Poverty and Shared Prosperity 2020*, PovcalNet

c) The organising principle of the *four betters - better production, better nutrition, better environment* and *better life*, which demonstrate how FAO intends to support achievement of the SDG agenda and reflect the interconnected economic, social and environmental dimensions of agri-food systems while encouraging a strategic and systems-oriented approach.

d) The further articulation of FAO's *results framework* with twenty Programme Priority Areas under the overarching framework of the Agenda 2030, anchored in the Sustainable Development Goals and focused on targets most relevant to its mandate.

e) The "*new normal*" under the global challenge of COVID-19 and other potential future risks and uncertainties, ensuring that FAO has a well-articulated approach to bring to bear its technical expertise and to shape, support and influence the global community's response now and into the future, in response to the changing landscape worldwide.

A. The 2030 Agenda and the big challenges ahead

8. Despite the enormous progress made in the last 75 years since FAO was created, and even though we produce enough food to feed the world, 690 million people suffered from hunger even before COVID-19. Millions more are micronutrient deficient, and an alarmingly growing number of people are overweight across all ages, classes and borders. The pandemic has increased the number of undernourished up to 132 million more people, putting the importance and vulnerability of the world's agri-food systems under the spotlight. As highlighted by the Secretary General in his recent address to the General Assembly, in many places, the pandemic coupled with conflict and disruption is dealing devastating setbacks to food security, with millions of people facing the risk of famine.[8]

9. Food markets continue to face uncertainties due to prospects of weak economic growth. African swine fever and a catastrophic desert locust outbreak constitute major disasters, in addition to threats and shocks of climate change. Agri-food systems which directly employ over 1 billion people and provide livelihoods to another 3.5 billion, are experiencing disruptions that could at least temporarily disrupt the incomes and, by extension, food access of 1.5 billion people.

10. This unprecedented situation is an opportunity for the Organization and its Members to reaffirm FAO's leadership and position as the UN agency mandated to defeat hunger and achieve global food and nutrition security while preserving the planet's resources and reducing the environmental impact. There is growing recognition of the fundamental role of agri-food systems in achieving the 2030 Agenda. The *Global Sustainable Development Report 2019* identified building sustainable food systems and healthy nutrition patterns as one of the six key "entry points" where focused and collaborative action by various stakeholders can accelerate progress towards the SDGs. Major global initiatives such as the upcoming UN Food Systems Summit provide a historic opportunity to build back better. The cornerstone of our existence, and at the core of the 2030 Agenda for Sustainable Development, is a healthy planet that allows our agri-food systems to provide a healthy diet for all in a sustainable manner.

Transforming our world: the 2030 Agenda for Sustainable Development

11. A world facing escalating threats demands that we act without delay to safeguard livelihoods, transform our agri-food systems to future-proof our planet and lock in sustainable outcomes. The 2030 Agenda is there to guide us. But the historic consensus surrounding its adoption must be matched by political determination to deliver it.

12. In September 2015, UN Member States unanimously signed up to a new vision for humanity. By tying broad principles to detailed benchmarks, the 2030 Agenda with its 17 Sustainable Development Goals (SDGs) and their related targets and indicators, charts a bold path. It squarely commits the international community to ending poverty, hunger and malnutrition. Its vision is one in which a healthy, prosperous and dignified life, rooted in thriving ecosystems, is a reality for all - a vision in which no one is left behind.

[8] Secretary General's address to the General Assembly, September 22, 2020

13. The Agenda 2030 embraces five basic principles that feed into all SDGs – the '*five Ps*': People, Planet, Prosperity, Peace, and Partnership. The *five Ps* highlight how the SDGs are one intertwined framework and that progress on one P must balance and support progress on another.

14. Today, progress is being made in many places, but, overall, action to meet the Goals is not yet advancing at the speed or scale required. 2020 has ushered in a decade of ambitious action needed to deliver the Goals by 2030. The Decade of Action has further set the direction for FAO's support to its Members calling for accelerating sustainable solutions to all the world's biggest challenges, ranging from poverty and gender, to climate change, inequality and closing the finance gap. The 2030 Agenda is the roadmap for the world we all want and its implementation a necessity for our survival.

15. As emphasized in the *Declaration on the commemoration of the seventy-fifth anniversary of the United Nations*, the peoples have to be at the centre of all our efforts and particular attention must be given to people in vulnerable situations. The spirit of "We the peoples" entails the full participation and empowerment of women and girls in all domains, and engagement with youth, the "missing piece for peace and development".[9]

Transforming the world through food and agriculture

16. The 2030 Agenda for Sustainable Development and the SDGs call for transformative shifts, integrated approaches and solutions to structural barriers to sustainable development and it recognizes the fundamental role played by sustainable agriculture in the connection between people, planet and prosperity.

17. Explicit in SDG 2 *Zero Hunger* - but implicit throughout, the concept of food security - safe and nutritious food for all - underpins the 2030 Agenda. It is inseparable from the urgency to eradicate extreme deprivation, tackle climate challenges, build community resilience and responsibly manage natural resources and rich biodiversity. In short, achieving the 2030 Agenda calls for fundamental transformation of our agri-food systems.

18. When many of the Goals in the 2030 Agenda are off-track, the need to engage more effectively all actors at all levels - from international to regional to national - becomes all the more pressing. Today's challenges require cooperation, not only across borders, but across the whole of society, with relevant stakeholders including regional and subregional organizations, non-governmental and civil society organizations, the private sector, research institutions and academia and parliamentarians.[9]

19. As highlighted by the *Global Sustainable Development Report* and confirmed by deliberations at the SDG Summit in 2019, actions to achieve SDG 2 and realizing sustainable agri-food systems will accelerate progress across most other goals and targets, and help maximizing and scaling up results, while also mapping and addressing potential trade-offs. In short, to transform the world through food and agriculture, we must: (i) get hunger back on a steep downward trend; (ii) transform agri-food systems to nourish people, nurture the planet and build resilient livelihoods and ecosystems; and (iii) commit to a rural transformation and invest expressly in vulnerable populations to reduce inequality, leaving no country and no person behind.

[9] A/RES/75/1

UN Food Systems Summit

20. The United Nations Secretary-General's Food Systems Summit will provide a process through which a food systems approach can be better articulated, and an improved alignment of food system actors' initiatives in support of more sustainable food systems promoted. The Summit is a catalyst for agri-food systems transformation.

21. FAO will act as a facilitator and enabler of change. FAO hosts the Rome-based part of the Summit Secretariat focused on ensuring the provision of evidence, knowledge and data on agri-food systems as inputs to the Action Tracks and to the country-level Food Systems Dialogues, in close cooperation with the Scientific Committee of which FAO's Chief Scientist and Chief Economist are members. FAO is also the core UN agency directly supporting Action Track 1 on "Ensuring access to safe and nutritious food for all" and is involved in all other action tracks. The Scientific Group, with FAO's support, is developing short scientific papers on each Action Track and a series of papers on, *inter alia*, definitions and concepts as well as a general equilibrium model to be able to measure the trade-offs of different actions recommended by the Summit.

22. The Summit's five Action Tracks: *1) Ensure access to safe and nutritious food for all*; *2) Shift to sustainable consumption patterns*; *3) Boost nature-positive production*; *4) Advance equitable livelihoods*; *and 5) Build resilience to vulnerabilities, shocks and stress* helped inform the identification and development of FAO's Programme Priority Areas in the Strategic Framework.

23. While the process towards the 2021 UN Food Systems Summit provides significant opportunities for FAO to further leverage its support to Members, the outcomes and follow-up actions resulting from it to support more efficient, inclusive, resilient and sustainable agri-food systems will guide FAO's work under the Strategic Framework.

B. Global challenges and opportunities

24. To accelerate strategic thinking on global challenges and opportunities, FAO is undertaking a Corporate Strategic Foresight Exercise (CSFE) which aims to increase preparedness and effectiveness in providing support to achieving the Agenda 2030, and to share knowledge on challenges, threats and opportunities in moving agri-food systems towards sustainability.

25. The Exercise comprises several stages including: (i) an Internal Expert Consultation, (ii) a Staff Sample Survey, (iii) an External Expert Consultation, and (iv) the preparation of selected technical papers on key trends and emerging challenges for agri-food systems. The results of the CSFE to-date are presented in this document. The CSFE will also result in a flagship report as part of the FAO series *the Future of Food and Agriculture*.

Critical drivers of agri-food systems

26. The Internal Expert Consultation identified 18 key current and emerging interconnected socio-economic and environmental drivers impacting food and agricultural systems as shown in *Table 1*. Six are overarching drivers and the other 12 affect in particular food access and livelihoods, food and agricultural production and distribution processes, and environmental systems. Further detail on the drivers is provided in *Annex 1*.

Table 1: Critical drivers of agri-food systems and related trends

A. Systemic (overarching) drivers
1. Population dynamics and urbanization, which are expected to increase and change food demand
2. Economic growth, structural transformation and macro-economic outlook, which are not always delivering the expected results in terms of inclusive economic transformation of societies
3. Cross-country interdependencies, which tie together agri-food systems globally
4. Big data generation, control, use and ownership, which enable real-time innovative technologies and decision-making, also in agriculture
5. Geopolitical instability and increasing conflicts, which include resource- and energy-based conflicts
6. Uncertainties, which materialize in sudden occurrences of events in many occasions impossible to predict
B. Drivers directly affecting food access and livelihoods
7. Rural and urban poverty, with a high proportion of rural people living in poverty or extreme poverty
8. Inequalities, characterized by high income inequality and inequalities in job opportunities, in gender, access to assets, basic services and inequitable fiscal burden
9. Food prices,[10] which are in real terms lower than in the 70's but higher than in the 80's and 90's despite the fact that they fail to capture the full social and environmental costs of food
C. Drivers directly affecting food and agricultural production and distribution processes
10. Innovation and science including more innovative technologies (including biotechnologies and digitalization) and systemic approaches (*inter alia* agroecology, and conservation and organic agriculture)
11. Public investment in agri-food systems, which is often insufficient
12. Capital/information intensity of production, which is increasing due to mechanization and digitalization of production, including in food and agriculture
13. Market concentration of food and agricultural input and output, which represents a challenge for the resilience and equitability of agri-food systems
14. Consumption and nutrition patterns, resulting from behavioural change of consumers which are increasingly being asked to make complex choices about the nutritional content and safety of what they eat and where shifting consumer demand in the direction of healthier eating patterns is key
D. Drivers regarding environmental systems
15. Scarcity and degradation of natural resources, including land, water, biodiversity, soil
16. Epidemics and degradation of ecosystems, which may increase in the future due to rising trends in transboundary plant pests and diseases, agriculture encroaching in wild areas and forests, antimicrobial resistance, the increasing production and consumption of animal products
17. Climate change, including weather extremes and variability of temperatures and rainfall patterns, which is already affecting agri-food systems and natural resources and is expected to accelerate hunger and poverty in rural areas
18. The 'Blue Economy',[11] where the development of economic activities related to the fisheries and aquaculture sector is increasing globally, and arising trade-offs require sound policy-making integrating technical, social and economic solutions, principles of ecosystem restoration of production systems, and cross-sectoral stakeholder involvement in the context of transformative agri-food systems.

[10] As measured by FAO Food Price Index (FFPI). The FFPI is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014-2016.

[11] In the context of the Corporate Strategic Foresight Exercise, the World Bank definition for *blue economy* applies: The sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem (*What is the Blue Economy?*, World Bank, 6 June 2017).

Transforming agri-food systems: priority triggers of change

27. Achieving Agenda 2030 and FAO's global goals requires a diagnosis of current agri-food systems and an understanding of how to trigger or to accelerate transformative processes of agri-food systems such that corporate goals be achieved.

28. Almost all the core activities of agri-food systems - primary production, processing, distribution, consumption, disposal etc. - and their interactions with socio-economic and environmental systems present critical aspects, weaknesses and pitfalls. Critical aspects emerge due to selected trends in major 'drivers' of agri-food systems, as well as in weaknesses of the institutional set up and inadequate governance processes. It is recognized that, increasingly, concurring factors contribute to generating multiple risks and uncertainties in agri-food systems.

29. A number of '*priority triggers'* considered effective starting points or boosters of transformative processes to move away from 'business as usual' are presented below. These triggers are expected to mutually interact and have systemic impacts on agri-food systems.

Institutions and governance

30. Transformative processes require, as a precondition (upstream enabler), much stronger, more transparent and accountable institutions and governance, including adaptive and effective regulatory governance. These are required both within and outside agri-food systems because governance and institutions influence all the drivers and the channels that link the various elements of agri-food systems with the other systems. These comprise, for instance, processes and rules for climate change and other disaster and crisis risks and emergencies, governance of agri-food systems at all levels (food production and processing, food trade, food safety, food quality and food consumption, etc.), mechanisms for contributing to sustained peace and conflict prevention, and institutions for poverty and hunger eradication. Given the multiple issues at stake and their inter-relationships, clear, specific, well-designed institutional mechanisms with effective compliance rules need to be in place.

31. Overall, the institutional vacuum is particularly felt in the discrepancy between the global level of issues at stake, such as international capital flows, global climate issues, international conflicts or local conflicts fed by external dynamics, big data generation, storage, use and control, on one side, and the increasing weakness of most of the sovereign countries to govern such issues, on the other side. With few exceptions, the size of most countries is clearly too small to influence, at least to some extent, these global dynamics.

Consumer awareness

32. The need to increase and exploit consumer awareness regarding the type, quantity and safety of food to consume, as well as regarding food waste and other broader impacts of consumption choices, is underlined as a trigger to directly influence selected outcomes of agri-food systems and, via feedback effects, also selected drivers. Increasingly, the younger generation is eager to change, for instance in relation to climate action. Youth feel their future is at stake and are more likely to pursue ethical ideals, progressively lead development and policy processes, and thus could become a trigger of change, including for environmental problems and social problems brought by certain food production processes, but also structural problems as described in the preceding section. Consumer awareness regarding food, but also non-food consumption is also important in the light of existing sectoral and cross-country interdependencies.

33. Social media are also increasingly influencing the shaping of consumers' views and behaviours, on one hand through facilitating communication between governments and citizens, including in emergency situations such as the COVID-19 pandemic, and on the other, through targeted business advertising to increasingly influence consumers' preferences.

Income and wealth distribution

34. The urgency of improving income and wealth distribution among and across societies is seen as a channel through which inequalities, including urban and rural poverty, can be reduced. Improving

food security and nutrition is difficult if income and wealth distribution are not improved.[12] For instance, billions of people cannot afford nutritious diets,[13] while global wealth accumulates in small fractions of the population. Reducing cross- and within-country inequalities may also positively impact on geo-political instability.

35. Providing more income opportunities implies that the channels through which income is distributed throughout the economic system are enlarged and maintained active also during economic downturns. Equitable employment opportunities across economic sectors should be ensured for wage workers, while equitable profit sharing should be required for capital owners.

Innovative technologies and approaches

36. Large reliance is put on 'technological' innovative solutions to: produce more with less (water, land degradation, food loss and inputs, loss of biodiversity etc.), reduce food and agricultural prices including the cost of nutritious food, and reduce the risks of epidemics and pandemics. Innovative technologies are also expected to increase transparency in transactions, create new earning opportunities and boost overall technical progress while promoting social inclusion. Systemic approaches, including conservation agriculture, integrated agriculture, agroforestry, and agroecology are seen as entry doors to support the development of emerging sectors, such as the 'blue economy'.[14] Further research, in addition to better governance, is also needed to address structural issues such as the excessive concentration in big-data ownership, use and control, and to improve income distribution through better profit sharing.

37. There is growing recognition of 'digitalization' and the so-called 'new technologies' spanning all available approaches, systems, tools and innovations, including a suite of biotechnologies such as genome editing (or gene editing), in particular CRISPR-Cas,[15] or synthetic biology, where the genetic material of an organism can be synthesized. Advances in food and medicine research in the area of genomics, food processing, and drug design/formulation, may increasingly lead to 'personalized foods' to address specific health conditions. This is an area in rapid evolution where regulatory guidance and oversight would be needed.

38. It is important to note that technology can be an enabler, but could also lead to a technological divide impacting smallholder farmers, who due to the high initial investment costs and need for training and education, may not have access to the benefits. However, a strategic deployment of technology and innovation has the potential to resolve and minimize trade-offs among the SDGs.

Current and emerging challenges and opportunities

39. Managing and transforming agri-food systems in the context of the drivers and trends introduced above presents a series of challenges, divided into (1) overarching challenges which directly relate to FAO's global goals[16] and (2) challenges pertaining to triggers of transformative changes for agri-food systems.

40. Mapping drivers and related trends into challenges ensures the reflection of all key drivers affecting agri-food systems, notwithstanding the fact that, given the systemic nature of food and agriculture and their environments all drivers are interlinked.

41. Challenges in the context of transforming agri-food systems are not only negative, but also represent opportunities for the global transformation of economies and societies. For example, the

[12] SDGs 1 and 2 and related targets
[13] SOFI 2020
[14] In the context of the Corporate Strategic Foresight Exercise, the World Bank definition for *blue economy* applies: The sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem (*What is the Blue Economy?*, World Bank, 6 June 2017).
[15] CRISPR-Cas represents a relatively new set of techniques for making precise changes to the genetic makeup of a living organism without transferring transgenes across species boundaries
[16] Selected challenges were already identified in the FOFA 2017 *Trends and challenges*. For instance, the increasing population raises concerns for the capacity of agri-food systems to nourish a progressively larger number of people.

COVID-19 pandemic despite threatening the livelihoods of billions of people and causing massive casualties, highlights opportunities to build back better and transform agri-food systems by implementing structural changes that were not feasible before. At the same time, commodities like fish are increasingly recognized as a significant source of protein, micronutrients and 'good' fats and therefore opening a new opportunity to provide more affordable heathy diets.

Overarching challenges which directly relate to FAO's global goals include:

A. Addressing climate change and intensification of natural hazards by drastically reducing GHG emissions of global agri-food systems and economy-wide, in partnership with other agencies.

B. Making agri-food systems more resilient to shocks and climate hazards.

C. Ensuring the sustainable use of natural resources and the restoration of the natural resource base.

D. Ensuring that all development processes contribute to definitively eradicating extreme and persistent poverty.

E. Ensuring that all strategies and policies contribute to end hunger, eliminate all forms of malnutrition and maintain these results in the long run.

Challenges pertaining to triggers of change include:

F. Addressing the weaknesses of institutions, lack of cross-sectoral coordination, governance processes and legal frameworks at all levels, tackling their enforceability issues, and their implications for agri-food systems.[17]

G. Supporting countries and the global development community to increase consumer awareness on transformative consumption choices.

H. Addressing income and wealth distribution within and between countries, including implications for agri-food systems.

I. Managing innovative technologies and systemic approaches and their potential risks to sustainably improving food and agricultural productivity.

C. FAO's basic attributes and core functions

FAO's basic attributes

42. The nature of global challenges facing food and agriculture, and the approach envisaged in Agenda 2030 clearly suggest that these issues cannot be tackled by FAO alone. FAO's future role and work thus needs to be considered in light of its basic organizational attributes. The most relevant basic attributes and strength of an organization are those that are intrinsic and unique to it, and which define its basic organizational characteristics. There are several basic attributes which are intrinsic and in combination unique to FAO:[18]

a) It is the United Nations specialized agency in food and agriculture, with a comprehensive mandate from its Members to work globally on all aspects of food and agriculture (including fisheries, forestry and natural resources' management), food security and nutrition across the humanitarian-development continuum.

b) Its intergovernmental status and neutrality and the authority to provide a neutral platform where nations can call on each other for dialogue and knowledge exchange.

c) It has the authority to request any Member to submit information relating to the purpose of the Organization.

[17] Laws and regulations are vital to build strong and transparent institutions and promote accountable governance. FAO's legal and governance work is pivotal to improve institutions and governance mechanisms while anchoring policies and strategies for the achievement of Agenda 2030.
[18] C 2017/7 Rev. 1, paragraph 108

d) Its Regular Budget is derived from assessed contributions that provide a minimum guaranteed amount of resources that can be committed for priority activities agreed upon by Members in the Governing Bodies, complemented by voluntary contributions to leverage FAO's knowledge and enhance outreach.

e) Its staff with a broad range of expertise across its areas of mandate working in an interdisciplinary fashion.

f) Its country-level presence, supported by regional and global teams of experts, to respond to demands articulated by countries and regions.

Core functions

43. Core functions are the critical means of action employed by FAO to achieve results. Consequently, they represent the types of interventions to which the Organization will give priority in its plan of action. They are areas in which FAO is expected to play a lead, but not necessarily exclusive role. In such cases, FAO needs to work with partners and should intensify its efforts to develop and operationalize strategic partnerships.

1. *Assemble, analyse, monitor and improve access to data and information*, in areas related to FAO's mandate, working in concert with countries and other development partners to identify consumer drivers, policy and investment gaps, promote common platforms and use emerging technological tools.
2. *Facilitate and support countries and other partners in the development and implementation of normative and standard setting instruments* for more efficient, inclusive, resilient and sustainable agri-food systems, such as international agreements, codes of conduct, technical standards and related technologies, digital tools, good practices and others.
3. *Facilitate, promote and support agri-food systems policy dialogue at global, regional and country levels,* including explicit recognition and consideration of trade-offs.
4. *Support institutions at all levels, including through capacity development, to prepare, implement, monitor and evaluate evidence-based policies and programmes, and leverage investments*.
5. *Facilitate partnerships and coalitions* for more efficient, inclusive, resilient and sustainable agri-food systems that address inequalities and leave no one behind, including with governments, development partners, civil society organizations and the private sector.
6. *Advise and support activities that assemble, disseminate and improve the uptake of knowledge, technologies and good practices* in the areas of FAO's mandate.
7. *Advocate and communicate at national, regional and global levels,* including to consumers, leveraging the Organization's knowledge, data, position as UN specialized agency, and trusted role as neutral broker.

D. FAO's Theory of Change – strategic results framework

44. The Strategic Framework sets out FAO's agenda for the future. It defines FAO's *strategic vision* in terms of its contribution to transformative and structural changes at global, regional and country levels. This requires not only reviewing the formulation and execution of a programmatic approach fit for tackling the SDGs, but also how FAO works across organizational layers and with partners to promote sustainable results and maximum impact.

45. This Section outlines how FAO has reshaped its results framework to ensure that its contribution to development processes at country, regional and global level best leverage its comparative advantage as a UN specialized agency.

46. *Section E* describes further FAO's reinvigorated business model, including the programmatic approach and how FAO works across organizational layers and with partners to promote sustainable results and maximum impact.

FAO's Vision and Global Goals

47. The Strategic Framework is guided by FAO's vision and the three Global Goals of Members.

FAO's vision*: A world free from hunger and malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner.*

48. The three **Global Goals** of Members:

1. eradication of hunger, food insecurity and malnutrition, progressively ensuring a world in which people at all times have sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life;
2. elimination of poverty and the driving forward of economic and social progress for all, with increased food production, enhanced rural development and sustainable livelihoods; and,
3. sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations.

FAO's strategic narrative and the Sustainable Development Goals

49. The strategic narrative guiding the Strategic Framework is the transformation to MORE efficient, inclusive, resilient and sustainable agri-food systems for *better production*, *better nutrition*, a *better environment*, and a *better life*, leaving no one behind.

Figure 1: The four betters

50. The *four betters* represent an organising principle for how FAO intends to contribute directly to the three guiding SDGs, SDG 1 (No poverty), SDG 2 (Zero hunger), and SDG 10 (Reduced

inequalities)[19] as well as to supporting achievement of the broader SDG agenda, which is crucial for attaining FAO's overall vision. The *betters* reflect the interconnected economic, social and environmental dimensions of agri-food systems, and, as such, encourage a strategic and systems-oriented approach within all FAO interventions.

51. The SDGs are central in FAO's overall theory of change. Key SDGs and their indicators, including all indicators for which FAO is custodian or contributing agency,[20] are used to promote focus, track progress and express aspirations at the level of medium/long-term outcome/impact.

52. FAO is uniquely placed to directly contribute to the achievement of a number of SDGs organized around FAO's four aspirations (*better production*, *better nutrition*, a *better environment*, and a *better life)*. For example, SDG 14 *Life below water*, spans all *four betters*, given the importance of, *inter alia*, supporting the sustainable intensification of aquaculture production, investing in transformative and innovative fisheries management, transforming and upgrading fish value chains, and making fish an indispensable component of food security and nutrition strategies.

Figure 2: The Sustainable Development Goals (SDGs)

53. FAO will implement its Strategic Framework and deliver results against its results framework through programmes around the *four betters*, using the systems approach to minimize trade-offs in achieving the SDGs. Through the agri-food systems approach, FAO will focus on profiling agriculture beyond production and macro-economic purposes to ensure food security and resilient livelihoods, promote innovations, and better catalyse investment and partnerships.

54. By putting the 2030 Agenda and the SDGs at the centre of the Strategic Framework, FAO moves away from bespoke targets and indicators and uses a common language to articulate its mandated targets and respective results across all Organizational levels.

[19] Including reducing inequalities between rich and poor countries, urban and rural areas, and men and women
[20] Relevant indicators under SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 5 (Gender), SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Production and Consumption), SDG 14 (Life under Water), and SDG 15 (Life on Land).

Programme Priority Areas

55. Programme Priority Areas guide the programmes that FAO will implement under the *four betters* in order to fill critical gaps and put in place the conditions needed to drive the changes that will ultimately contribute to the achievement of the selected SDG targets. The Programme Priority Areas respond directly to the issues and challenges emanating from the Corporate Strategic Foresight Exercise, the Regional Conferences, the Technical Committees, and other formal and informal consultation processes. They represent FAO's comparative advantage as a UN specialized agency in contributing to the 2030 Agenda, bringing together FAO's breadth and depth of technical expertise and knowledge.

56. Programme Priority Areas are formulated as inter-disciplinary, issue-based technical themes, representing FAO's strategic contribution to specific SDG targets and indicators. This is in line with the Evaluation of FAO's strategic results framework, which recommended "updating the theory of change underpinning the results framework to identify more tangible, issue-based programmatic objectives".[21] Programme Priority Areas embody the interconnectedness and indivisibility of the SDGs.

57. Introducing issue-based Programme Priority Areas is also aligned with the objectives of the headquarters organizational structure approved by Council in July 2020[22] for a modular and flexible structure aiming to ensure efficiency, effectiveness and cross-sectoral collaboration.

58. The 20 Programme Priority Areas proposed in the Strategic Framework are outlined in *Table 2*.

Table 2: 20 Programme Priority Areas (PPAs)

PPA	Outcome Statement	SDG Targets
BETTER PRODUCTION	*Ensure sustainable consumption and production patterns, through efficient and inclusive food and agriculture supply chains at local, regional and global level, ensuring resilient and sustainable agri-food systems in a changing climate and environment*	
BP1: Innovation for sustainable agriculture production	Sustainable crop, livestock and forestry production systems that are productive, resilient, innovative and competitive, and create integrated entrepreneurial and business opportunities, inclusive of small scale and vulnerable producers, supported through enabling technologies and policies	2.3, 2.4, 6.4, 15.2
BP2: Blue transformation	More efficient, inclusive, resilient and sustainable blue food systems promoted through improved policies and programmes for integrated science-based management, technological innovation and private-sector engagement	2.1, 2.2, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c
BP3: One Health	Strengthened and better performing national and international integrated One Health systems for human, animal, plant and environmental health achieved through improved pest and disease prevention, early warning and management of national and global health risks, including AMR	1.5, 3.d, 15.8
BP4: Small-scale producers' equitable access to resources	Enhanced equitable access of small-scale producers and family farmers to economic and natural resources, markets, services, information, education and technologies ensured through improved policies, strategies and programmes	1.4, 2.3, 2.4, 9.3
BP5: Digital agriculture	Accessible digital ICT technologies to enhance market opportunities, productivity and resilience integrated into agri-food systems policies and programmes, with particular focus on ensuring affordable and equitable access of poor and vulnerable rural communities	1.4, 5.b, 9.c, 17.8

[21] PC 127/2, paragraph 10
[22] CL 164/REP, paragraph 14.a)

PPA	Outcome Statement	SDG Targets
BETTER NUTRITION	*End hunger, achieve food security and improved nutrition in all its forms, including promoting nutritious food and increasing access to healthy diets*	
BN1: Healthy diets for all	The right to adequate food established and transition towards healthy diets for national populations prioritized in integrated institutional, policy and legal environments that ensure and incentivize engagement of consumers and the private sector	1.3, 2.1, 2.2 3.1, 3.2, 3.4 12.8, 14.b
BN2: Nutrition for the most vulnerable	Identifying and ending food insecurity and malnutrition for the most vulnerable individuals in all contexts made the specific focus of targeted policies, strategies and programmes developed and implemented by countries	1.3, 2.1, 2.2 3.1, 3.2
BN3: Safe food for everyone	Integrated, multi-sectoral food safety policies and legislation across national agri-food systems adopted and implemented by governments, and capacities and awareness of value chain operators and consumers enhanced.	2.1, 2.2, 3.2
BN4: Reducing food loss and waste	Clear, specific and contextualized roadmaps to prompt and enable all actors in the food supply chain, the food environment and at consumer level to reduce food loss and waste put in place and implemented by governments and intergovernmental organizations	2.1, 2.2, 12.3
BN5: Transparent markets and trade	Improved market transparency and equitable participation in markets, global value chains and international trade achieved through policy coordination and human and institutional capacities for evidence-based decision-making	2.b, 2.c, 10.a, 17.11
BETTER ENVIRONMENT	*Protect, restore and promote sustainable use of terrestrial and marine ecosystems and combat climate change (reduce, reuse, recycle, residual management) through more efficient, inclusive, resilient and sustainable agri-food systems*	
BE1: Climate change mitigating and adapted agri-food systems	Transformation and resilience of agri-food systems to achieve sustainability and Paris Agreement goals enabled through the establishment and implementation of climate-smart agricultural practices, policies and programmes	2.4, 13.1, 13.2, 13.b, 14.3
BE2: Bioeconomy for sustainable food and agriculture	A bioeconomy that balances economic value and social welfare with environmental sustainability promoted through formulation and implementation of integrated evidence-based policies and practices in micro and macro environments, using technological, organizational and social innovations	12.2, 12.4, 12.5
BE3: Biodiversity and ecosystem services for food and agriculture	Biodiversity for food and agriculture maintained and sustainable use, conservation and restoration of marine, terrestrial and freshwater ecosystems, and their services promoted through adoption of targeted policies and practices	2.5, 14.4, 15.1, 15.3, 15.4, 15.6
BETTER LIFE	*Promote inclusive economic growth by reducing inequalities (urban/rural areas, rich/poor countries, men/women)*	
BL1: Gender equality and rural women's empowerment	Women's equal rights, access to, and control over resources, services, technologies, institutions, economic opportunities and decision-making ensured, and discriminatory laws and practices eliminated, through gender-responsive policies, strategies, programmes and legal frameworks	2.3, 5.4, 5.a, 5.c
BL2: Inclusive rural transformation	Inclusive rural transformation and revitalization of rural areas ensuring equal participation of, and benefits to poor, vulnerable and marginalized groups accelerated through implementation of targeted policies, strategies and programmes	1.1, 8.3, 8.5, 10.1, 10.2, 10.7, 14.b
BL3: Achieving sustainable urban food systems	More efficient, inclusive, resilient and sustainable urban and peri-urban agri-food systems transformation that addresses urban poverty, food insecurity and malnutrition, enables healthy diets and catalyses inclusive and sustainable rural transformation, promoted through the adoption of supportive policies and programmes, and the initiation and scaling-up of actions and investments by national and local stakeholders	1.1, 2.1, 11.a, 12.1

PPA	Outcome Statement	SDG Targets
BL4: Agriculture and food emergencies	Countries facing, or at risk of acute food insecurity provided with urgent livelihood and nutrition assistance and, adopting a humanitarian-development nexus and its contribution to peace approach, their populations equipped with appropriate capacities to better withstand and manage future shocks and risks	1.5, 2.1, 2.2, 2.3, 16.1
BL5: Resilient agri-food systems	Resilience of agri-food systems and livelihoods to socio-economic and environmental shocks and stresses strengthened through improved multi-risk understanding and effective governance mechanisms for implementation of vulnerability reduction measures	1.3, 1.5, 2.4
BL6: Hand-in-Hand (HIH) Initiative	Agricultural transformation and sustainable rural development accelerated through targeting the poorest and the hungry, differentiating territories and strategies, and bringing together all relevant dimensions of agri-food systems through analysis and partnerships	1.1, 1.2, 2.1 2.2, 2.a, 10.1, 10.2
BL7: Scaling up investment	Transformation towards sustainable agri-food systems with large-scale impacts on reducing inequalities and eradicating poverty and hunger accelerated through increased public and private investment, and improved capacities to leverage future investments	1.b, 2.a, 10.1, 10.2, 10.b, 17.5

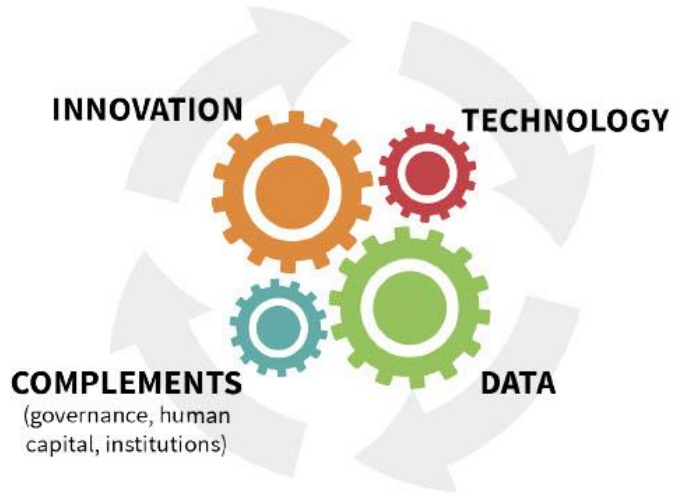
59. A more detailed presentation of the PPAs and their results frameworks is included in the Medium Term Plan 2022-25 and Programme of Work and Budget 2022-23,[23] including the main gaps being addressed, how these relate to SDG targets and indicators, how FAO will leverage the accelerators to fast-track progress, principal thematic components, including normative aspects and those relating to FAO's core functions, and key risks and trade-offs.

FAO's accelerators

60. In order to accelerate progress and maximize our efforts in meeting the SDGs and to realize our aspirations - the *four betters* - FAO will apply four cross-cutting/cross-sectional "accelerators": *technology*, *innovation*, *data* and *complements* (*governance*, *human capital*, *and institutions*) in all our programmatic interventions. Sustainably feeding close to 10 billion people by 2050 is an unprecedented challenge. And it speaks to the paramount importance of accelerating the impact of our programmatic interventions while minimizing trade-offs. The four accelerators, shown in *Figure 3*, can help achieve both objectives. It is critical that technology, innovations and data are inclusive and gender-sensitive, and are used to spur development.

[23] C 2021/3

Figure 3. Four cross-cutting/cross sectional accelerators



61. Emerging *technologies* are already changing the food and agriculture sector, yet most governments or agri-food systems actors have yet to harness their powerful potential. Helping farmers take full advantage of new technologies such as digital agriculture, biotechnologies, precision agriculture, innovations in agroecology, 5G, and Artificial Intelligence (AI) to increase food production whilst respecting the environment, is of paramount importance. The accelerators aim to the need to reduce physical inputs and improve the way we optimise their use, i.e. allocate them more efficiently to get more out of every unit of input.

62. As an example, the food and agriculture sectors can harness digital tools ranging from e-commerce and blockchain transaction ledgers to the use of Artificial Intelligence for improved pest control and crop genetics, as well as tools allowing optimized management of natural resources and early warning of food security threats.

63. *Innovation* in general and in particular in agriculture, is a central driving force for achieving a world free from hunger and malnutrition. Innovations, including social, policy, institutional, financial and technological innovations, which are science and evidence-based, are important drivers affecting food and agricultural production and distribution processes.

64. Applying innovative approaches is also critical in the context of building back better, where innovation needs to be considered in its broadest sense including innovation on technology, management, business models, and enabling policies.

65. Globally, food and agriculture can highly benefit from the fourth industrial revolution (or specifically in agriculture referred to as agriculture 4.0) which is driven largely by large sets of data (big data) with innovative digital technologies in convergence with science and technology. This creates an unprecedented opportunity to move towards and agriculture sector that produces more with less, needing less water, land and energy, saving biodiversity and reducing carbon emissions. Agricultural innovation is broader than technology, and is the process whereby individuals or organizations bring new or existing products, processes or ways of organizing into use for the first time in a specific context, to increase effectiveness, competitiveness and resilience with problem-

solving goal. Innovation also encompasses modernization of policies and business models for agri-food systems.

66. On *Data*, FAO's *Hand-in-Hand geospatial platform* and the big data lab exemplifies how data on food, agriculture, socio-economics, and natural resources can come together to help strengthen evidence-based decision-making in the food and agriculture sectors. Data can, *inter alia*, enable monitoring of agricultural water productivity, including agricultural systems at risk due to human pressure on land and water, ascertain aquatic species distribution, and analyse precipitation trends, allowing the design of targeted agricultural interventions and investment plans through a territorial approach which fosters equality, inclusion and sustainable food and nutrition security.

67. *Complements* refers to the needed governance, human capital and institutions to assure an inclusive agri-food system transformation. Transformative processes require, as a precondition (upstream enabler), much stronger, more transparent and accountable institutions and governance, including adaptive and effective regulatory governance.

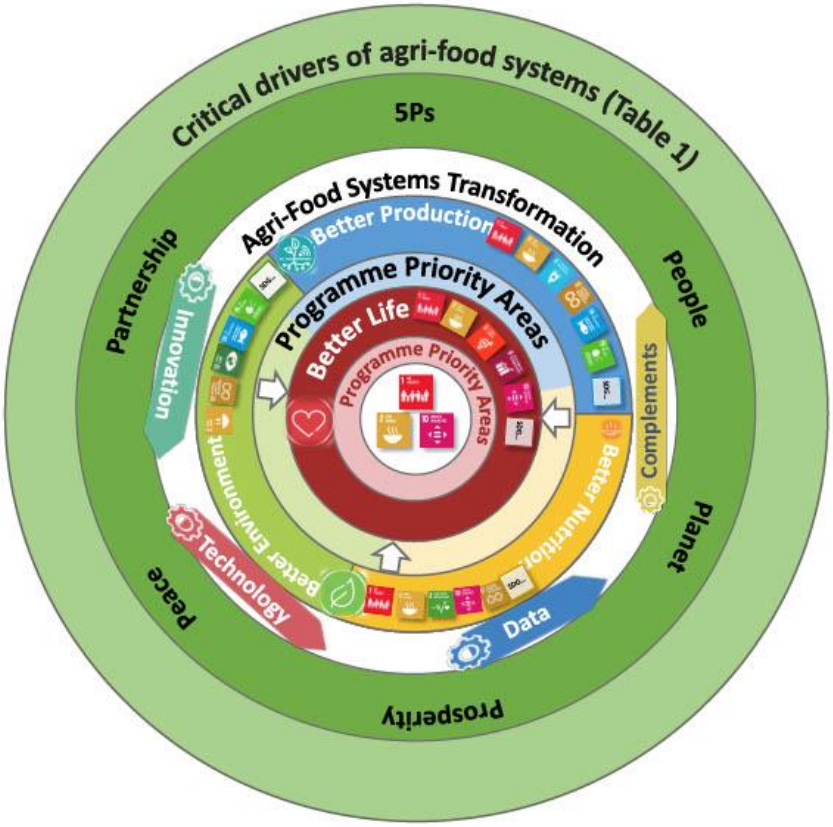
68. As technologies revolutionize, the risks of unequal access and exclusion loom. Investments in human capital by building capacities, as well as policy and regulations minimizing such risks are required. It is central that the labour supply responds to the new labour demand that will result from the new technologies and innovation to make the process more inclusive. Technologies have to be affordable, so everyone can access them and use them, and other structural barriers to their application, including education and training, must be identified and addressed.

Graphic depiction of Strategic Framework elements

69. *Figure 4* provides a graphic presentation of the main elements that impact and are part of FAO's strategic results framework, moving from the outer layer as follows:

- the *drivers* impacting agri-food systems (described in *Table 1* and *Annex 1*)
- the five basic principles that feed into all SDGs - the '*five Ps*', People, Planet, Prosperity, Peace, Partnership
- a distinctive systems approach to support *agri-food systems transformation* and the *four accelerators* to speed up progress towards the achievement of the 2030 Agenda
- FAO's four aspirations (the *four betters*) anchored in the SDGs
- programmes to fill critical gaps and linking different aspects of FAO's work, including agriculture, fisheries, forestry, livestock, land and water, poverty reduction, and improved access to investment and finance, and
- the guiding lens of SDGs 1 *No poverty*, 2 *Zero hunger*, and 10 *Reduced inequalities*

Figure 4: Main elements of FAO's strategic results framework



Cross-cutting themes

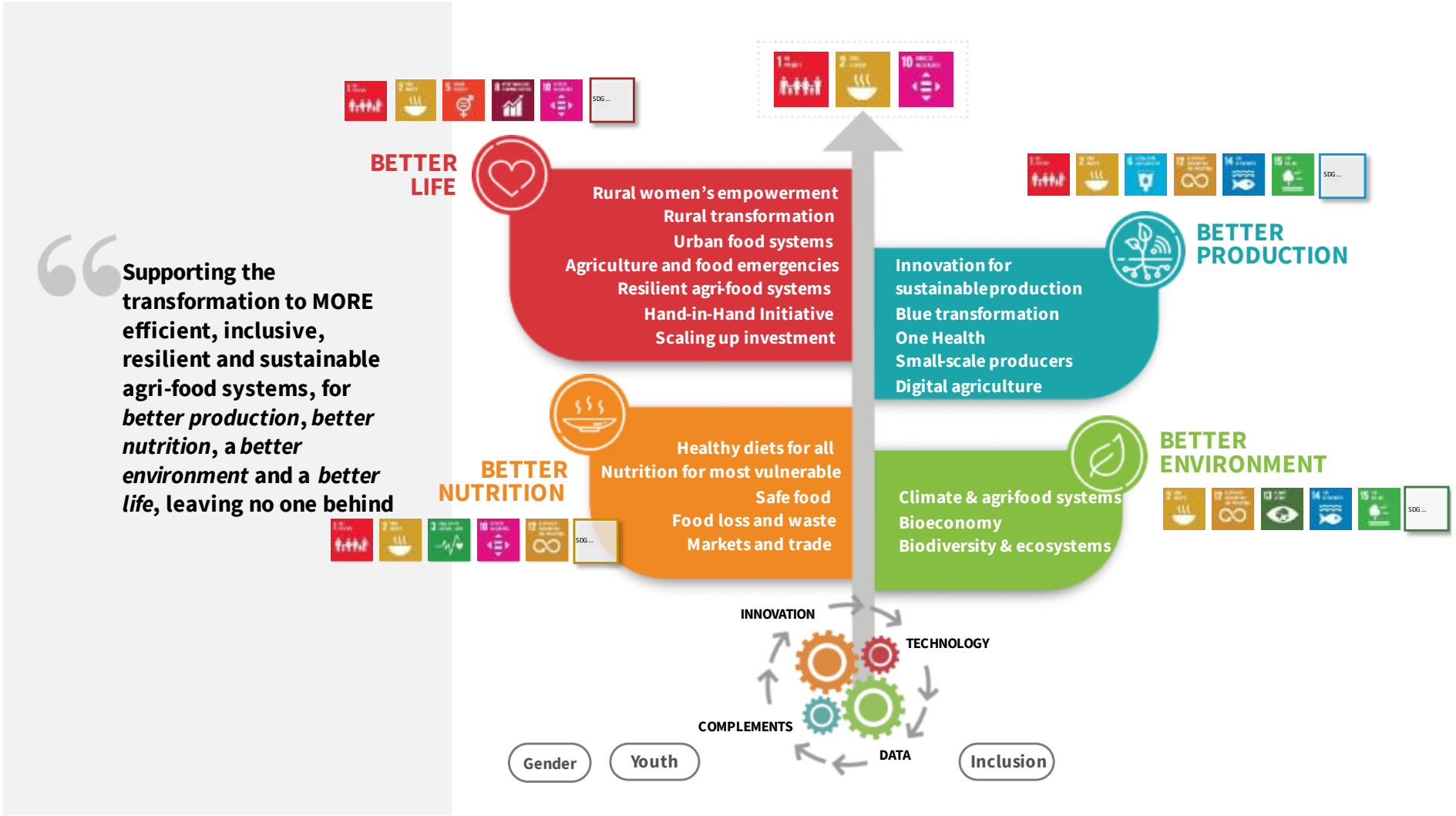
70. FAO's cross-cutting themes are important issues that need to be taken into account across all of FAO's programmatic work, and which require particular visibility.

71. For the Strategic Framework, it is proposed to focus the cross-cutting themes on few, key issues of critical importance to the 2030 Agenda and in support of the strategic narrative. With this logic, FAO has identified the themes of *gender*, *youth*, and *inclusion* (for reduced inequalities and leave no one behind, LNOB). In doing so, the intent would be to promote a more systematic mainstreaming and operationalization of these issues across all of FAO's work.

72. In this regard, it is noted that a number of key technical themes of a cross-cutting nature (climate change, nutrition and biodiversity) are explicitly visible in the PPAs and have dedicated cross-organizational strategies requested by the Governing Bodies with specific accountability to Members.

73. *Figure 5* provides an overview of FAO's results framework including the Programme Priority Areas, the cross-cutting themes and the accelerators.

Figure 5: FAO strategic results framework



74. *Annex 2* provides a graphic depiction of FAO's results framework, putting the SDGs at the centre of the Organization's work, while *Annex 3* provides a view of how the architecture plays out at country level, with the SDGs providing the common language for linking country priorities to the overall results framework.

E. FAO's Practice of Change – a reinvigorated business model fit for purpose

75. A clear results chain and architecture is essential to clarify ultimate goals, intermediate milestones and immediate actions, and to provide a clear statement of priorities and value added. The challenge of the 2030 Agenda, however, also requires a shift in working paradigm to ensure the transformational change that is called for. FAO and all UN entities need to re-examine our ways of working to ensure that we are leveraging most effectively our limited resources and taking best advantage of our global knowledge, neutral status, and convening authority. In short, we need to focus both on "doing things right" and on "doing the right things".

76. A more explicit articulation of FAO's business model together with the strategic narrative, the accelerators and SDG-based results framework are key foundational elements in the Strategic Framework. FAO's aim is to create an inclusive and agile Organization that is transparent, open, innovative, responsible, effective and impactful, and that serves its Members to achieve the *four betters*.

77. FAO will leverage its comparative advantage as a UN specialized agency to catalyse and contribute to larger coalitions of partners around issues of food, agriculture and agri-food systems to support processes at global, regional, subregional and country level. FAO will shift from a more traditional to a more forward-looking business model promoting science, technology and innovation.

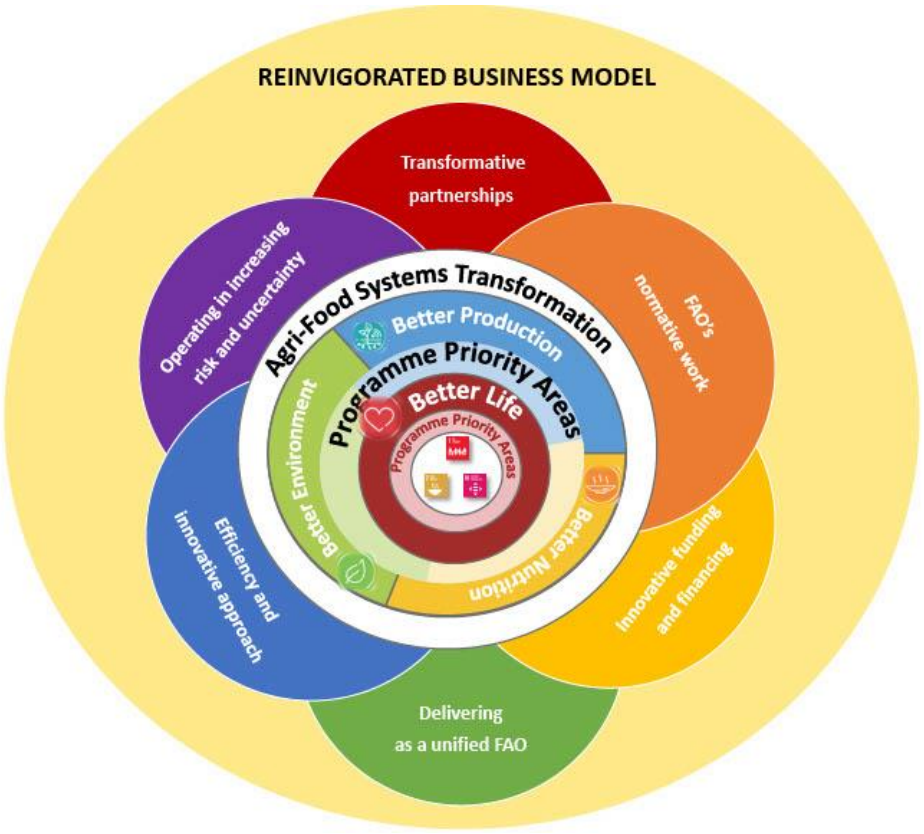
78. To do so, the Organization will adjust its balance of work to better promote enabling other actors, providing a solid information and analytical base in order to attract significant, sustainable investments and take advantage of innovative financing mechanisms. This will mean repositioning FAO's analytical, technical, policy and investment assets to deliver better targeted and more impactful results through partnership-enabled services, bringing together normative and project work in a better focused, programmatic approach.

79. The programmatic approach will ensure the Organization fully leverages its comparative strengths to promote working at scale for greater sustainability and longer-term impact. Such an approach involves aligning the various levels and layers of the Organization around a common vision of objectives to be achieved and means of action to achieve those objectives in response to Members' needs.

80. The improved, programmatic approach will be supported by boosting transformative and expanded partnerships, ensuring optimal leverage of FAO's normative strengths, seeking innovative financing mechanisms and sources to complement its traditional funding modalities, working under a unified vision (One FAO), embracing efficient and innovative approaches, and being prepared for operating in increasing risk and uncertainty, as shown in *Figure 6* and outlined in more detail below. A more efficient, modern, service-oriented administration will support delivery under a reinvigorated business model

81. To ensure that the Organization continues to evolve as an agile enabler of change, FAO is putting in place a Change Management Strategy (CMS) in conjunction with the Strategic Framework, leading to a reinvigorated business model better fit-for-purpose.

Figure 6: FAO's reinvigorated business model fit for purpose



Transformative partnerships

82. Partnerships are central to reaching the goals of the 2030 Agenda; partnerships are highlighted as one of the 'five Ps' for sustainable development and are encapsulated in SDG 17 which calls upon all actors to work in alliance for implementing the SDGs. While partnership is not an end in itself, it is a key vehicle to achieve the complex challenges ahead.

83. As noted in the Director-General's Manifesto, newer forms of partnerships are needed to advance in the 2030 Agenda, including reinvigorated North-South Partnerships and South-South and Triangular Cooperation. These invigorated partnerships can include businesses and academic institutions, regional organizations, and civil society organizations working in collaboration with FAO and Members.

84. FAO is seeking to strengthen partnerships across the spectrum. First and foremost, FAO aims to strengthen its partnerships with Members in order to work as one to support delivery of the SDGs at country level. FAO also seeks to strengthen its partnerships with other UN agencies and financial institutions, corroborated *inter alia* by the introduction of "Centres" in FAO's organizational structure. FAO will also continue to seek to expand and deepen its partnerships with producer organizations, academic and research institutions, and civil society organizations.

85. As the private sector is a key area of partnerships towards achieving the SDGs, FAO has developed a new strategy for private sector engagement[24] which was endorsed by Council at its 165th session in November 2020. The overall goal of the new strategy is to enhance engagement with the private sector in FAO's work, including at the decentralized level, as "One FAO" to work towards more long-term sustainable solutions. FAO envisions its private sector engagements will bring strategic partnerships, scale up collective multi-stakeholder efforts, and bring country-owned and

[24] CL 165/4 Rev. 1 *FAO's Strategy for Private Sector Engagement 2021-2025*

country-led innovative solutions to help FAO Members in achieving the SDGs, and ultimately maximizing the positive impact for its beneficiaries the Organization supports.[25]

86. The ongoing UN development system repositioning has played a catalytic role in reinforcing and diversifying FAO's collaboration with Rome-based Agencies (RBAs) and other UN entities at regional and country levels. There is an increasing number of partnerships for resilience and the co-led FAO/WFP global food security cluster is supporting food security coordination in food crisis countries. FAO plans to expand and upgrade partnerships with UN entities and the RBAs in particular.

87. FAO's close relationship with the RBAs and other UN entities is also exemplified in the Programme Priority Areas, with, for example, the PPA on *Agriculture and Food Emergencies* providing the direct link to FAO's collaboration with WFP, the PPA on *Scaling up Investment* highlighting FAO's collaboration with IFAD, and the PPA on *One Health* encompassing the joint work with WHO and OIE.

88. Other key emerging partnerships, inter-alia, include:

- *CGIAR*: CGIAR has moved from being solely a research organization to "the world's largest global agricultural innovation network" and now operates in the same development space as FAO. It is opportune to partner with the unified "One CGIAR" in order to maximize collective impact, leveraging the comparative advantages and building on the institutional strengths of each organization.
- *Academic and other Research Institutions*: FAO has historically collaborated with universities and other research organizations either individually (National Agriculture Research Systems, NARS) or through their consortia (Global Confederation of Higher Education Associations for Agricultural and Life Sciences, Global Forum on Agricultural Research and Innovation, and others). FAO partnerships with national, regional, and international institutions in all continents will be critical to improving knowledge dissemination and developing innovative approaches with local ownership. Mainstreaming findings into practical policies and practices is becoming more critical, and also important for FAO as a knowledge Organization.
- *Parliamentarians*: FAO's work with Parliamentarian Alliances in several regions has led to important impacts on countries' legislative agendas. Successful examples should be replicated and expanded.

89. Areas of particular focus for partnerships looking ahead are expected to include the agri-food systems agenda, partnerships for healthy diets and eradicating all forms of malnutrition (including obesity), and partnerships towards the eradication of hunger and rural poverty and addressing food crises. Furthermore, newer areas of emphasis would include scaling up science, technology and innovation to achieve the SDGs, more and better public and private investments to bring technical expertise to scale, and leveraging data, non-traditional sources of data, and data science.

FAO's normative work

90. FAO's normative work is a major comparative strength of FAO as a UN specialized agency. FAO's normative work includes the development of norms and standards in conventions, declarations, regulatory frameworks, agreements, guidelines, codes of practice and other standard setting instruments, at global, regional and national level.[26] Furthermore, FAO produces global public goods in the form of knowledge products and data and statistics to support the development of norms and standards and their implementation at different levels.

91. FAO's normative and operational work are not only largely interdependent, but they are also mutually reinforcing: the quality of FAO's activities in the field is ensured by the constant nourishment derived from the Organization's normative resources. Likewise, FAO's normative work is constantly

[25] CL 165/4 Rev. 1 *FAO's Strategy for Private Sector Engagement 2021-2025*
[26] Definition used by UNEG 2013 *UNEG Handbook for Conducting Evaluations of Normative Work in the UN System.*

reinforced by lessons learned in the field. It is this combination that gives FAO its comparative advantages and explains the unique "value added" that it provides to Members.

92. To improve relevance, visibility and impact of its normative work, FAO will support Members and partners to build capacity to develop, adapt and use those norms, standards, knowledge products, data and statistics required to achieve SDGs related to food and agriculture, while striving to ensure that norms and standards are based on scientific evidence in a transparent, participatory and inclusive formulation process.

93. FAO's normative work will contribute to the articulation of FAO's comparative value-added at country level, including through better integration of normative work into the UN Common Country Analyses (CCA), the UN Sustainable Development Cooperation Frameworks (UNSDCFs) and the derived FAO Country Programming Frameworks (CPFs). To ensure optimal use of FAO's normative work across the Organization, additional focus will be given to: ensuring appropriate integration of normative work into FAO country programmes and projects; stepping up efforts to mobilize resources for the implementation of normative work; strengthening staff capacities at all levels to contribute to the development and use of normative work; and, improving knowledge sharing across the Organization. Finally, based on lessons learned and recommendations of the Evaluation of FAO's strategic results framework, normative work will be featured more prominently in FAO's results framework and priority programmes, including through performance metrics.

Innovative funding and financing

94. FAO's reinvigorated business model needs to include innovative financing mechanisms and sources to complement its traditional funding modalities, in order to reach the required development objectives under the 2030 SDG Agenda. Estimates for financial resources needed to implement the SDGs vary from USD 2.5 trillion to over USD 5 trillion a year. Official Development Assistance while remaining important, will not be enough. Progress will require harnessing additional financial flows and capital.

95. FAO resource mobilization has been based on a highly diffuse model, with a strong focus on operations at a decentralized level, which mirrors the action of most main resource partners who have now decentralized a large part of their funding decisions to their country or regional offices. FAO headquarters leads resource mobilization for major global programs, for humanitarian funding, for interaction with the private sector and for International Financial Institutions (IFIs) and vertical funds such as the GCF and GEF. It also provides the key resource mobilization support functions and an enabling environment for country level resource mobilization efforts.

96. In recent years, FAO has significantly diversified the typology of partners it works with. While the traditional OECD-DAC pool of resource partners has remained steady in absolute terms over the last five years, emerging donors from the global south and FAO engagement with IFIs and vertical funds has grown and now accounts for approximately half of the total.

Flexible funding and programmatic approaches

97. At present over 95 percent of the extrabudgetary contributions received by FAO are fully earmarked to the achievement of specific outcomes at the project level. This provides minimal space to redirect resources based on changing needs or underfunded priorities. In order to encourage a programmatic approach, and to reduce transaction costs thereby ensuring that a higher percentage of contributions goes directly to programme beneficiaries, FAO currently makes available to resource partners four specialized pooled and funding mechanisms:

- The FAO Flexible Multipartner Mechanism (FMM), FAO's main pooled funding mechanism for flexible, voluntary and multi-year contributions for the achievement of results under FAO's Strategic Framework and the realization of catalytic impacts
- The Special Fund for Emergency and Rehabilitation (SFERA), which provides rapid response funds for humanitarian emergencies
- The Special Fund for Development Finance Activities (SFDFA) established to help leverage development finance resources, which has been instrumental in supporting GCF programming

- The Africa Solidarity Trust Fund (ASTF) – an innovative and catalytic flexible funding instrument for Africa-to-Africa initiatives on food and agriculture

98. These funding mechanisms have achieved important successes in piloting new models and approaches, however there is an urgent need for an increasing volume and share of funding to be channelled through these types of mechanisms to achieve greater impact.

Emergency and Resilience funding

99. FAO has been working to build the resilience of people's livelihoods against a growing number of threats and crises. These efforts focused on the more than 100 million people in acute food insecurity and on communities exposed to food chain emergencies and natural disasters. By 2023, FAO aims to assist 60 million people annually with emergency and resilience interventions, and through investments in anticipatory action that will reduce humanitarian needs in the future. While an ambitious scale up,[27] this is a minimum considering the scale of humanitarian needs and the imperative to empower people and communities with more efficient, inclusive, resilient and sustainable agri-food systems to achieve sustainable development. To reach this target, FAO will need to significantly increase its current funding levels.

Climate and Environment Finance

100. The Global Environment Facility (GEF) serves as the financial mechanism for five multilateral environmental agreements and its programming reflects the priorities of these major Conventions to conserve and sustainably utilize biodiversity, mitigate and adapt to climate change, combat desertification, and remove hazardous agricultural chemicals. FAO's portfolio includes investments in all of these areas with many projects combining several into one multi-focal, integrated approach.

101. The FAO-GEF program serves as a key vehicle and catalyst to help FAO achieve its strategic priorities. In this context, the first FAO-GEF Strategy and Action Plan was completed in 2020 which has as a key overarching priority the alignment of FAO-GEF priorities to FAO's Strategic Framework.

102. The Green Climate Fund (GCF) is the primary financial mechanism of the Paris Agreement, and has the ambition to mobilize and leverage USD 100 billion per year to achieve the Agreement's goals. FAO's core objective in engaging with the Green Climate Fund (GCF) is to support Members to invest in sustainable, climate-resilient and low-emissions development pathways for the Agriculture, Forestry and Other Land Use (AFOLU) sector through sustainability driven innovations that reduce poverty (SDG 1), hunger (SDG 2) and inequality (SDG 10) and help Members face the challenges of Climate Change (SDG 13).

103. GCF projects are specifically designed to help Members deliver their nationally determined contributions (NDCs), ensuring that the FAO GCF partnership contributes meaningfully to Agenda 2030. Paradigm shifting innovations, sustainability, scalability and replicability are the hallmarks of a GCF project. They contribute to the *four betters* through the core nature of the interventions, targeting actions best suited to national contexts for a transformational change that improve agricultural production and ecosystem health, reduce emissions and increase carbon sequestration, strengthen livelihoods, and develop resilient value chains. Moving forward, FAO's engagement with the GCF is evolving into a programmatic approach that seeks to leverage the comparative advantages of public and private partners to streamline and scale AFOLU sector climate change interventions.

Investment Support

104. Given the estimated cost of achieving the SDGs of USD 2.5 trillion per year, and the availability of approximately USD 153 billion per year in ODA, it is clear that the bulk of the needed financial resources needs to come from private sector investments, including those made by farmers and other development actors themselves, and through public and private financial investments. FAO's role in this is to support, facilitate, de-risk and leverage investments at scale to help countries achieve the SDGs.

[27] In 2019, FAO programmes protected and improved the livelihoods of around 35 million people worldwide.

105. The FAO Investment Centre supports public and private investments in member countries through a unique business model involving government, International Financial Institutions (IFIs) and FAO. This is enabled by the Centre's longstanding collaboration agreement with IFIs and a professional culture of partnership and delivering results at country level. Cost-sharing and other collaborative arrangements result in a structure of budget of approx. 40%-60% from FAO-IFI partners respectively, resulting in an aggregate leverage effect of 1.5.

Delivering as a unified FAO

106. The Strategic Framework provides the unifying strategic vision to reposition the Organization's resources and operating modalities to better support its Members' collective and national efforts to achieve the SDGs. It envisages delivering as a unified FAO where actions at all levels of the Organization are oriented towards the achievement of the 2030 Agenda and SDGs at country level, in line with the spirit of the repositioning of the UN development system.

107. Promoting a unified FAO requires adopting a programmatic approach and delivering results more efficiently and effectively at the country level. This necessitates that FAO be involved at the country level in the development of both the UN Common Country Analysis (CCA) and the UN Sustainable Development Cooperation Framework (UNSDCF), to ensure that FAO provides strategic and timely contributions as part of the UN collective offer in each country.

108. The Cooperation Framework is intended to be the polestar of all UN country-level activities and serves as the results framework against which contributing UN entities are held collectively and individually accountable. The FAO Country Programming Framework (CPF) is therefore duly derived from the UNSDCF and seamlessly aligned with its processes and cycle.

109. In line with these coherent efforts and coordinated actions, the UNSDCF National/UN Joint Steering Committee (JSC) will also serve as the main oversight mechanism for the CPF at country level.

110. The CPF, duly derived from the UNSDCF, incorporates country-level results which are defined in the context of the UNSDCFs and are linked to the achievement of SDG targets and indicators. This allows all FAO offices to use a common language and facilitates measurement of FAO's interventions at all levels, by aggregating and rolling-up results from country, regional and global levels.

Efficiency and innovative approaches

111. Transforming FAO into an agile, results-oriented Organization that is fit-for-purpose will mean to reduce internal bureaucracy, enhance efficiency and improve FAO's service orientation. FAO will continue to simplify and rationalize its business processes, procedures and systems, building on past and current reforms in work-streams such as human resources, procurement, finance, information technology, information management and administrative services.

112. A future-proof FAO means embracing the opportunities that innovation and digitalization offer, whether in terms of knowledge management, interdisciplinary collaboration, programming, partnerships, business processes and systems or otherwise. The digital revolution offers huge potential to enhancing FAO's contributions to the SDGs by transforming the way it works and delivers against its mandate - both internally and in partnership with others. Digitalization of the workspace has already proven to have a profound impact on the office culture and relationships, flattening the structure and dramatically improving access to information and decision-making. FAO will continue pursuing innovative ways to foster a digital workplace and culture.

Operating in the context of increasing risk and uncertainty

113. FAO is committed to strong enterprise risk management (ERM) throughout the Organization and significant progress has been made in recent years integrating risk considerations in programme implementation and process design. In order to generate full benefits, however, risk management must be embedded at all stages of the organizational management processes, from strategic thinking to detailed workplans. The strategic planning process has therefore been accompanied by an analysis of

risks, both those influencing the process itself and those affecting the achievement of the objectives and programmes under development.

114. The FAO Strategic Framework spans ten years, a long timeframe in a rapidly changing world. The assumptions and dependencies, which are an integral part of the framework, are affected by the volatility of the external political, economic and social environment and by developments in priorities of partners and other stakeholders. Assumptions underpinning the framework are less likely to hold as time progresses which introduces risks and uncertainty. Strategic planning therefore requires the incorporation of careful risk management in order to improve the achievement of the relevant goals.

115. The key risks, i.e. the possibility of negative events happening but for which the future outcome can be predicted, identified affecting the process of developing the Strategic Framework were addressed as follows:

Risk	***Mitigating action***
The Strategic Framework does not lead to significant progress towards the Organization's overall goals, including the relevant SDGs, or does not fully reflect FAO's mandate.	The development of a robust theory of change has been at the core of the development of the proposed Strategic Framework.
The Strategic Framework does not adequately reflect the priorities of Members, key contributors and donors.	A carefully considered process has been followed to ensure involvement of governing bodies and member nations at different stages of the Strategic Framework Development.
The Strategic Framework does not focus on FAO's comparative advantages and FAO's place in the overall UN family and global development context.	The Programme Priority Areas (PPAs) have been formulated based on analyses of FAO's comparative advantage and the presence of other actors.
The Strategic Framework does not allow the development of a meaningful results framework, and does not enable quality monitoring and reporting.	The PPAs have been carefully developed with a view to a well-structured results framework and incorporating the differences across regions in consultation with Regional Conferences and regional and country offices.
The Outputs, Outcomes and impacts of the Strategic Framework are delayed because of potential risks.	The PPAs have been carefully developed to incorporate risk-coping strategies and to increase resilience of the agri-food systems.

116. The development of the PPAs has embedded an analysis of the key risks from the external context, as well as internal constraints.

117. The most significant and uncertainties, i.e. negative events or shocks for which the future outcome cannot be predicted, to the overall framework are:

Uncertainty	***Mitigating action***
Unexpected political uncertainty or conflict.	Strong PPAs on emergencies and on shock responsive and resilient agri-food systems have been developed.
Uncertainties on significant health shocks or pandemics.	PPA on *One Health* approach to prevent the emergence of new zoonotic reservoirs has been developed.
Uncertainties on climate shocks.	The PPAs include innovations on agricultural insurance combining index-based insurance, traditional insurance and access to finance.
New potential uncertainties affect the agriculture sector and food security and nutrition.	The PPAs include innovations to increase early warning systems and capacity to better predict those events when they occur.

118. Risks and uncertainties affecting each programme, as well as relevant mitigating actions, have been identified as part of the Programme Priority Area formulation process for the Medium Term Plan 2022-25.

An agile Organization

119. Building a flexible Organization which can adapt to changes in context and priorities is at the core of risk management in the context of uncertainties over time. The COVID-19 pandemic has highlighted the need for rapid adaptation and the challenges encountered have provided an opportunity for FAO to test its readiness, with excellent results.

120. FAO has taken action on several fronts to prepare for the multifaceted challenges of a volatile environment:

121. **Flexible and streamlined structure**. The implementation of a modular, flatter structure, through the Further Adjustments of the Programme of Work and Budget, allows for an agile response through strengthened cross-sectoral collaboration and greater flexibility in organization of resources and capacity around emerging needs and priorities. The business model foresees organizational functions delivering as one across sectors and geographic layers, allowing for expertise to be called upon in a timely manner, irrespective of geographical location.

122. **Robust Strategic Framework**. The Strategic Framework, with a clear vision and guiding principles, is designed to remain fundamentally unaltered across different potential scenarios. While methods of work, specific priorities and scale may change, the Organization's goals and values will remain a stable basis around which to build flexible operations. Should there be need for programmatic changes and resource shifts to respond to changing requirements, these can be carried out, in line with past biennia, with approval from the Governing Bodies as foreseen by established procedures.

123. **Active monitoring**. In order to allow rapid and appropriate reaction to changes in the external context, emphasis is placed on quality and speed of intelligence gathering and availability of information on evolving situations, risks and opportunities. The current modular structure has broken down silos and bureaucracy to achieve greater transparency and faster reactions, strengthening internal information flows to inform decision-making.

124. **Subsidiarity**. The framework has been developed with the principle that resources and authority be granted to the level that is responsible and accountable for achieving the results, whether national, regional or global. Country level support, be it technical, operational or administrative, will be a key responsibility of relevant offices throughout the Organization. Delegation of authority and operational procedures will be reviewed as necessary as part of the change management process.

125. **Culture change**. At the basis of an agile Organization is the flexibility and willingness of employees and decision-makers - FAO management and Members - to adapt. Accompanying the structural changes, a process of culture change is underway throughout the Organization, through strengthened collaboration across functions, innovative communication and inclusive planning processes. The change management plan will be instrumental in continuing the evolution.

Annex 1: Critical drivers of agri-food systems and related trends

1. The CSFE identified key current and emerging socio-economic and environmental drivers and related trends which impact agri-food systems and are in turn impacted by them through feedback effects. Some drivers directly affect the entire agri-food systems [systemic (overarching) drivers] given their high interconnectedness with both supply and demand sides, and their linkages with the global socio-economic context within which food and agricultural activities occur. Other drivers directly impact on food access (food demand) and livelihoods, production and distribution processes, or the environment natural resource base supporting food and agricultural activities.

Systemic (overarching) drivers

2. **Population dynamics and urbanization** are expected to keep increasing and changing food demand. Sub-Saharan Africa and South Asia are leading these changes. In addition to population growth, other factors relative to the different locations are also important (e.g. ageing in rural areas and high-income countries). Other social aspects, such as spatial location and/or gender balances, change also as a consequence of internal and international migration. The UN report[28] on megatrends affecting global societies and economies notes that between 2018 and 2050, globally, the portion of people living in urban areas will shift from 67 percent to 83 percent. These population dynamics present interconnected implications for agri-food systems because population growth and changing structure, urbanization and food demand are closely linked. Urbanization is seen as a challenge for food and agriculture, for instance through encroaching on fertile land. In addition, the growth of young cohorts, particularly in sub-Saharan Africa and in South Asia raises serious concerns regarding employment opportunities and the risks of degrading the quality of jobs (remunerations, exploitation, safety) within and outside agri-food systems.

3. **Economic growth, structural transformation and macro-economic stability** are not always delivering expected results towards inclusive economic transformation of societies. The transformation of agri-food systems is closely tied to structural transformation of socio-economic systems at large and their macro-economic stability. Economic growth and economy-wide structural transformation is a result and driver of food and agriculture transformation processes. The World Bank[29] suggested that stronger economic growth is an important driver of poverty reduction, however, poverty reduction is only realized when the gains of economic growth are shared across social strata. Sub-Saharan Africa, for instance, despite the very high economic growth in the last two decades, still awaits substantive economic transformation. The outbreak of COVID-19 is expected to add to the already existing macro-economic imbalances of several countries, where "*if the current policy stances continue, the global economy from here to 2030 will face slower growth and higher instability. As labour shares across the world continue on their decreasing path, household spending will weaken, further reducing the incentive to invest in productive activities."*[30]

4. **Cross-country interdependencies** tie together agri-food systems globally, but low-income food-deficit countries (LIFDCs), small island developing States (SIDS) and landlocked developing countries (LLDCs) heavily depend on imports for their food needs. Other countries depend on a small number of export commodities in order to import technology, energy, financial services or health care equipment. This commodity-dependence makes economic systems fragile and leads to negative impacts on the lives of people. *The State of Food Security and Nutrition in the World* (SOFI) 2019[31] reports that *"eighty percent of the countries (52 out of 65) with a rise in hunger during recent economic slowdowns and downturns are countries whose economies are highly dependent on primary commodities for export and/or import."* Furthermore, commodity-dependency may increase the difficulty of addressing environmental and social concerns *inter alia* because multilateral trade

[28] UN Department of Economic and Social Affairs, 2018. *World Urbanization Prospects – The 2018 Revision*
[29] World Bank, 2018. *Poverty and shared prosperity 2018 – Piecing together the poverty puzzle*
[30] UNCTAD, 2019. *Trade and development report 2019 - Financing a global green new deal*
[31] FAO, IFAD, UNICEF, WFP and WHO. 2019. *The State of Food Security and Nutrition in the World (SOFI) 2019. Safeguarding against economic slowdowns and downturns*.

agreements create uncertainties;[32] as well as potentially lead to illicit financial flows that draw resources from low-income towards high-income countries, due to weak institutions.[33] The conditions under which these interdependencies increase the resilience and sustainability of agri-food systems and economic systems in general, or force them towards commodity-dependency or other forms of dependency (technological, energy, financial, cultural, geo-political and strategic etc.), is an issue that requires further consideration, while it is hoped that as a reaction to COVID-19, selected countries and communities may move towards self-sufficiency.[34]

5. **Big data generation, control, use and ownership** enable real-time decision-making in agri-food systems. However, due to the large economies of scale that exist in digital industries, digitalization of many aspects of human life, social interactions and production, including agri-food value chain processes, has resulted in a digital divide raising concerns also about the economic benefits of big data platforms that are able to amass extraordinary amounts of information on consumer behaviour and preferences.[35] Capacities in National Statistical Systems and awareness of consumers and civil society need to be built on data harvesting, storage, management and control, to ensure country-driven independent, transparent and accountable data generation, validation and utilization processes, as well as their conversion into statistics, and this is particularly important for small countries.

6. **Geopolitical instability and increasing impacts of conflicts**, including those relating to competition over resources and energy, are a major driver of food insecurity and malnutrition.[36] SOFI 2017[37] highlights that the vast majority of chronically food insecure and malnourished people live in countries affected by conflicts. Furthermore, research suggests that 40-60 percent of intrastate armed conflicts over the past 60 years have been triggered, funded, or sustained by natural resources.[38] Conflicts reduce food availability, disrupt access to food and health care, and undermine social protection systems, and the majority of food insecure people in many parts of the world are the result of conflicts. This driver, interacting with climate change, degradation of renewable natural resources and desertification, is disrupting agricultural livelihoods and agri-food systems. Extractive activities tend to be concentrated in rural areas that include indigenous territories and have been a recurrent reason for socio-economic and ethno-territorial conflicts. A "world in disorder" where international and national conflicts emerge and persist is among the possible future scenarios. Agri-food systems would be affected by disruptions in various parts of socio-economic and environmental systems and would affect people according to their social features (gender, age, ethnicity, socio-economic status, etc.).

7. **Uncertainties**. All drivers affecting agri-food systems are subject to multiple systemic risk of hazards carrying uncertainties that often materialize in sudden occurrences of events. *The Future of Food and Agriculture*[39] (FOFA) highlights that the future of food and agriculture faces uncertainties

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[32] For instance, "S*ince carbon footprint is not in essence a physical part of products…the implications of the TBT* [Technical Barriers to Trade] *Agreement requirement for the equal treatment for imports of 'like' products remain untested"* FAO, 2018. *The State of Agricultural Commodity Markets (SOCO): Agricultural trade, climate change and food security*

[33] cf. SDG 16, target 4, and Joint African Union Commission (AUC)/United Nations Economic Commission (ECA), 2014. *Illicit financial flows: why Africa needs to "Track it! Stop it! Get it!". High level panel on Illicit financial flows*

[34] Self-sufficiency is intended in a broad sense, as reflecting an increasing attitude of communities to satisfying their basic needs with their own forces.
cf. FAO 2015-16 *SOCO - In Depth - Food Self-Sufficiency and International Trade: A False Dichotomy?* American Journal of Economics 0(5): 277-283. Buheji M. et al. 2020. *Optimising Pandemic Response through Self-Sufficiency – A Review Paper*

[35] CEB/2019/1/Add.2

[36] The number of forcibly displaced persons in 2019 reached almost 80 million people UNHCR, 2019. *Global Trends – Forced displacement in 2019*

[37] FAO et all. 2017. *The State of Food Security and Nutrition in the World (SOFI) 2017 - Building resilience for peace and food security*

[38] United Nations, World Bank. 2018. *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict*

[39] FAO, 2018. *The future of food and agriculture – Alternative pathways to 2050*

that give rise to serious questions and concerns and that These uncertainties revolve around different factors, including population growth, dietary choices, technological progress, income distribution, the state of natural resources, climate change, and the sustainability of peace. The timing, speed, geographic spread and magnitude of the outbreak of COVID-19 and its impacts is a case in point.[40] Multiple risks of disasters and crises, often combined with conflicts and other shocks, generate damage and losses. Extreme climate events such as drought, floods and storms, weather seasonal variabilities and slow onset events such as sea level rise are also unfolding emergencies. The 2020 desert locust upsurge together with other high-impact and transboundary food chain crises are also threatening agri-food systems. Uncertainties, and more specifically, their impacts on agri-food systems are difficult to predict and measure, but prevention with risk management and anticipation, including emergency preparedness and capacity to face them may reduce their impacts.

Drivers directly affecting food access and livelihoods

8. **Rural and urban poverty**. Rural areas are lagging behind. Despite great potential in many instances, a high proportion of rural inhabitants live in poverty or extreme poverty. Labour income in the agricultural sector is lower than the average income of other sectors and is characterized by higher gender imbalances. Many rural territories face severe deficits in infrastructure, institutional weakness, limited access to basic services and natural resources, and an eroded social fabric. Overall, the number of food insecure people is increasing and malnourishment is widespread, as stated in SOFI 2020, because the cost of a healthy diet is much higher than the international [extreme] poverty line, established at USD 1.90 purchasing power parity (PPP) per day[41] and there are significant risks for the most vulnerable to fall in to poverty. While the whole Agenda 2030 is grounded on the leave no one behind principle, still certain groups within society such as the elderly, children and youth, women, as well as indigenous people, in many instances face risking discrimination and marginalization. Moreover, in some instances these groups face conditions such as insecurity, violence and/or involvement in illegal economic activities which aggravates their situation. An additional issue brought by the outbreak of COVID-19 is the disparity of access to public health care services, as well as other public services, within societies and across countries, topped by exacerbated pre-existing gender inequalities along many dimensions, including the increase of care and domestic work that limit women's participation in the labour market. These often unmeasured disparities may provide a more severe picture of current poverty levels, with resulting worsening of purchasing power, and consequent resorting to mere calory consumption, thus worsening their nutritional status.

9. **Inequalities**. Societies are characterized by high inequalities in income, job opportunities, and access to assets including natural resources, basic services, and fiscal burden. There are large segments of populations that are living either below the threshold, or at the edge of poverty, while a few make very significant profits, within and outside the food and agriculture sectors. Women, girls, youth, small producers and indigenous groups suffer the most in ways that are not always measured because they go very much beyond mere economic inequalities. Increased inequality can erode social cohesion, lead to political polarization and ultimately lower economic growth.[42] Worryingly, inequality of income is growing. In Asia, for instance, despite the high economic growth over the past few decades (an average annual gross domestic product (GDP) per capita growth rate of 5 percent from 2000 to 2016), income inequality has risen, thus slowing progress in poverty reduction, with further exacerbating inequalities due to COVID-19 impact.

10. **Food prices** are significantly higher in recent years than 20-30 years ago. Indeed, food is around 30 percent more expensive than in the '90s, even without considering the price spikes of 2008 and 2011.[43] This occurred despite the fact that current pricing mechanisms fail to capture the whole cost of food, including social and environmental externalities at all levels (full cost accounting). FOFA 2050 highlights that if environmental costs were accounted for, food prices might significantly

[40] FAO, 2018. *Protecting people and animals from disease threats*
[41] FAO et al. SOFI 2020
[42] International Monetary Fund (IMF). 2017. *Fiscal Monitor: Tackling Inequality*
[43] As measured by the real FAO Food Price Index (FFPI). The FFPI is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014-2016.

increase, other things equal, by 30-35 percent in the next decades. While political and media attention is sensitive to the price of food, and policy makers raise concerns on the efficiency of food and agricultural systems, cheap, unhealthy, and socially- and environmentally-unsustainable food cannot be the solution.

Drivers directly affecting food and agricultural production and distribution processes

11. **Innovation and science**. Accelerating and scaling up science, technology and innovation (STI), including institutional innovations, is key to meeting the aspiration of more efficient, inclusive, resilient and sustainable agri-food systems and leveraging emerging opportunities for achieving the SDGs. Emerging STI has enormous transformative potential, but it also presents substantial risks and can be exploited in ways that reinforce inequality and market concentration, and contribute to the degradation of natural resources. STI has huge potential of producing co-benefits of complementary sets of actions, for example by addressing environmental concerns while increasing farmers income and nutrition Technical progress including the emergence of more systemic approaches, digitalization, biotechnologies and all other innovative solutions raise opportunities[44] to achieve, in concert, the dual aims of producing sufficient food and safeguarding the environment, while remaining mindful of challenges.[45] Research is ongoing on their development, limits and potential risks to ensure that safety and acceptability aspects are properly addressed, providing gender-balanced access, and bringing low-income countries on board to avoid technological divides.

12. **Public investment in agri-food systems** decreased significantly in the last 15 years, as shown by the FAO Agriculture Orientation Index (AOI) for Government Expenditures (SDG Indicator 2.a.1). In many instances, priorities set by governments, particularly those of low-income countries, including LIFDC, SIDS, and LLDCs, are not implemented due to insufficient public investment and/or low priority attributed to local agri-food systems. Thus, those countries that are currently heavily dependent on import to cover their food needs are likely to remain such, unless they shift their priorities. In addition, adequate regulatory and legal frameworks to secure financing are limited and not conducive to attract private sector investments.

13. **Capital/information intensity of production** is increasing due to automation, mechanization and digitalization of production in almost all sectors, including in food and agriculture. While these trends contribute to raising the overall productivity, they also raise concerns for the levels of employment, both in rural and urban areas.[46] Increasing capital intensity in the downstream segments of food value chains limits labour demand in processing and distribution, other things equal. In addition, the mechanization/digitalization of primary production lowers profits for farmers who do not or cannot appropriate new capital assets. Young farmers, possibly more inclined to adopting digital technologies and other innovations, can increase their capital ownership only if they have access to finance, training and capacity development. However, despite the fact that the progressive spread of advanced technologies is likely to increase the profitability of food-related livelihoods and create new job opportunities, the net job balance is most likely to be negative. Thus, increasing capital/information intensity of food production, associated to ageing, may further contribute to urban migration and emptiness of rural areas, and if employment and other earning opportunities cannot be found in urban areas, poverty and food insecurity may increase.

14. **Market concentration of food and agricultural inputs and outputs** represents a challenge for the resilience, equitability and sustainability of agri-food systems. Unprecedented levels of market

[44] FAO advocates for the leveraging of ecosystem services to complement these external inputs. The overuse of external inputs increases the environmental footprint of food production – too much irrigation exerts more pressure on an already scarce resource just as too much pesticides and herbicides damages the environment, reduces biodiversity (which generate ecosystem services) and could be prejudicial to human health.

[45] UN, 2018. *UN Secretary-General's Strategy on New Technologies*

[46] E/CN.9/2020/2 UN Economic and Social Council, 2020. *Population, food security, nutrition and sustainable development "[…] the manufacturing, agri-food and service sectors are themselves undergoing capital intensification through the adoption of information technologies (robotics, digitalization and artificial intelligence) that reduce the need for workers*"

concentration throughout the global agri-food systems[47,48] spanning from crop seeds, agricultural chemicals, veterinary pharmaceuticals, agricultural machinery, fertilizers, livestock genetics, fishing rights, food processing and commodity trading deserves attention. Furthermore, land concentration associated to lack of land use regulation also affects access to resources. This puts rural, local and low-income economies at risk and increases dependency on external actors. The COVID-19 pandemic is showing the weaknesses of such concentrations which may require in some circumstances relying more on locally produced goods.

15. **Consumption and nutrition patterns**, resulting from behavioural change of consumers are key factors affecting agri-food systems. Consumers are increasingly making complex choices about the sustainability, nutritional content and safety of what they eat. Shifting consumer demand in the direction of sustainable and healthier eating patterns is important. Recognizing that consumers are ready to change behaviour if correctly informed may lead to deep changes in production systems. For instance, carbon labelling could help shape consumer preferences, contributing to the transition to a low-emissions economy. This would require an internationally recognized approach in setting the related standards (FAO SOCO, 2018) and, as recalled in the Global Sustainable Development Report, building sustainable agri-food systems and healthy nutrition patterns to accelerate progress towards the SDGs requires collaborative action by various stakeholders, including consumers.[49]

Drivers regarding environmental systems

16. **Scarcity and degradation of natural resources**. Land, water, soil and biodiversity are progressively degrading. Water scarcity, land degradation, soil nutrients depletion, large scale deforestation, overexploitation of marine resources and pasture, pollution at all levels raise serious concerns, not only for the entire agri-food systems, but also for the achievements of the SDGs. "Inefficient or unsustainable farming systems are often associated with environmental and soil degradation and biodiversity loss and an increase in crop specialization and distribution can raise the risk of poor harvests."[50] Availability and accessibility of natural resources per capita, including land and water are one of the most important bottlenecks for agri-food systems. For instance, although the Asia and the Pacific region accounts for more than half (56 percent) of the world population, the region covers less than one-quarter of the global land area. Population increase, urbanization and industrialization are increasing pressure on natural resources used by the agricultural sector. In Latin America, natural resources of the region have been degraded by the development of intensive productive activities related to agri-food systems. Sub-Saharan Africa is experiencing the same situation of severe degradation of natural resources, water scarcity in dryland areas of the Sahel and the Horn of Africa, as well as in Southern Africa. Massive deforestation also occurs, linked to the extension of agricultural land, to the exploitation of mining, to infrastructure works such as hydroelectric dams or roads, to urbanization, and even to excessive logging. Competition over progressively scarce natural resources contribute to conflicts, and likewise, the agriculture sector across many regions is increasingly deeply affected by the frequency and intensity of extreme weather events.[51]

17. **Epidemics and degradation of ecosystems**, beyond COVID-19, may increase in the future due to rising trends in transboundary animal and plant diseases and pests, agriculture encroaching in wild areas and forests, antimicrobial resistance and the increasing production and consumption of animal products. According to a UNEP-ILRI report,[52] "the pathogens originate in animals, and the emergence or spillover of the diseases they cause in humans is usually the result of human actions,

[47] IPES-Food. 2017. *Too big to feed: Exploring the impacts of mega-mergers, concentration, concentration of power in the agri-food sector*
[48] UNCTAD, 2018. *Trade and Development Report 2018: Power, Platforms and the Free Trade Delusion*
[49] UN, 2019. *Global Sustainable Development Report 2019: The Future is Now: Science for achieving sustainable development*
[50] UN Environment (UNEP), 2019. *Global Environment Outlook – GEO-6: Healthy Planet, Healthy People*
[51] Full cost accounting of natural resource use and degradation, mentioned above, while engendering shifts in prices may have impacts on natural resource use, GHG emissions and biodiversity.
[52] United Nations Environment Programme and International Livestock Research Institute, 2020. *Preventing the Next Pandemic: Zoonotic diseases and how to break the chain of transmission*

such as intensifying livestock production or degrading and fragmenting ecosystems, or exploiting wildlife unsustainably." All this adds to the increasing occurrences of events that threatens food safety, aggravated by climate change, and calls for a One Health approach.[53]

18. **Climate change**, due to agricultural and economy-wide greenhouse gas (GHG) emissions, is already affecting agri-food systems, food safety and natural resources, and is expected to accelerate hunger and poverty in rural areas.[54] In Latin America, for instance, agri-food systems will be impacted, both currently and in the medium- and long-term, by climate change. It is estimated that rain-fed production in selected areas (e.g. in the Southern Cone of Latin America) will be reduced by seasonal water stress. In addition, fisheries and aquaculture production will be affected. SIDS and coastal areas will face sea level rise, increased hurricane frequency and intensity, saline intrusion, ocean acidification and warming and increased incidence of coral bleaching. On the other hand, "an estimated 23% of total anthropogenic greenhouse gas emissions (2007-2016) derive from agriculture, forestry and other land use".[55] Not only agri-food systems contribute a large share of total global CO_2-equivalent emissions, including through deforestation and other land use changes, but almost all prevailing economy-wide development paradigms are based on fossil fuels and huge GHG emissions.[56] Overall, there are no risk-informed measures to tackle a warming planet beyond a 1.5 degree scenario and there is limited understanding of the implications of deep decarbonisation. Vision and knowledge about these issues is particularly important for the post-COVID recovery process that is assumed to build back better.

19. **The 'Blue Economy'**,[57] that is the development of economic activities related to oceans and coastal areas is increasing globally, and increasingly the concept around which countries (particularly SIDS and other states that enjoy large Exclusive Economic Zones (EEZ) build their economic development policies. A recent IPCC report[58] highlights an important role for sustainable ocean industries to reduce GHG emissions and adapt to climate change. At the same time, while aquaculture is expected to provide the necessary increase in aquatic products globally, its regional development is uneven and hampered by constraints which need to be adequately addressed through better governance, increased investment, and targeted support to environmentally-friendly production systems such as integrated multi-trophic aquaculture in coastal and integrated agriculture aquaculture in inland regions, with a special focus on Africa which is the only region foreseen to have declining 'apparent consumption'.[59] Aquatic food production systems are nested in the larger development framework. However many 'blue economy' policies favour large projects such as oil/gas and shipping/ports or even tourism, which bring economic benefits, but also environmental degradation, with impacts on food from the ocean and ocean biodiversity. Arising trade-offs require further investigation for risk-informed, sound policy-making and investments for resilient and sustainable development.

[53] World Health Organization (WHO). One Health approach to designing and implementing programmes, policies, legislation and research requires that multiple sectors work together to achieve better public health outcomes such as food safety, the control of zoonoses (diseases that can spread between animals and humans, such as flu, rabies and Rift Valley Fever), and combatting antibiotic resistance of bacteria.

[54] Regarding the impact on food safety, see for instance: FAO, 2020. *Climate Change: unpacking the burden of food safety*

[55] Intergovernmental Panel on Climate Change (IPCC), 2019. *Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*

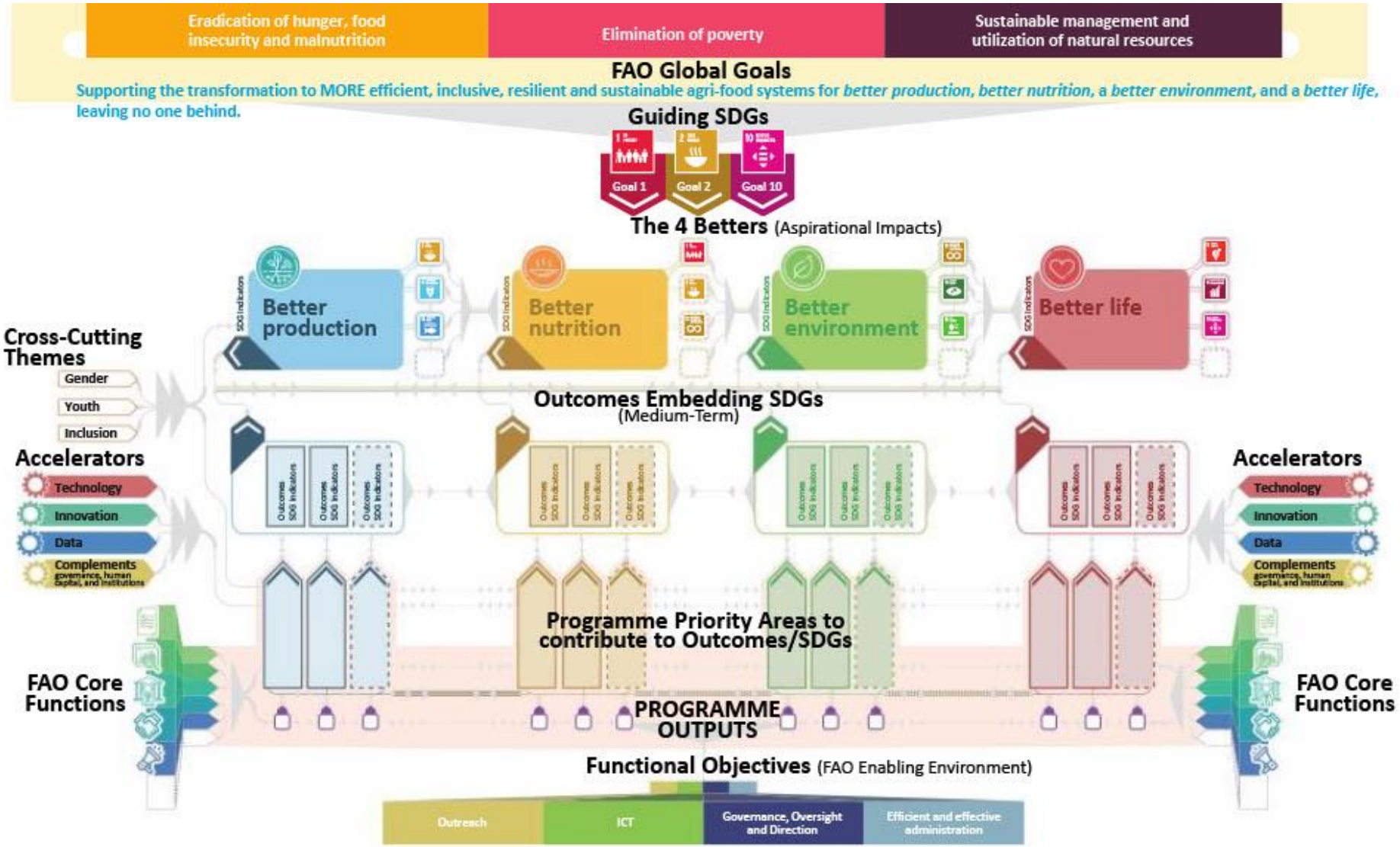
[56] This also applies to some activities that are increasingly portrayed as complementary to agricultural activities in rural areas such as tourism, whose GHG footprint has largely to be investigated.

[57] In the context of the Corporate Strategic Foresight Exercise, the World Bank definition for *blue economy* applies: The sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem (*What is the Blue Economy?*, World Bank, 6 June 2017).

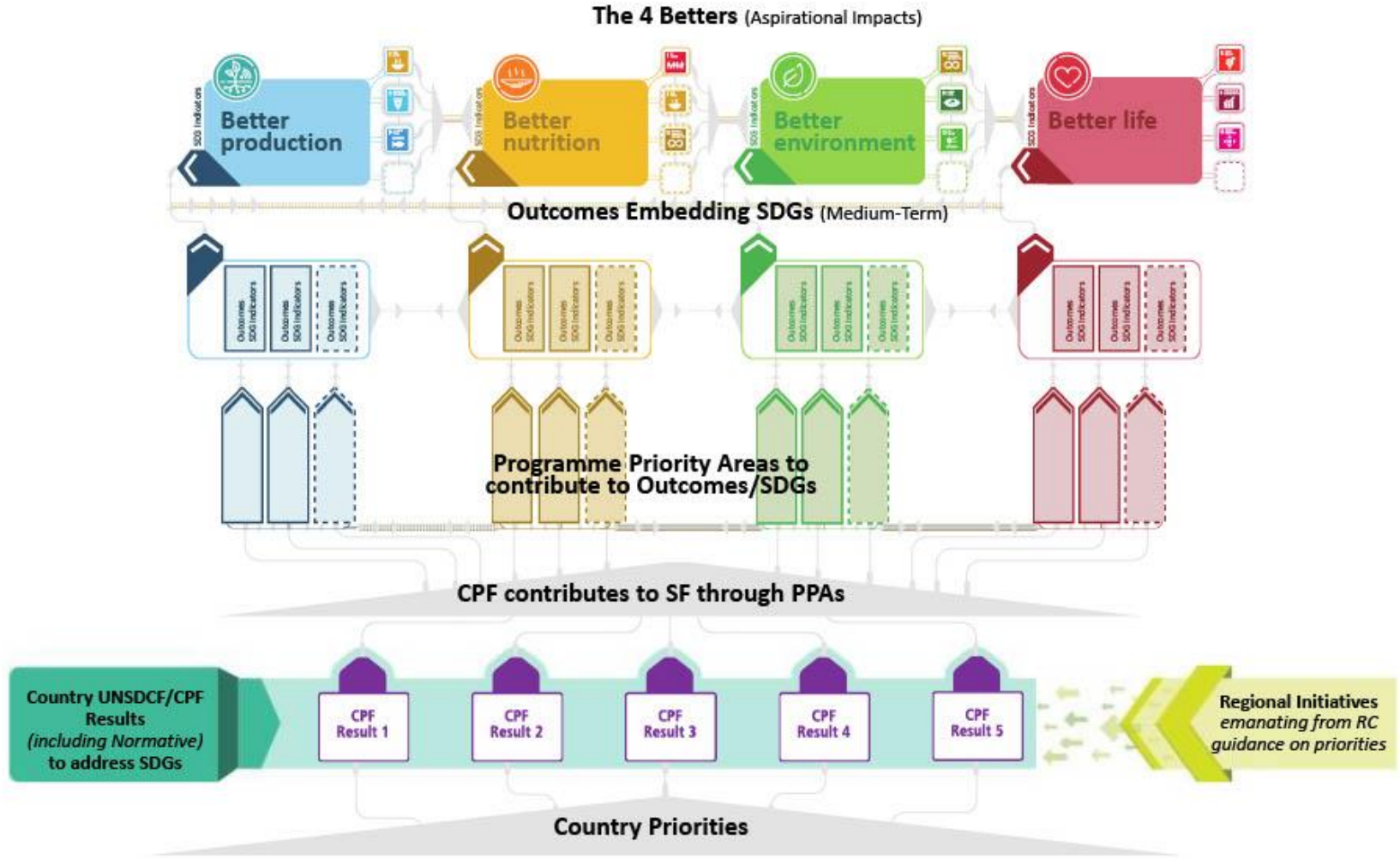
[58] IPCC, 2019. *Special Report on the ocean and cryosphere in a changing climate*

[59] Apparent consumption is a proxy measure for consumption of a product or material defined as production plus imports minus exports of the product or material (UN Stats Glossary)

Annex 2: FAO's results framework



Annex 3: FAO's results framework depiction of country level planning




UNITED NATIONS DEVELOPMENT PROGRAMME
STRATEGIC PLAN
2022-2025

Foreword

This is a critical moment for the world, and for development. A planetary emergency and the pandemic have depleted the world's natural resources and widened poverty and inequality. Up to one billion people could be living in extreme poverty by 2030 unless we seize this opportunity for a decisive push towards the Sustainable Development Goals (SDGs).

But this is also a moment of choice: an opportunity to learn from our experience, to do things differently, to aspire to greater shared goals. This new Strategic Plan 2022-2025 describes how UNDP intends to work together with our partners to deliver what's required of us in these extraordinary times. Collaborating across the revitalized UN system and beyond for stronger collective results. Applying integrated approaches aimed at transformative change. Supporting governments and communities to rebound from COVID-19 and build forward better.

The Strategic Plan is grounded in UNDP's continued commitment to eradicating poverty, accompanying countries in their pathways towards the SDGs and working towards the Paris Agreement. It envisions bold goals, making a difference to millions of lives, including through tackling multidimensional poverty, energy access, elections participation and development financing. It explains how UNDP will develop our six signature solutions – powered by digitalisation, innovation and development financing – for greater impact. It sets out practical steps towards becoming an even more agile and anticipatory organisation, investing further in our people, business model and operational excellence.

The Plan describes how the combination of our deep local experience and our rich global network, tapping into countries' knowledge and shared experience, delivers value to our partners. How we will foster innovation and creativity to help change systems and tackle the hardest challenges standing between us and the SDGs. All this to scale and accelerate progress towards green, inclusive transitions that empower every last person through greater opportunity and resilience.

The Plan is the result of extensive collaboration with our many partners. I am immensely grateful to them, and to all our UNDP teams, whose contributions have helped produce a Plan that truly reflects the diversity of all the countries, communities and people whom UNDP serves.

I invite you to read the Plan itself and learn more. With your support and collaboration, together UNDP can work with countries to expand people's choices for a fairer, sustainable future, to build the world envisioned by Agenda 2030 with planet and people in balance.

Photo: UNDP/Michael Atwood

Achim Steiner
Administrator
United Nations
Development Programme

Strategic context

Advancing the future of development

The challenge of reaching Agenda 2030 was already significant, even before the COVID-19 pandemic hit. Compounded by a climate emergency, political polarization and challenged multilateralism, continued conflicts and forced displacement, the number of people living in poverty rose in 2020 for the first time since 1998 by an estimated 119-124 million. Inequalities are growing, and the traditional social contract is no longer working for many.

Today's development challenges are dynamic, interconnected puzzles of multidimensional risk that require systemic solutions. Multilateral cooperation is vital in addressing these shared challenges that cross boundaries of geography and time.

No country has yet achieved the combination of very high human development with a light ecological footprint. The impacts of climate change and biodiversity loss are growing. In this complex, uncertain landscape, the SDGs and the Paris Agreement offer clarity of purpose and a way forward.

In the next four years, UNDP will work with countries to make a difference to millions of lives:

Helping
100 million people
to escape multidimensional poverty

Supporting
500 million people
to gain access to clean energy

Supporting
800 million people
to participate in elections, many for the first time

Promoting
over US$1 trillion
of public expenditure and private capital investment in the SDGs

Global COVID-19 response

As the United Nations system technical lead on the socio-economic response to COVID-19, UNDP is supporting governments in developing and implementing inclusive economic stimulus packages to restore the livelihoods of those newly poor, through combined interventions including health, education and digital access.

Beyond climate resilience

In Somalia, UNDP is helping strengthen community resilience to climate change and water scarcity by supporting water conservation infrastructure and education at local level, coupled with national policies on disaster risk reduction.

Governance for the future

In Viet Nam, UNDP is "future-proofing" governance systems through anticipatory approaches, and better understanding and management of risk.

Renewable energy at scale

The Africa Mini-Grid Programme, supported by UNDP, is improving the financial viability of renewable energy mini-grids in **18 countries**, encouraging private investment, lower tariffs and expanded service.

20,000 people
at UNDP working together across
170 countries and territories

What we do

UNDP's development offer

UNDP's work is summarized in the Strategic Plan by this "3x6x3" framework:

3 DIRECTIONS OF CHANGE — supporting countries towards three directions of change: *structural transformation, leaving no-one behind, building resilience*

X

6 SIGNATURE SOLUTIONS — through six signature solutions: *poverty and inequality, governance, resilience, environment, energy, gender equality*

X

3 ENABLERS — enhanced by three enablers: *strategic innovation, digitalisation, development financing*

This combination will help UNDP continue to deliver on what it does best: **integrated development solutions driven by country priorities.**

Directions of change

Guiding people and planet beyond 2025

During this Plan and beyond, UNDP will be accompanying countries towards the SDGs through country programmes, driven by national development choices, and with poverty eradication at their core.

To this end, we support countries in pursuing three directions of systemic change:

Structural transformation: including green, inclusive and digital transitions: working with countries to effect change in systems and structures that shape a country's sustainable development

Leaving no-one behind: a rights-based approach centered on empowerment, inclusion, equity, human agency and human development

Building resilience: strengthening countries and institutions to prevent, mitigate and respond to crisis, conflict, natural disasters, climate and social and economic shocks

Signature solutions

Supercharged for greater results

Learning from the experience of the last four years, UNDP will:

- Prioritize where country demands are greatest
- Focus on UNDP's strongest capabilities and role within the UN system
- Refine and develop the signature solutions for greater impact and scale
- Deliver integrated solutions through a systems approach

Enablers

Maximising development impact

Enablers are capacities and approaches to scale-up development impact for country partners and within UNDP's own systems:

Digitalisation

Supporting countries to build inclusive, ethical and sustainable digital societies

Strategic innovation

Empowering governments and communities to enhance the performance of entire systems, making them adaptive and resilient

Development financing

Partnering with governments and the private sector to align public and private capital flows with the SDGs and mobilise finance at scale

Global partnerships

Forging connections for the SDGs

Delivering results at the speed and scale needed to reach Agenda 2030 depends on close partnerships with a diverse range of actors working towards common goals. UNDP's longstanding partnerships leverage the diverse capabilities, resources and knowledge of our partners:

The next four years will see UNDP strengthening these existing partnerships and forging new ones. Using our convening power to continue building strategic alliances with marginalized voices and empowering local actors.

The partnerships of the future require flexible instruments, modalities and funding, better suited to new types of partners or new ways of collaborating (e.g., "creative commons" approaches towards sharing intellectual property).

UNDP will also work with partners to advocate for, and facilitate, global and regional cooperation around common challenges – from pandemics to conflict to green transitions – while showcasing the value of multilateral solutions.

A strong partner in the UN system

Complementing our capabilities

As we work with partners across the UN system, we draw on each other's complementary strengths and capabilities to deliver stronger results.

With the United Nations Development System to deliver coherent and integrated development solutions, driven by country demand, that maximise collective results and impact

As technical lead of the UN's socio-economic response to the COVID-19 pandemic

Working with governments and partners under the leadership of the World Health Organisation and UNICEF to support COVID-19 vaccine preparedness and deployment

With UN Volunteers, United Nations Multi-Partner Trust Fund, UN Office for South-South Cooperation, and United Nations Capital Development Fund to reinforce the revitalized development system

Connecting partners to UNDP expertise and experience across country, regional and global teams through the Global Policy Network

Better never stops

Building from lessons learned

The Strategic Plan 2018-2021 set out an ambitious agenda: to transform UNDP into a more nimble, innovative thought leader, more effective and efficient at delivering results, a trusted partner for countries in reaching the SDGs.

The Strategic Plan 2022-2025 continues in this direction, building on the progress of the last four years. It draws on assessments, evaluations and audits, and on the lessons of experience, including from our COVID-19 response.

Conversations with diverse practitioners and thought leaders from government, civil society, the private sector, the UN system and UNDP staff worldwide have also enriched the Plan.

Key lessons to which the Plan responds include:

Global, regional, local

UNDP's network brings the world together, driving sustainable impact and results for people and planet.

North America

- New York headquarters

Latin America and the Caribbean

- **Panama Regional Hub**
- Argentina
- Barbados and the Eastern Caribbean (covering Anguilla, Antigua and Barbuda, the British Virgin Islands, the Commonwealth of Dominica, Grenada, Montserrat, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines)
- Bolivia
- Brazil
- Chile
- Colombia
- Costa Rica
- Cuba
- Dominican Republic
- Ecuador
- El Salvador
- Guatemala
- Guyana
- Haiti
- Honduras
- Jamaica (covering The Bahamas, Belize, Bermuda, Cayman Islands, Jamaica, Turks and Caicos Islands)
- Mexico
- Panama
- Paraguay
- Peru
- Suriname
- Trinidad and Tobago (covering Aruba, Curacao, Sint Maarten, Trinidad and Tobago)
- Uruguay
- Venezuela

Africa

- **Addis Ababa Regional Service Centre**
- Angola
- Benin
- Botswana
- Burkina Faso
- Burundi
- Cameroon
- Cape Verde
- Central African Republic
- Chad
- Comoros
- Congo (Dem. Republic of)
- Congo (Republic of)
- Côte d'Ivoire
- Equatorial Guinea
- Eritrea
- Eswatini
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritania
- Mauritius and Seychelles
- Mozambique
- Namibia
- Niger
- Nigeria
- Rwanda
- São Tomé and Príncipe
- Senegal
- Sierra Leone
- South Africa
- South Sudan
- Tanzania
- Togo
- Uganda
- Zambia
- Zimbabwe

Arab States

- **Amman Regional Hub**
- Algeria
- Bahrain
- Djibouti
- Egypt
- Iraq
- Jordan
- Kuwait
- Lebanon
- Libya
- Morocco
- Programme of Assistance to the Palestinian People
- Saudi Arabia
- Somalia
- Sudan
- Syria
- Tunisia
- Yemen

Europe and Central Asia

- **Istanbul Regional Hub**
- Albania
- Armenia
- Azerbaijan
- Belarus
- Bosnia and Herzegovina
- Cyprus
- Georgia
- Kazakhstan
- Kosovo (as per UNSCR 1244)
- Kyrgyzstan
- Moldova
- Montenegro
- North Macedonia
- Serbia
- Tajikistan
- Turkey
- Turkmenistan
- Ukraine
- Uzbekistan

Asia and the Pacific

- **Bangkok Regional Hub**
- Afghanistan
- Bangladesh
- Bhutan
- Cambodia
- China
- Democratic People's Republic of Korea
- India
- Indonesia
- Iran
- Lao PDR
- Malaysia (covering Brunei Darussalam, Malaysia, Singapore)
- Maldives
- Mongolia
- Myanmar
- Nepal
- Pacific Office in Fiji (covering Federated States of Micronesia, Fiji, Kiribati, Republic of the Marshall Islands, Nauru, Palau, Solomon Islands, Tonga, Tuvalu, Vanuatu)
- Pakistan
- Papua New Guinea
- Philippines
- Samoa (covering Samoa, Cook Islands, Niue, Tokelau)
- Sri Lanka
- Thailand
- Timor-Leste
- Viet Nam

Representation Offices

- Brussels Representation Office (covering European Union)
- Geneva Representation Office
- Nordic Representation Office (covering Denmark, Finland, Norway, Sweden)
- Tokyo Representation Office
- Washington Representation Office

Policy Centres

- Nairobi Global Centre on Resilient Ecosystems and Desertification
- Oslo Governance Centre
- Istanbul International Center for Private Sector in Development
- Seoul Policy Centre for Knowledge Exchange through SDG Partnerships
- Singapore Global Centre for Technology, Innovation and Sustainable Development

United Nations Development Programme
One United Nations Plaza
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www.undp.org

For People and Planet

The United Nations Environment Programme strategy for tackling climate change, biodiversity and nature loss, and pollution and waste from 2022—2025.

UN environment programme

50 1972-2022

Medium-Term Strategy 2022—2025

The United Nations Environment Programme strategy for tackling climate change, biodiversity and nature loss, and pollution and waste from 2022—2025.

UN environment programme

50 1972-2022

Foreword

For 50 years, UNEP has scanned the horizons for environmental change, linked science to policy and decision making, coordinated responses to global environmental challenges, and supported countries in delivering on their environmental mandates. Today, in an era of unprecedented challenges, UNEP's mandate is more important than ever. As noted by the United Nations Secretary-General, António Guterres, "making peace with nature" is the priority for people everywhere. Curbing decades of unsustainable consumption and production that are chipping away at the Earth's foundations, putting at risk our future on this planet, will be central to overcoming this challenge.

Guided by the latest science, UNEP's Medium-Term Strategy for 2022—2025 seeks to deliver a transformational change for people and nature. And it does so by drilling down on the root causes of the three planetary crises of climate change, nature and biodiversity loss, and pollution and waste. Our aim is to propose solutions in line with a sustainable and just post-COVID-19 recovery.

I am very proud to note that this strategy is the result of extensive consultations between UNEP and Member States, stakeholders and partners, including civil society and youth groups, faith-based organizations and the private sector. This engagement has shaped UNEP's contribution to the 2030 Agenda, but with a 2050 outlook on planetary sustainability for people, prosperity and equity.

To accelerate global efforts to deliver the 2030 Agenda and Sustainable Development Goals in this critical Decade of Action, UNEP's strategy is geared towards building a United Nations system that is stronger, more coordinated and mutually supportive of environmental action. In line with its mandate, UNEP will seize the opportunities provided by the Decade of Action and demonstrate that a networked and inclusive multilateralism is fundamental to discovering and implementing lasting solutions to global challenges.

Nothing short of a transformation is required to address the triple planetary crisis and make peace with nature. It is my hope that UNEP's Medium-Term Strategy for 2022—2025 will serve as a vehicle for a transformation that inspires each and every one of us, everywhere and every day, to raise ambition and voice, and catalyze environmental action for people and planet.

Inger Andersen
United Nations Under-Secretary-General and UNEP Executive Director

Contents

Abbreviations

10YFP	10-Year Framework of Programmes on Sustainable Consumption and Production Patterns
COVID-19	Coronavirus disease
CSW	Commission on the Status of Women
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
ILO	International Labour Organization
IMF	International Monetary Fund
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPU	Inter-Parliamentary Union
IRP	International Resource Panel
ITU	International Telecommunication Union
JIU	Joint Inspection Unit
OECD	Organization for Economic Cooperation and Development
Rio+20	United Nations Conference on Sustainable Development
SCBD	Secretariat of the Convention on Biological Diversity
SIDA	Swedish International Development Cooperation Agency
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
UN-Women	United Nations Entity for Gender Equality and the Empowerment of Women
WHO	World Health Organization

Summary

Supporting the Sustainable Development Goals.
Photo: UN Photo

For people and planet

The United Nations Environment Programme (UNEP) strategy for tackling climate change, biodiversity and nature loss, and pollution and waste from 2022—2025.

1. In its decision 4/1, the United Nations Environment Assembly of the United Nations Environment Programme (UNEP) requested the Executive Director of UNEP to submit for consideration and approval by the Environment Assembly at its fifth session, in consultation with the Committee of Permanent Representatives, and building on lessons learned from previous bienniums, a results-oriented and streamlined Medium-Term Strategy and programme of work in line with General Assembly resolution 72/266.

2. UNEP's Medium-Term Strategy for 2022—2025, and the programme and work and budget for 2022–2023, focus on responding to three planetary crises - climate change, biodiversity and nature loss, pollution and waste. Tackling these challenges to achieve climate stability, living in harmony with nature and moving towards a pollution-free planet will require a recalibration of our economies and societies towards more sustainable and equitable models. The Medium-Term Strategy outlines a set of transformative shifts that target the drivers of climate change, biodiversity loss and pollution, and looks at their impact. It maps out the actions needed to reshape our consumption and production patterns towards sustainability, framing UNEP's contribution in the context of the 2030 Agenda for Sustainable Development and the Decade of Action to deliver the Sustainable Development Goals and beyond. It does so while respecting synergies with the Multilateral Environmental Agreements and in line with their relevant objectives, goals and principles, without prejudice to the outcome of future negotiations. The Medium-Term Strategy will also guide the support provided by UNEP in a manner consistent with other internationally agreed frameworks. It will leverage the United Nations development system reform to engage the wider United Nations system in stronger, more coordinated and mutually supportive environmental action. The programme of work (UNEP/EA.5/3/Add.1) sets out the UNEP's results framework for the biennium 2022–2023, focused on the three strategic objectives outlined in the Medium-Term Strategy.

3. Member States reviewed the road map for the preparation of the Medium-Term Strategy and programme of work at the sixth meeting of the annual subcommittee of the Committee of Permanent Representatives, held in October 2019. The streams of consultation for the preparation of the Medium-Term Strategy and programme of work and budget for 2022–2023 were:

a. sessions with the Committee of Permanent Representatives;
b. discovery sessions with Member States;
c. UNEP internal discovery processes, including as part of the transformation process;
d. consultations on priorities with strategic partners, including other United Nations entities;
e. discovery sessions with Multilateral Environmental Agreement secretariats; and
f. discovery sessions with major groups and stakeholders, including children and youth and faith-based organizations, and with the private sector.

4. The Medium-Term Strategy for 2022–2025 and the programme of work and budget for 2022–2023 build on consultations held with the Committee of Permanent Representatives on 10 December 2019 (on lessons learned), and on 4 June 2020 (on the outcome of the Committee's "discovery sessions"), 14 July, 14 September, 12–16 October (during the seventh meeting of the annual subcommittee of the Committee of Permanent Representatives), 19 November and 10 December 2020.

Background

Cleaning solar panels in Gujarat, India.
Photo: Reuters/A. Dave

"With only 10 years left before the 2030 deadline, there is an urgent need to step up action. And every nation, every community and every person can and must make a contribution."

– Secretary-General António Guterres

1. UNEP was established in 1972 against the backdrop of a series of scientific reports that notified the world that the state of the global environment was in crisis. The United Nations Conference on the Human Environment (Stockholm Conference) provided a science-centred platform for world leaders and policymakers to converge and tackle the drivers of that crisis. As a result, UNEP was tasked with coordinating global responses to environmental challenges and related emerging issues, within and outside the United Nations, while keeping watch over the state of the world's environment and linking science to policymaking.

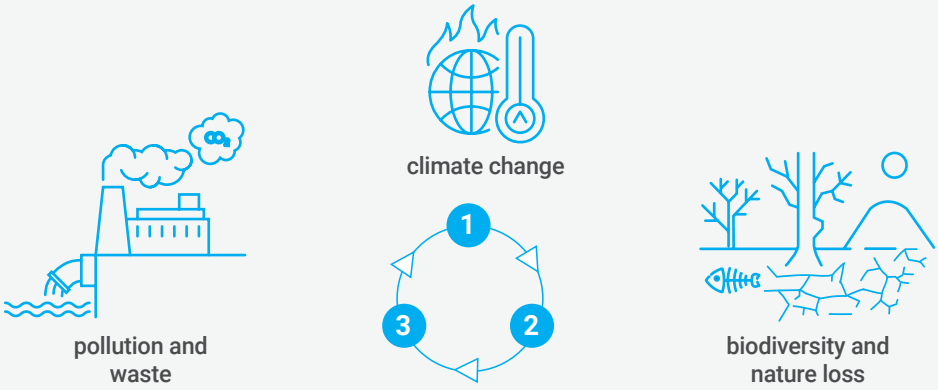
2. Today, the world finds itself in a similar situation, but the state of the environment has only worsened. Three interconnected crises—climate change, biodiversity loss and pollution—are putting our economic and social well-being at risk, while undermining opportunities to reduce poverty, and improve lives and livelihoods, as demonstrated by the COVID-19 crisis. Furthermore, they also risk irreversibly changing our relationship with the natural world. These crises are primarily linked to unsustainable patterns of consumption and production, which were recognized at the United Nations Conference on Environment and Development (Earth Summit) in 1992 as "the major cause of the continued deterioration of the global environment" (UNCED, 1992). While the effects of these drivers of environmental deterioration have been evident for decades (UNEP, 2019d), the scale and pace of the global response to these three crises is failing to reverse or even slow down. The 2030 Agenda for Sustainable Development was put in place to boost the collective sense of urgency and accelerate cooperation, but today we are not on track to achieve the Sustainable Development Goals, especially the environment-related ones, which are central to achieving all the goals.[1]

3. While the importance of linking science to policy and decision making remains stronger than ever, science alone is not enough. Science underpins solutions and actions that can chart a transformational path for the way we live, work and relate to nature. Yet only when sustained by strong environmental governance and supported by enabling macroeconomic policies can science help catalyze a response to the crises of climate change, biodiversity loss and pollution – a response required to improve well-being, in general, and the lives of the poor and the vulnerable in particular. Science can and must inform and drive financial, economic and behavioral shifts towards sustainable consumption and production patterns to enable transformation at the pace and scale required. Unless we harness the digital revolution as a strategic asset for more inclusive, transparent and innovative outcomes, we will fall short of the urgent responses we need.

4. This strategy sets out a vision of how UNEP can meet current and future expectations while continuing to deliver on the promises made to Member States in 2012 through the United Nations

1 The report *Measuring Progress: Towards Achieving the Environmental Dimension of the SDGs* (UNEP, 2019d) revealed that, of the 93 environment-related Sustainable Development Goal indicators, there are 22 (23 per cent) for which good progress has been made on 22 (23 per cent) over the last 15 years. However, for the other 77 per cent of the environment-related indicators, either there is not enough data to assess progress (68 per cent) or it is unlikely that the target will be met without upscaling action (9 per cent).

Three interconnected crises



Conference on Sustainable Development (Rio+20) and its outcome document, *The Future We Want* (A/RES/66/288). The strategy proposes a trajectory for UNEP for 2022—2025, with strengthening the environmental dimension of the 2030 Agenda as its road map and a forward-looking 2050 perspective for planetary sustainability. It speaks to the central role of UNEP in supporting countries' work to build their capacity to deliver on their environmental goals and commitments under international agreements.

5. Through this strategy, UNEP places the three environmental crises of climate change, biodiversity loss and pollution at the heart of its work. UNEP will tackle these crises through transformative multi-stakeholder actions that target the root causes and drivers of the crises, delivering deeper and broader impact that can underpin positive social and economic outcomes, while reducing vulnerabilities to support of sustainable development. UNEP will ensure that science remains at the centre of all decision making processes, including on emerging issues, and that environmental rule of law continues to improve global environmental governance, in close cooperation with the Multilateral Environmental Agreements and in the direction set by the 2030 Agenda. UNEP will also collaborate with its many partners, accelerating systemic interventions that engage financial and economic actors, while leveraging the power of digital technologies to scale up environmental sustainability.

6. This four-year strategy illuminates a path through the first half of the Decade of Action so that UNEP can strengthen the collective United Nations response to the crises of climate change, biodiversity loss and pollution. The United Nations development system reform presents a tremendous opportunity to empower the United Nations to address global environmental and socioeconomic crises. UNEP will leverage this opportunity to enhance its guiding role, raise ambition and accelerate and scale up progress towards the Sustainable Development Goals, in the spirit of the Secretary-General's Decade of Action.

7. These tenets lie at the heart of the UNEP Medium-Term Strategy for 2022—2025.

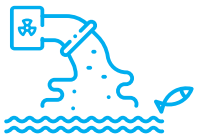
Sorting plastic and marine litter at EcoWorld Watamu, in Kenya. Photo: UNEP/ F. Fussstetter

Situational analysis:

unsustainable patterns of consumption and production are overburdening the planet's resources

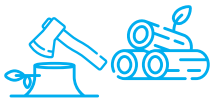
Scientists investigate rice production problems in Colombia.
Photo: CIAT / N. Palmer

A rapidly deteriorating environment threatens not only our social and economic well-being but also the achievement of the Sustainable Development Goals



Up to
400 million
tons of heavy metals, solvents, toxic sludge and other industrial wastes are released annually into the world's waters
IPBES, 2019

8. Expanding human activity and increasingly unsustainable patterns of consumption and production are testing Earth's environment. In the past 50 years, the global human population has doubled, the extraction of materials has tripled, primary energy production has more than tripled, the economy has grown nearly fivefold and global trade has grown tenfold (UNEP, 2019c). Yet, over 820 million people still suffer from hunger (FAO and others, 2019). Human consumption is set to increase further as population, urbanization and per capita income continue to grow. Per capita consumption in developed countries generally far exceeds that in developing countries. Land, freshwater bodies and oceans are being overexploited for food production, infrastructure, industry and human settlements. Up to 400 million tons of heavy metals, solvents, toxic sludge and other industrial wastes are released annually into the world's waters (IPBES, 2019).



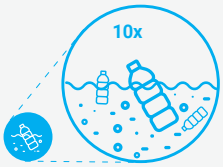
Land, freshwater bodies and the oceans are being
overexploited
for food production, infrastructure, industry and human settlements

9. The accumulating pollution from chemicals and waste and the changing climate, biodiversity loss, ecosystem degradation, desertification, land degradation and drought are closely related and are reinforcing each other. Global chemical production capacity almost doubled between 2000 and 2017 (UNEP, 2019b). Fertilizers used in agriculture entering coastal ecosystems have produced more than 400 ocean "dead zones" totalling more than 245,000 km^2 – a combined area greater than that of the United Kingdom of Great Britain and Northern Ireland (Diaz and Rosenberg, 2008). Marine plastics pollution has increased tenfold since 1980 (UNEP, 2019b; 2019c). Of 45 megacities with available observations, only four attained the World Health Organization (WHO) guidelines for air quality (Cheng and others, 2016). Climate change, chemicals, waste, pollution and unsustainable use of land, water and oceans can individually or in combination lead to degradation of ecosystems and their ability to provide services that are crucial for the well-being of humans and nature (FAO and others, 2019; IPBES, 2019; IPCC, 2019; IRP, 2019a; UNEP, 2019b; 2019c).

Fertilizers used in agriculture entering coastal ecosystems have produced more than 400 ocean "dead zones" totalling more than
245,000 km^2

10. As the environment changes, the risk of crossing thresholds that upset critical socioecological systems increases, leading to threats such as new pandemics and sudden changes to food supply (IPBES, 2019; IPCC, 2019; IRP, 2019a; UNEP, 2019a). Trends and scenarios project clear progress over time in reducing hunger, increasing access to safe drinking water and adequate sanitation, and increasing access to modern energy services, but not enough to meet the related Sustainable Development Goal targets by 2030 (IPBES, 2019; IPCC, 2019; UNEP, 2019c). For example, in 2018, damage from climate-related disasters cost an estimated US$155 billion (UNEP, 2019c). Global economic losses due to decreased labour productivity, increased health care costs and lower crop yields could amount to 1 per cent of global gross domestic product (GDP) by 2060 (OECD, 2016). Any further progression of climate change increases the risks, specifically those relating to poverty and hunger, health and well-being and access to clean freshwater (UNEP, 2019c). Poor water quality has many associated economic costs, including those related to degradation of ecosystem services; water treatment and health; impacts on economic activities such as agriculture, fisheries, industrial manufacturing and tourism; and lost property value and opportunities for further development. Furthermore, current negative trends in biodiversity and ecosystem integrity undermine progress towards Sustainable Development Goal targets related to poverty, hunger, health, water, climate and cities (IPBES, 2019; UNEP, 2019c). For example, animal pollination is critical to more than 75 per cent of food crops, including many fruits and vegetables and important cash crops of developing countries, such as coffee, cocoa and almonds (IPBES, 2019). Loss of pollinators threatens an annual global commercial crop output of between US$235 billion and US$577 billion (IPBES, 2019).

11. The trajectory of global environmental change is out of line with international goals and objectives. The global community is failing to meet internationally agreed environmental goals. Earth's mean surface temperature has already warmed by about



Marine plastics pollution has increased tenfold since 1980

UNEP, 2019c; 2019d

Of 45 megacities with available observations, only four attained the World Health Organization guidelines for air quality

Cheng and others, 2016

Loss of pollinators threatens an annual global commercial crop output of between US$235-US$577 billion

IPBES, 2019

At the current rate of greenhouse gas emissions, warming is likely to reach 1.5°C in the early 2030s

(IPCC, 2018)

1°C above pre-industrial levels. At the current rate of greenhouse gas emissions, warming is likely to reach 1.5°C in the early 2030s. With current pledges, the world is on a path to warming of 3°C to 4°C or even more, and even keeping warming to that level requires that current pledges be met (IPCC, 2018). A changing climate means stresses on land and freshwater resources, adding to existing risks to livelihoods, biodiversity, human and ecosystem health, infrastructure and food systems (IPCC, 2019). One million of the world's estimated 8 million species of plants and animals, including insects, are threatened with extinction (IPBES, 2019).

12. Addressing environmental degradation requires an integrated focus on climate, biodiversity, chemicals and waste, natural resources and pollution. It is still technically possible to limit the global mean temperature increase to well below 1.5°C if all countries take immediate and more ambitious action to reduce emissions of all greenhouse gases. Such ambitious actions will require capacity building and adequate financial and technological support. A sound assessment of the potential benefits and risks is fundamental for further political action. The more efficiently we use natural resources, the lower the greenhouse gases emitted across the entire economy (IRP, 2019a; 2019b). Biodiversity can only be conserved, sustainably used and restored by addressing all the underlying drivers of change, including the economic factors driving the exploitation and destruction of critical habitats. The adverse effects of chemicals and waste pollution on the environment and human health can be substantially reduced by implementing the existing international frameworks, strengthening the scientific basis of policy and decision making, and fostering sustainable, resource-efficient innovations and capacity through which harmful chemicals are contained and their use reduced and phased out.

Negative impacts on human development, increasing inequality and challenges to the multilateral order risk diverting attention from the environmental dimensions of sustainable development

13. The global macroeconomic outlook has worsened during the COVID-19 pandemic, accelerating the growth of inequality across the world and threatening to wipe out significant progress on sustainable development. In June 2020, the International Monetary Fund projected global growth of -4.9 per cent in 2020 and predicted "a particularly acute negative impact of the pandemic on low-income households worldwide that could significantly raise inequality" (IMF, 2020). The United Nations Development Programme warned that global human development is set to decline in 2020 for the first time in 20 years (UNDP, 2020). Building back better requires better measurement and management of the assets that underpin human, environmental, institutional and economic progress.

14. Not only are increasing socioeconomic inequality and inequity deepening divisions between the "haves" and the "have-nots," but there is also greater concern about losing the gains made in recent decades in relation to reducing poverty. Even before the onset of COVID-19, it was estimated that inequality had been steadily increasing for more than 70 per cent of the global population (United Nations, 2020d), exacerbating divisions between and within countries. Mega-trends and global forces such as technological innovation,

A man tries to chase a swarm of locusts devstating ricefields in Manila, Philippines. Photo: Reuters / R. Ranoco

urbanization and migration, in addition to climate change, environmental degradation and resource depletion, reinforce each other to exacerbate such inequality while undermining prospects for development generally. Current modes of production and consumption and the associated levels of inequality threaten the achievement of the entire 2030 Agenda (Independent Group of Scientists appointed by the Secretary-General, 2019).

15. Poor people, women and children face increased vulnerability from environmental stresses that lead to intensified competition for scarce natural resources and potentially to migration, instability and conflict. Globally, 24 per cent of land is degrading. More than 1.5 billion people, 74 per cent of whom live in poverty, depend directly on that land (Sena, 2019). By 2050, over 143 million people in sub-Saharan Africa, South Asia and Latin America – comprising 2.8 per cent of the population of these regions – will have become internal migrants. A major cause of that will be the various climatic impacts, with people leaving less viable areas with higher water scarcity and lower crop productivity, as well as areas affected by rising sea levels and storm surges (Rigaud and others, 2018).

16. Establishing more sustainable consumption and production patterns at the local, national, regional and global levels, supported by a framework anchored in the United Nations, is key to reducing inequality, creating jobs and protecting the environment. Resource extraction and processing create more than 50 per cent of global climate change impacts and more than 90 per cent of global biodiversity loss (IRP, 2019a). Yet the two indicators of resource consumption, "material footprint" and "domestic material consumption," shared by Sustainable Development Goal targets 12.2 and 8.4, both show a negative long-term trend continuing to rise at the global level (Independent Group of Scientists appointed by the Secretary-General, 2019; UNEP, 2019d). This indicates that the rate at which materials are being extracted globally is outpacing both population and economic growth (Independent Group of Scientists appointed by the Secretary-General, 2019). Reversing this trend requires transforming how we produce, process, use and manage natural resources in our socioeconomic systems and how we design and implement our national fiscal and economic policies. On the jobs side, the International Labour Organization has reported that "a shift to a greener economy could create 24 million new jobs globally by 2030 if the right policies are put in place" (ILO, 2018). Prioritizing resource-intensive sectors for a shift to sustainable consumption and production could achieve very significant economic, social and environmental gains, often in short time frames. For example, the agriculture, food and beverage, and building and construction sectors accounted for nearly 70 per cent of the world's total material footprint in 2015, while being among the most intensive greenhouse-gas-emitting sectors (Life Cycle Initiative and others, 2018). Transforming those sectors to reduce emissions and increase circularity will be crucial in the years to come.

In Mangatsiotra village, Madagascar, women weave and sell mats made of a local reed called Rambo. UNEP is working with farmers to cultivate rambo, a climate-resilient crop, which can withstand erratic rainfall and secures a more stable income. Photo: UNEP

17. Gender equality and a rights-based approach are key to ending all forms of discrimination and ensuring progress towards environmental sustainability (World Economic Forum, 2019). Climate change and the population crisis are not gender neutral; a high and uneven burden is carried by women, who constitute 80 per cent of those displaced by climate change (Habtezion, 2016). Women of child-bearing age and children are especially vulnerable. Women are responsible for 60—80 per cent of food production in developing countries (SIDA, 2009); however, women are often excluded from land ownership and decisions, with prevailing traditional, religious and customary laws and practices in 123 countries limiting their freedom to claim and protect their land assets (OECD, 2014). Women and children are often employed in informal sectors with higher exposure to risk, such as artisanal mining and waste collection. This inequality is further compounded by a low level of political representation, with only 25 per cent of parliamentary seats in governments around the world held by women (IPU, 2020). A stocktaking exercise with regard to the Beijing Declaration and Platform for Action in 2020, 25 years after its adoption, reveals that "major gaps remain and that obstacles, including structural barriers, discriminatory practices and the feminization of poverty, persist" (United Nations CSW, 2020). Estimates indicate that it will take, on average, another century to achieve gender parity globally. Indigenous peoples constitute another group that, while comprising less than 6 per cent of the world's population, is known for stewarding 80 per cent of the world's biodiversity through traditional ecological knowledge (United Nations, 2009; Sobrevila, 2008). Indigenous peoples can also contribute to climate solutions through traditional knowledge, legal systems and cultures (United Nations General Assembly, 2019c).

18. Seventy-five years after the signing of the Charter of the United Nations, environmental multilateralism remains as crucial as ever. Global challenges such as climate change, high pollution levels, destruction of nature and the COVID-19 pandemic are clear signs of the need to champion environmental stewardship and cooperation. This multilateral cooperation must deliver solutions for sustainable development that integrate health, education, poverty reduction, and economic and social well-being. In its economic outlook for 2020, the United Nations warned that "amid a weakening commitment to multilateralism – whether in the economic or political arena – the capacity of the international community to contain and resolve conflicts has decreased" (United Nations, 2020c). Reinvigorating multilateralism is essential to achieve the 2030 Agenda. An important milestone will be reached in 2025 when the United Nations turns 80 and the period covered by the present Medium-Term Strategy comes to an end. This opportunity must be seized.

Seizing the opportunity to strengthen the United Nations development system reform through increased access to and use of environmental data and ensuring that the digital revolution helps deliver, not hinder, the environmental dimension of the 2030 Agenda

19. United Nations development system reform provides the framework for integrated policy guidance and technical support to countries to accelerate the implementation of the 2030 Agenda and achieve the Sustainable Development Goals. The United Nations must be ambitious in working with partners to enhance environmental sustainability through sharp analytics and to support Member States in fostering the conditions needed to meet their requests in paragraph 88 of *The Future We Want*. Coordinated work across the United Nations on common country analyzes and the United Nations Sustainable Development Cooperation Framework through the United Nations country teams has already demonstrated the importance of integrating the environment into Sustainable Development Goal monitoring and implementation.

20. High-quality, credible, open, shared, sex-disaggregated environmental data, assessments and expertise are critical to supporting integration efforts across the United Nations system. In addition to contributing to the delivery of the Secretary-General's data strategy for 2020-2022 (United Nations, 2020a), options for ensuring stronger integration of environmental data and analysis include:

a. engaging in the development of the One United Nations initiative and ensuring better use of accounting and statistics, including those generated under Multilateral Environmental Agreements, to promote sustainable development;

b. enhancing, through the Environmental Management Group, Multilateral Environmental Agreements and multi-agency collaboration, the implementation of the United Nations System-wide Framework of Strategies on the Environment and environmental indicators and monitoring, and scaling up actions informed by environmental statistics and science, including through integrated analyzes across the three pillars of sustainable development;

c. working with Multilateral Environmental Agreement secretariats and other multilateral platforms to support coherent approaches to the Sustainable Development Goals among the Multilateral Environmental Agreements in terms of indicator methodologies and analysis;

d. bolstering engagement with United Nations country teams to inform the common country analyzes on which the United Nations Sustainable Development Cooperation Framework is built; and

e. ensuring that UNEP, through the World Environment Situation Room, provides the prime global digital platform that allows governments and the public at large to visualize the state of, and pressures on, the world environment and feed this analysis into policies benefiting the environment and sustainable development.

21. Institutions at every level need to keep pace with the speed and scale of technological innovation in the digital space. The digitalization of society and the economy and advances in artificial intelligence offer a massive opportunity to build greater environmental sustainability, resilience and transparency. Technology is transforming life in both developed and developing countries, and enhanced cooperation across the United Nations and beyond will be required to ensure that goals, policies and strategies remain relevant to the shifting economic, social and environmental landscape. At the same time, it will be important to be aware of the global digital divide; nearly 87 per cent of the population uses the Internet in developed countries compared to 19.1 per cent in the least developed countries. In addition, the Internet user gender gap for the least developed countries stood at 42.8 per cent in 2019, compared to 17 per cent globally (ITU, 2019). Worldwide, digital technology is moving faster than society's ability to govern it. There is a growing understanding that a societal leap must be made concurrently with the technological revolution. Transparency on the environmental performance and carbon footprints of goods and services must remain a shared goal in line with multilaterally agreed norms and standards. Moreover, access to environmental data and information on environmental changes is paramount for sound environmental governance and to encourage the participation of communities and disadvantaged groups. For decision making to increase equity, technology must be leveraged for greater inclusion of those at risk of being left behind. At the same time, environmental considerations linked to the use of more digital technologies, from extraction of rare-earth elements to energy use by devices and data centres, need to be kept under review.

Lessons learned

A woman feeds her granddaughter in Afghanistan.
Photo: UNEP / I. Riabchuk

Building on the past for higher performance in the future

22. UNEP strives for continuous improvement and follows an adaptive management model that is constantly refreshed through exhaustive monitoring and evaluation of its performance.

23. In 2019, UNEP launched a transformation process to become more effective in delivering its mandate, with more operational integration, clarity of focus and learning from past lessons. This process resulted in a shift in its organizational capabilities and identity to deliver more impactful results. This strategy thus builds on opportunities and recommendations for improvement arising from that transformation process, which is informed by lessons learned from previous medium-term strategies, as well as a blend of internal and external reviews and audits (UNEP, 2020c).

Investing in staff for sustainable organizational change

24. Promoting and reinforcing changes in individual attitudes and behaviours and creating channels to communicate feedback across all staff play a prominent role in successful organizational change management (JIU, 2019d). UNEP will continue to build a healthy, results- and performance-driven organization by tapping into the expertise and knowledge of staff to forge new forms of behaviour, while building collaborative teams at all levels and developing a strategic, more collaborative leadership that directs resources toward agreed priorities. Building on a progressive diagnosis of the cultural and behavioural traits within the organization, UNEP will invest in providing staff training in knowledge, skills and attitudes that support more coherent internal delivery of the organization's aspirations under this strategy and reviewing the acquired capacities. By building stronger supervisory and peer support systems, UNEP will ensure that learnings translate into long-term capacities and ultimately improve day-to-day work routines, building a foundation for a cultural transformation of the organization that enhances outcomes.

Getting gender right: increased responsiveness to gender equality and human rights

25. Despite appointing gender focal points and introducing "responsiveness to human rights" and "gender equity" as stand-alone project evaluation criteria in 2018, UNEP performance on the delivery of gender and human rights outcomes at the project level remains weak (UNEP, 2020c). UNEP already takes part in the United Nations System-Wide Action Plan on Gender Equality and the Empowerment of Women. As of 2019, UNEP had met or exceeded 8 of its 17 gender equality and empowerment of women indicators (UN-Women, 2019), but that is not enough. UNEP will work to fully implement Environment Assembly resolution 4/17 on promoting gender equality and the human rights and empowerment of women and girls in environmental governance. UNEP will fully support Member States in their achievement of Sustainable Development Goal 5 in the context of the environment, calling for women's full and effective participation and equal opportunities for leadership at all levels of environmental decision making. The focus will be on operationalizing gender and human rights dimensions and non-discrimination issues in programme and project design. UNEP will foster the widespread use of a gender lens to ensure that gender equality and human rights perspectives are fully embedded and integrated through associated principles. Linkages between gender indicators, gender-disaggregated data and policy recommendations will be observed and applied, as will gender-informed feedback loops and reinforced monitoring frameworks. UNEP will also collect good practices that can be shared at the wider United Nations level.

26. UNEP will invest in enhancing the abilities of staff, including within the Multilateral Environmental Agreements, to better understand, implement, monitor and analyze gender and human rights and intersectional gender and non-discrimination issues, with the goal of integrating related objectives into the organization's analytical and operational work. Moving beyond project design and monitoring, UNEP will provide programme and project implementation support to ensure that gender issues are integrated across the programme cycle, not just at the design stage, but also during implementation and project evaluation, with feedback loops for continuous improvement.

Securing a stronger organizational design for collective accountability

27. Accountability is critical to efficient and transparent operations, including in cooperation and coordination with the Multilateral Environmental Agreements (United Nations, 2019b). UNEP will review its organizational design, including the allocation of management roles and responsibilities among its divisions and regional offices, to ensure solid alignment with the priorities outlined in this strategy. As part of this process, UNEP will place emphasis on senior managers to improve task assignment and implementation for more cohesive, inclusive and better performance. In pursuit of the United Nations management reforms, UNEP will also improve internal quality controls and compliance for enhanced performance. To that end, UNEP will upgrade and improve its standards for internal controls and management, providing oversight, identifying opportunities for greater efficiency and ensuring compliance with the Financial Regulations and Rules of the United Nations, including on enterprise risk management.

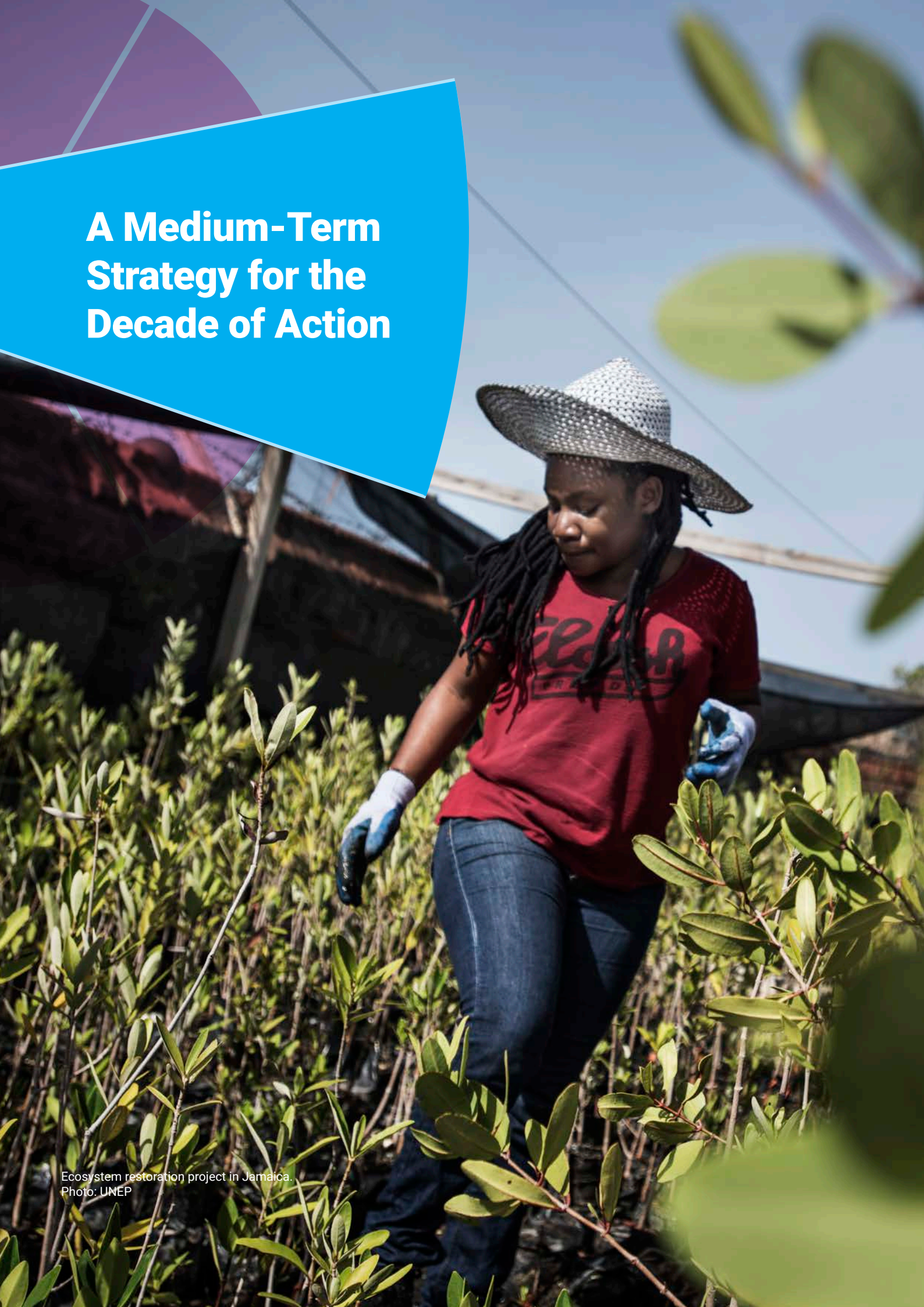
Increasing focus on management for results

28. UNEP recognizes that the continuing transition to results-based management is as much a transformation of the institution's internal culture as it is a management issue. The use of data, monitoring and evaluation is a critical tool for decision making (United Nations, 2019b). UNEP will enhance its internal capacity to deliver results and will develop indicators that are aligned with organizational objectives to reflect true transformational change. It will engage in project cycle reform, invest in human resources and build capacity through customized and in-house training and the establishment of technical networks across the organization that can support programme delivery, while developing "best-in-class" fiduciary and governance standards that build on enterprise risk management tools. As is indicated in its programme of work, UNEP will use Sustainable Development Goal indicators or internationally agreed environmental indicators as much as possible in its results framework to increase ambition. Furthermore, it will strive to monitor change over a longer term rather than a single biennium or the four years of this strategy. To that end, UNEP will employ impact metrics with project performance dashboards and cross-project leader boards to gauge effectiveness and assess the level of uptake of its products and services. Projects that cannot demonstrate an impact on key metrics after a prescribed period and a series of iterations will be closed. UNEP will also seek to monitor and report on key digital metrics, including for social media (e.g., engagement, reach, referral and conversion rates), platform performance (e.g., unique users, new and returning users, session pages and duration, downloads, and application programming interface calls) and uptake (e.g., references, use of data, application in policy design and implementation, and media coverage).

Mobilizing resources and leveraging partnerships to enhance efficiency

29. Securing contributions to the Environment Fund, as well as funding that is only softly earmarked, is indispensable if UNEP is to be equipped to deliver on the priorities agreed by Member States while demonstrating tangible results (United Nations, 2019b). As was recognized in the online survey on UNEP funding carried out in 2020, efforts by UNEP and its partners to widen and secure the resource base for the execution of this strategy, including through an increased understanding of the factors that determine or hinder Member States' financial contributions to UNEP, need to be sustained (UNEP, 2020a). UNEP will continue to engage in dialogue with Member States on these issues, and will work to define its comparative advantage and funding needs strategically, for both core and earmarked funding, and look comprehensively at the landscape of potential funding sources. UNEP will also engage in strategic and innovative approaches to resource mobilization (United Nations, 2019b), including through stronger communication of the value of the Environment Fund and the results achieved through its support, as well as the effects of insufficient core funding on UNEP's implementation efforts. UNEP will update its 2017 resource mobilization strategy to reflect the recent decisions of the Environment Assembly, as well as the results of the 2020 online survey, and will prepare a fully developed implementation plan for the strategy, with timelines and related resources. It will also update its partnership strategy to ensure stronger pursuit of its comparative advantage to match its increased ambition for resource mobilization in order to deliver on its strategic priorities.

A Medium-Term Strategy for the Decade of Action



Ecosystem restoration project in Jamaica.
Photo: UNEP

UNEP's vision for the 2030 Agenda – a 2025 strategy with a 2050 outlook

30. The UNEP situational analysis indicates that the world is facing three major environmental crises: climate change, biodiversity and nature loss, and pollution. These are all largely driven by human activity and unsustainable patterns of consumption and production. Tackling these crises is critical to improving the health of the environment, as well as social and economic health, as the COVID-19 crisis has shown. A healthy environment, healthy people and healthy economies are the foundation for achieving the Sustainable Development Goals.[2]

31. The Secretary-General has stressed that "as we enter a Decade of Action on the Sustainable Development Goals, we have to convince people that the United Nations is relevant to all and that multilateralism offers real solutions to global challenges" (United Nations, 2019a). In line with its mandate, UNEP will seize the opportunity provided by the Decade of Action to demonstrate the value of multilateralism by actively shaping a more balanced, equitable and sustainable future for all, where the environment is at the centre of political and economic decision making and where all countries are on track to meet their environmental goals and aspirations.

32. The present Medium-Term Strategy charts the contribution of UNEP to the 2030 Agenda and the Decade of Action, delivered against a 2022—2025 time frame but with a 2050 outlook on planetary sustainability for people, prosperity and equity.[3]

2 More than half of the Sustainable Development Goals have an environmental focus or address the sustainability of natural resources, and more than 86 of the 169 targets concern the environment directly, including at least 1 in each of the 17 Sustainable Development Goals (UNEP, 2016).

3 The sixth edition of the *Global Environment Outlook* recognizes that maintaining a forward-looking perspective in the form of a long-term 2050 vision is critical to assessing development pathways towards achieving the environmental dimension of the Sustainable Development Goals and making progress on the Multilateral Environmental Agreements, particularly on the nexus areas of sustainable consumption and production, human well-being (including in relation to pollution) and the natural resource base (including in relation to biodiversity loss and climate change).

Strategic approaches central to the vision of UNEP for the 2030 Agenda and its contribution to the Decade of Action

33. UNEP will support an integrated and balanced implementation of the 2030 Agenda. It will continue to build the capacity of Member States and partners to integrate the environment into all aspects of sustainable development, leveraging the interactions and co-benefits of the 17 Sustainable Development Goals. As custodian of 26 Sustainable Development Goal indicators, UNEP will promote integrated approaches to country planning and implementation that support the incorporation of environmental perspectives into country plans and policies while connecting to other development objectives, such as human rights, gender equality, economic growth and employment.

34. UNEP will strengthen institutional capacity for gender-responsive programme delivery. Gender equality is a multiplier and cross-cutting factor of sustainability and an effective and efficient way to address issues of poverty, health, food security and access to energy. In the period 2022—2025, UNEP will leverage the opportunities provided by the Sustainable Development Goals to strengthen the institutional capacity of policymakers, UNEP staff and key partners to develop and implement gender-responsive policies and strategies. UNEP will use information from its stakeholders and government partners to secure commitments and elicit collective gender-transformative actions.

35. UNEP, working with its many partners, will deliver transformational results. It will align its planning and action with the 2030 Agenda and other internationally agreed environmental goals and aspire to deliver long-term, transformational impacts beyond the four years covered by this strategy. UNEP will identify the key transformative actions for the environment that will drive the desired systemic changes at the heart of sustainable development. In collaboration with its partners, UNEP will target these drivers through leveraging a "networked multilateralism" that demonstrates impact and scale, bringing together the United Nations system, regional organizations, international financial institutions and other key players (United Nations Secretary-General, 2020b).

Building the resilience of Kune Vaini Lagoon, Albania, through ecosystem based adaptation. Photo: UNEP

To achieve focus, UNEP will develop a typology of projects that meet the following criteria:

a. alignment with UNEP core mandate areas and a focus on the delivery of this strategy, with a strong expectation of outcomes that lead to transformative change for sustainable development;
b. delivery on multiple Sustainable Development Goals, spanning the environmental, social and economic dimensions of sustainable development, as well as other internationally agreed environmental goals and aspirations, including the Environment Assembly resolutions;
c. demonstration of new and/or innovative concepts that provide opportunities to leapfrog past outdated paradigms while maintaining a clear vision that connects with and capitalizes on the diverse expertise of external partners, enabling joint development, staffing, financing and implementation; and
d. demonstration of value for money through optimal use of resources to achieve the intended outcomes.

36. UNEP will provide a clear "line of sight" for its delivery of the 2030 Agenda, from the internationally agreed environmental goals to regional and national action. It will pursue the global aspirations of the Sustainable Development Goals while delivering support in response to national needs and realities, and taking account of differing regional integration processes, capacities and levels of development. Through its regional offices, UNEP will increase its strategic engagement with regional inter-agency mechanisms, including regional commissions and forums on sustainable development, regional collaborative platforms[4] and issue-based coalitions. This will ensure increased consensus and better institutional coherence on sustainable development while increasing the delivery of a common United Nations approach to regional Sustainable Development Goal priorities.

37. UNEP will make full use of the United Nations development system reform to extend its reach as the global environmental authority to support all Member States in their pursuit of the Sustainable Development Goals. Working with and through its sister United Nations entities, UNEP will support United Nations country teams, providing

4 In line with the guidance provided by Member States in resolution E/RES/2019/15 to reposition the United Nations regional assets, the Secretary-General created a regional collaborative platform that would absorb existing, duplicative coordination mechanisms to foster collaboration on sustainable development across United Nations development system entities operating at the regional level.

environmental data and analysis so that common country analyzes have environmental science as their foundation. United Nations Sustainable Development Cooperation Frameworks will then likewise include strong environmental components, providing clear guidance and pathways for the entire United Nations system to support the environmental dimensions of sustainable development.

38. UNEP will pursue collective action on environmental sustainability, resilience and environmental risk across all aspects of the Charter of the United Nations, including peace and security, human rights and sustainable development within the scope of its mandate. The United Nations leadership collectively decided to "develop a common approach to integrating biodiversity and nature-based solutions for sustainable development into the United Nations policy and programme planning and delivery" (United Nations Secretary-General, 2020a). UNEP will leverage this collective inter-agency commitment to support the systemic changes that will enable the United Nations Secretariat, agencies, funds and programmes to make significant progress on the climate, nature and pollution agendas.

39. UNEP will strengthen South-South and triangular cooperation[5] to enable all Member States to progress towards environmental sustainability, while fostering complementarities with North-South cooperation. UNEP will promote South-South and triangular cooperation across its policy, programming and partnership activities.[6] Through continued engagement with the United Nations Office for South-South Cooperation and other multilateral system entities, governments and non-governmental organizations, UNEP will strengthen regional engagement and inter-agency linkages to more closely monitor and follow up on strategic and political issues related to South-South and triangular cooperation, while promoting North-South cooperation and supporting the Buenos Aires Plan of Action for Promoting and Implementing Technical Cooperation among Developing Countries.[7]

40. UNEP will work to leave no one behind while increasing its focus on the special needs of disaster- and conflict-affected states. It will address the special needs of least developed countries, land-locked developing countries and small island developing states, facilitating access to finance, technology and innovative solutions to help them build more resilient and inclusive economies and societies in a post-COVID-19 world. In its contribution, UNEP will channel the voices of those most vulnerable to environmental degradation, including women, indigenous peoples and their communities, and children and youth.

41. Special attention will be paid to the Sendai Framework for Disaster Risk Reduction 2015-2030. By focusing on the special needs of countries that are vulnerable to, or affected by, disaster and conflicts, UNEP will assist Member States in fully implementing the Sendai Framework. UNEP will assist United Nations peacekeeping, peacebuilding and humanitarian and political missions where dedicated responses to environmental dimensions of a crisis are required. To optimize prevention and preparedness, UNEP will support capacities for early warning and early action, including through building an understanding of the interlinkages between climate change, natural resource extraction, security and migration. UNEP will also engage in emergency and short- to medium-term post-crisis support, assisting Member States with integrating environmental considerations into oversight, assessment and planning for better response and recovery.

5 South-South cooperation is a process whereby two or more developing countries pursue their individual and/or shared national capacity development objectives through exchanges of knowledge, skills, resources and technical know-how, and through regional and interregional collective actions, including partnerships involving governments, regional organizations, civil society, academia and the private sector, for their mutual benefit within and across regions. Triangular cooperation involves southern-driven partnerships between two or more developing countries supported by a developed country(ies) or multilateral organization(s) to implement development cooperation programmes and projects (as defined in the 2016 framework of operational guidelines on United Nations support to South-South and triangular cooperation (SSC/176/3)).

6 The UNEP Strategy for South-South and Triangular Cooperation (https://wedocs.unep.org/bitstream/handle/20.500.11822/31654/SSTC_Strategy.pdf?sequence=1&isAllowed=y), adopted in March 2020, will serve as the guiding framework for all UNEP South-South and triangular cooperation activities during the decade 2020-2030.

7 Adopted in 1978 by the United Nations Conference on Technical Cooperation among Developing Countries.

UNEP focus:

Three planetary crises, three interconnected strategic objectives

Government workers help fight a locust plague in Isiolo, Kenya during the COVID-19 pandemic.
Photo: UNEP / D. Moore

Enabling thematic and foundational subprogrammes for increased ambition

42. In the four-year period covered by this strategy, UNEP will articulate its vision, which spans the 2030 Agenda and the Decade of Action and beyond, by developing responses and deploying solutions that aspire to achieve three interlinked and mutually reinforcing strategic objectives:

a. climate stability,[8] where net zero greenhouse gas emissions and resilience in the face of climate change are achieved;

b. living in harmony with nature (SCBD, 2010), where humanity prospers in harmony with nature; and

c. towards a pollution-free planet,[9] where pollution is prevented and controlled, and good environmental quality and improved health and well-being are ensured for all.

Three principal areas of action…

43. In response to the findings of its situational analysis, UNEP will tackle three planetary crises through three thematic subprogrammes, on climate action, nature action, and chemicals and pollution action. Because these areas are deeply interconnected, the UNEP programme of work for 2022–2023 (UNEP/EA.5/3/Add.1) outlines the organization's approach, which is aimed at ensuring the delivery of multiple benefits and mutual outcomes that contribute to UNEP's vision for planetary sustainability and human health and well-being.

…underpinned by two foundational subprogrammes…

44. To mitigate and adapt to climate change, halt the degradation of nature and arrest pollution, UNEP will draw on its core competencies and base all actions on the analysis of prevailing and credible science while drawing on its expertise in environmental law and governance. Since 1972, when UNEP was created, environmental science and environmental law have been critical and constant pillars at the core of its work, informing engagements and actions in all other related areas of action. UNEP will step up delivery of these core areas of work, catalyzing actions outlined through two foundational subprogrammes on science-policy and environmental governance.

… and facilitated by two enabling subprogrammes

45. Science and environmental governance alone will not enable the transformation needed to reach a more sustainable future that is pollution-free and in which nature and climate are stabilized. Engagement with finance and business to deliver more sustainable patterns of consumption and production will be key to achieving the Sustainable Development Goals. This shift will be at the centre of an enabling subprogramme on financial and economic transformation.

46. In parallel, as the world sees ever-increasing connectivity, digitalization will become key to systematizing, integrating and democratizing environmental data, knowledge and insight for new collaboration opportunities and enhanced impact. This will be the focus of an enabling subprogramme on digital transformation.

47. UNEP will employ a three-pronged delivery approach in all of its seven subprogrammes:

a. applying cutting-edge scientific advances in data collection and display;

b. working with policymakers, relevant partners from science and industry, indigenous peoples and local communities, vulnerable groups, the investor community and other non-governmental actors, as well as other United Nations entities; and

c. working across regions and countries and at all subnational levels to strengthen effective environmental governance and rule of law.

48. The seven UNEP subprogrammes will support, accelerate and scale up a shift to sustainable consumption and production patterns[10] to achieve planetary sustainability for people, prosperity and equity. This will be achieved through:

a. increased support for just transitions to clean energy, resource efficiency and circularity in the use

8 Fully supporting a balanced implementation of the mitigation and adaptation commitments under the Paris Agreement.

9 In 2017, Member States adopted a ministerial declaration, *Towards A Pollution-Free Planet* (UNEP/EA.3/HLS.1), as a key outcome of the third session of the Environment Assembly. In the declaration, ministers for the environment requested the Executive Director of UNEP to prepare an implementation plan on the issue of a pollution-free planet for consideration by the Environment Assembly at its fourth session. The Environment Assembly then adopted the *Towards A Pollution-Free Planet Implementation Plan* in 2019 by resolution 4/21.

10 The implementation of these actions will be supported by the policies, tools and methods developed through the enabling and sectoral programmes of the 10YFP/One Planet network, the UNEP Finance Initiative, the Partnership for Action on Green Economy and other initiatives that support the transition to inclusive green economies. Maintaining the 10YFP/One Planet network until 2030 will enable continued support for countries' work towards Sustainable Development Goals 8 and 12.

of energy, materials and other production factors in high greenhouse-gas-emitting and resource-intensive sectors, including agriculture, to enable the adoption of net zero or low-emission targets;

b. championing of efficient, circular and cleaner production processes to deliver goods and services that reduce environmental degradation and detoxify land, cities, the ocean, rivers and air;

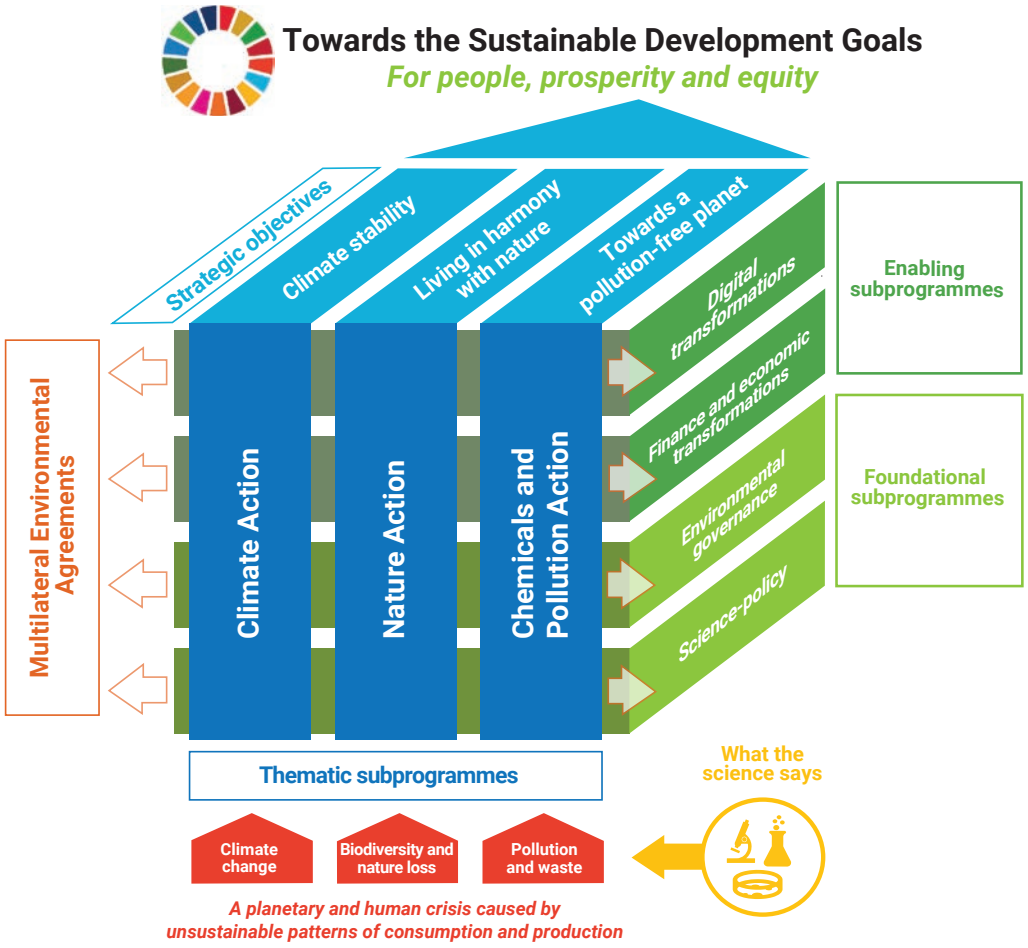
c. enhanced support for ecosystem-based policies and restorative and regenerative practices to reduce habitat fragmentation by agriculture and food systems, extractive industries, infrastructure and other resource- and nature-intensive value chains;

d. increased advocacy of, and information-sharing for, behavioural and educational tools and curricula and mechanisms to inform and influence consumer choices through increased awareness of the chemical, greenhouse gas, environmental, resource and waste footprint of goods and services; and

e. promotion of alignment of private finance (investments, banking and insurance) with sustainability, responsibility and net-zero emissions to influence investment and production decisions.

49. Collaboration with the Multilateral Environmental Agreements will be central to all actions across the UNEP subprogrammes to secure stronger synergies and enhance impact. Complementing national legislation and bilateral agreements, Multilateral Environmental Agreements form the overarching international legal basis for global efforts to address environmental issues. Partnership will continue to be a cornerstone of UNEP support provided to countries to implement the 2030 Agenda.

UNEP Medium-Term Strategy 2022—2025: on the road to 2030



Thematic subprogrammes

Floods triggered by heavy rain in Dar es salaam, Tanzania. Photo: Shutterstock / M. Husein

Climate action

50. Keeping a clear focus on the Paris Agreement is essential for guiding collective climate action in line with sustainable development. Achieving long-term climate stability will depend on countries making balanced progress towards their mitigation and adaptation commitments under the Paris Agreement, including "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C" and "increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development" (UNFCCC, 2016). A transition towards climate stability in line with the Sustainable Development Goals, the United Nations Framework Convention on Climate Change and the Paris Agreement recognizes that, by 2025:

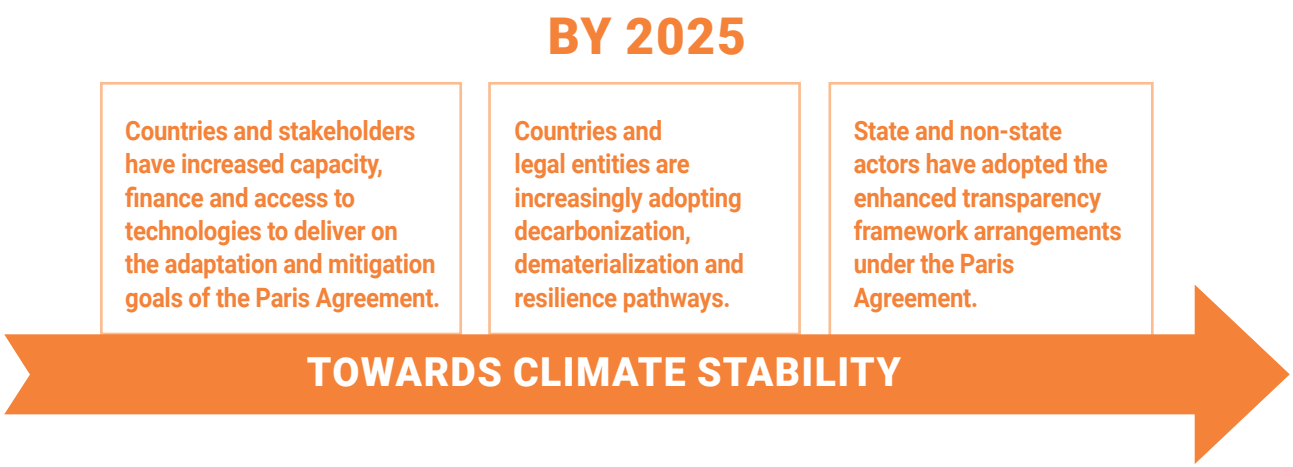
a. countries and legal entities are increasingly adopting decarbonization, dematerialization and resilience pathways;
b. countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals of the Paris Agreement; and
c. state and non-state actors have adopted the enhanced transparency framework arrangements under the Paris Agreement.

51. The expected 2030 outcome of this UNEP subprogramme is that "government and non-government development actions are compatible with the long-term mitigation and resilience goals of the Paris Agreement."

52. The climate action subprogramme will operate through the following principles.

a. Supporting country and stakeholder emission cuts and adaptation to climate change to facilitate stronger interactions between science, policy, finance, technology and the economy: UNEP will support countries in building public support for market and political strategies and decisions that are compatible with the latest scientific information, including from the social sciences, and promote sustainable consumption and production to achieve the largest impacts possible in terms of mitigating climate change and increasing resilience. Engagement of the finance industry and working through private-sector partnerships will be key to shifting public and private investments towards sustainable choices and business models that are adequately incentivized to support countries in achieving their climate goals and aspirations under the United Nations Framework Convention on Climate Change and Paris Agreement, as well as the Sustainable Development Goals.

b. Supporting countries and stakeholders in achieving rapid, just and comprehensive decarbonization in line with their climate commitments and aspirations: UNEP will take a value chain and multi-sectoral approach



that demonstrates opportunities to deploy timely renewable energy and energy efficiency solutions at all geographic levels, halt deforestation and habitat loss, restore degraded ecosystems, harness the potential of oceans and coastal ecosystems, change the way we produce and consume food, adopt more circular and resource-efficient business practices, and redesign our cities and transportation sectors.

c. ***Focusing on those who can contribute to the highest impact while supporting the most vulnerable*:** UNEP will help all countries raise the level of their mitigation ambition, with a focus on countries with the largest emissions. In parallel, UNEP will continue to support adaptation action while integrating aspects of human health, gender responsiveness, environmental security and poverty eradication, particularly in the countries that are most vulnerable and most in need, such as disaster- and conflict-affected countries, least developed countries and small island developing states. This will support the collective aspirations included in the nationally determined contributions and long-term strategies under the Paris Agreement and other strategic instruments.

d. ***Promoting policies and actions for sustainable consumption and production practices that reduce greenhouse gas emissions*:** UNEP will support governments, business and individuals in making informed choices to increase production of and demand for goods and services that are more resource-efficient and less emission-intensive, building on the work of relevant International Resource Panel analyzes and supporting a growing number of countries in identifying greenhouse gas emission hotspots in national economies.

e. ***Delivering tangible results through partnerships and integrated approaches*:** UNEP will channel and scale up its actions through networks and partnerships, including the financial and technology mechanisms of the United Nations Framework Convention on Climate Change (the Global Environment Facility, the Green Climate Fund, and the Climate Technology Centre and Network and Technology Executive Committee), for increased impact. Working across the wider United Nations system to achieve better synergy, including with United Nations country teams and other United Nations entities, UNEP climate actions will follow an integrated approach that links the environment to the pillars of the work of the United Nations: peace and security, human rights and development.

The climate action subprogramme will focus on the comparative advantage of UNEP to achieve three 2025 outcomes

Outcome 1: Decision makers at all levels adopt decarbonization, dematerialization and resilience pathways

53. In collaboration with its networks,[11] UNEP will support countries in taking full advantage of the opportunities presented by decarbonization, dematerialization and resilience and linking these to higher climate aspirations. UNEP will focus on

11 UNEP supports several networks and partnerships across science (e.g., the World Adaptation Science Programme), technology (e.g., the Climate Technology Centre and Network) and finance (e.g., the Net-Zero Asset Owner Alliance), as well as in all key sectors (e.g., United for Efficiency, the Cool Coalition, the Sustainable Rice Platform, UN-REDD, the Partnership for Clean Fuels and Vehicles, and the Global Alliance on Buildings and Construction). The United Nations Decade on Ecosystem Restoration, led by UNEP and the Food and Agriculture Organization of the United Nations, will be a key platform for advancing ecosystem-based approaches to climate change. The full range of current and future partnerships will be described in the programme of work and in-depth operational strategies.

sectors with the highest emissions,[12] based on the latest scientifically credible evidence of their share of national emissions and their role in ensuring the resilience of the socioeconomic fabric. UNEP will design and highlight opportunities for action in these sectors through action-oriented partnerships, including private-sector alliances, and support the country-level uptake of sustainable solutions ranging from ecosystem-based approaches to sustainable technologies and dematerialization practices, in line with national priorities. Special focus will be placed on an evidence-based introduction and uptake of better technologies, including digital technologies, for integration into sectoral and national policies and decisions. UNEP will help countries embed these opportunities in their revolving climate aspirations, linking them to adjustments in the policy and regulatory frameworks that inform nationally determined contributions and long-term strategies, as well as climate adaptation planning (e.g., early warning systems).

UNEP helps lower greenhouse gas emissions in line with the Paris Agreement while supporting states as they adapt to an already-changing climate, promoting sustainable development in the process.

54. UNEP will support countries in catalyzing public support and political will for climate action. It will also support advocacy for societal change that brings climate-positive outcomes while creating jobs and enabling a just transition. UNEP will focus on generating science-driven public support for ambitious climate advocacy and supporting sustainable consumer behaviour. UNEP will continue to function as a link between policymakers and the public, leveraging, for example, the One Planet network to communicate the benefits of using sustainable products and adopting sustainable lifestyles while sharing information that supports making the economic case for such change.[13] Facilitating public access to environmental information and increasing public awareness through formal and non-formal education, youth-led action and grassroots campaigns will be key levers of change that will shift knowledge and attitudes across society.

Outcome 2: Countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals

55. UNEP will facilitate inter-institutional collection, sharing and validation of climate-related knowledge and capacity at the national and subnational levels. It will contribute to enhanced capacity and promote cooperation among sectoral ministries with a stake in the implementation of mitigation and adaptation actions while also securing greater involvement of subnational authorities in knowledge- and data-sharing and related decision making to facilitate synergies and harmonize efforts. UNEP will further assess the potential, risks and gaps in relation to measures for tackling climate change to increase transparency and accountability and foster knowledge generation.

56. UNEP will work to connect countries to climate technology solutions by providing technical assistance, capacity-building and advice on technology solutions and accelerated access to climate technologies for low-emission and climate-resilient development at the request of recipient countries, including through the Climate Technology Centre and Network, and other partners. UNEP will also facilitate the development of enabling policy, and legal and regulatory frameworks for technology solutions tailored to the needs of individual countries by harnessing the expertise of global networks of technology companies and institutions.

57. UNEP will support the accelerated alignment of private and public finance with the long-term finance goals of the Paris Agreement. It will support the adoption of sustainable business and market models that can facilitate a strategic shift towards low-emission and resilient pathways in public- and private-sector investments and long-term planning across all sectors. Leveraging its partnerships and multi-stakeholder platforms, UNEP will support the accelerated design and implementation of public policies and fiscal incentives to address climate risks and impacts within the scope of an investment environment that is conducive to the achievement of the Paris Agreement goals. Providing reliable, accessible, state-of-the-art environmental

12 Including energy, industry, agriculture, forestry, transport, buildings and finance, among others.

13 The One Planet network is a UNEP-hosted open multi-stakeholder partnership that aims to accelerate the shift towards sustainable consumption and production in both developed and developing countries and implement Sustainable Development Goal 12 under 10YFP. https://www.oneplanetnetwork.org/.

information, including on public policies and incentives, that reduces uncertainty and risk in decision making, will continue to be a central asset in UNEP interventions.

Outcome 3: State and non-state actors adopt the enhanced transparency framework arrangements under the Paris Agreement

58. In collaboration with its networks and partners, including the secretariat of the United Nations Framework Convention on Climate Change and Global Environment Facility, UNEP will help countries meet their transparency and other reporting obligations. It will also implement the enhanced transparency framework for action and support established under the Paris Agreement.[14] UNEP will capitalize on its role of data-driven authority to support national institutions in tracking and reporting on climate actions, including through the development of greenhouse gas inventories; mapping progress towards their nationally determined contributions and adaptation actions; and tracking financial support provided and mobilized. The enhancement of existing national arrangements and sharpening of related regulatory frameworks will be central to these actions. Synergies will be pursued with global and regional Multilateral Environmental Agreements, including with the United Nations Framework Convention on Climate Change, with respect to the work conducted to support the transition towards the enhanced transparency framework and with the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer. This will facilitate coordination and complementarity between reporting obligations and contribute to greater coherence in tracking progress in implementing decisions under the Multilateral Environmental Agreements.

59. UNEP will assist countries in assessing and better reporting on their climate-related national capabilities and circumstances, including their capacity-building and technology needs, related finance, investment and trade trends, and areas for improvement, especially for least developed countries and small island developing states.

14 Article 13 of the Paris Agreement established an enhanced transparency framework for action and support to guide countries on reporting their greenhouse gas emissions, their progress towards their nationally determined contributions, their climate change impacts and adaptation, the support provided and mobilized and the support needed and received. The enhanced transparency framework also includes processes for technical experts to review reported information and a multilateral peer review where countries can ask each other questions.

60. Through its networks and partners, UNEP will encourage non-governmental stakeholders, including the private sector and finance community, to increase coherence and transparency in the reporting of their climate actions. This will contribute to increasing global confidence in the adoption of business models and market decisions towards decarbonization and resilience pathways.

61. UNEP will help countries measure progress towards decarbonization and resilience for stronger engagement in the global stocktake process.[15] UNEP will provide the best available scientific information and best practices to guide countries towards effectively assessing progress and evaluating the need for enhanced action and financial support to ratchet up the level of their climate ambition. Through the Intergovernmental Panel on Climate Change, International Resource Panel and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services and its flagship reports (e.g., the *Emissions Gap Report*), UNEP will deploy the most up-to-date, state-of-the-art compilation of climate change metrics and sectoral knowledge. This will support country engagement in the global stocktake, increasing compliance with the Paris Agreement in a more transparent way. To that end, and in partnership with other relevant organizations, UNEP will facilitate dialogue between government actors and non-government stakeholders, including subnational authorities, businesses and civil society, to add value and increase the accuracy, accountability and relevance of the information collected and shared by decision makers. Guided by the need to ensure greater climate ambition in line with the aspirations of the nationally determined contributions and long-term strategies and other strategic instruments, UNEP will also focus on supporting countries in increasing their capacities to use climate change information in development planning and investment decisions and monitor climate finance trends as pathways to increased ambition.

15 Article 14 of the Paris Agreement established the global stocktake as its key ambition mechanism. Every five years, countries will engage in the process to assess collective progress towards the agreement's long-term goals. This stocktaking process aims to inform the next round of nationally determined contributions to increase their level of ambition. It also offers the opportunity to evaluate the need for enhanced action and support.

Nature action

62. Nature underpins the functions and health of the planet and thereby the existence and health of humankind. Living in harmony with nature means "maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people", as well as ensuring that "biodiversity is valued, conserved, restored and wisely used". (SCBD, 2010). Dependency on biodiversity and ecosystems, including for food, fibre, materials, water, medicines and human health, climate regulation and protection from extreme events, has been outlined clearly in assessments by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the *Global Environment Outlook* and the International Resource Panel, among others. Biodiversity loss and ecosystem degradation undermine the resilience of our economy and many critical product value chains and ultimately will prevent progress towards the Sustainable Development Goals and human well-being. To facilitate a transition towards living in harmony with nature, in line with the Sustainable Development Goals and the long-term goals of the future post-2020 global biodiversity framework as agreed by Member States (SCBD, 2018a), it is expected that, by 2025:

a. the implementation of the agreed post-2020 global biodiversity framework is well under way through related national planning, implementation, monitoring and reporting processes;
b. biodiversity is mainstreamed (SCBD, 2018b) for sustainable development and across key themes and sectors (e.g., food and agriculture, sustainable forest management and zero deforestation, health, infrastructure, mining, tourism, trade, energy, cities, finance, governance and justice) to realize multiple benefits and avoid negative impacts on nature;
c. significant actions are being taken to reduce ecosystems degradation and build the resilience of landscapes and seascapes, with ecosystem integrity and conservation being leveraged as assets and tools for disaster risk reduction and greater social resilience; and
d. methodologies and tools for integrating biodiversity and ecosystems into consumer, infrastructure and financial decision making have been developed and made available for governments and financial institutions to align their policies and investment portfolios with global biodiversity targets.

BY 2025

The implementation of the agreed post-2020 global biodiversity framework is well under way through related national planning, implementation, monitoring and reporting processes.

Biodiversity is mainstreamed (SCBD, 2018b) for sustainable development and across key themes and sectors (e.g., food and agriculture, sustainable forest management and zero deforestation, health, infrastructure, mining, tourism, trade, energy, cities, finance, governance and justice) to realize multiple benefits and avoid negative impacts on nature.

Significant actions are being taken to reduce ecosystem degradation and build the resilience of landscapes and seascapes, with ecosystem integrity and conservation being leveraged as assets and tools for disaster risk reduction and greater social resilience.

Methodologies and tools for integrating biodiversity and ecosystems into consumer, infrastructure and financial decision making have been developed and made available for governments and financial institutions to align their policies and investment portfolios with global biodiversity targets.

TOWARDS LIVING IN HARMONY WITH NATURE

For decades, indigenous leader and UNEP Champion of the Earth, Nemonte Nenquimo has fought to protect the Amazon rainforest in Ecuador from oil exploitation.
Photo: Reuters / J. Zúñiga

63. The expected 2030 outcome of this UNEP subprogramme is that "recovery of nature occurs and is contributing positively to human well-being."

64. The nature action subprogramme will operate through the following principles.

a. ***Articulating a pathway to living in harmony with nature***: UNEP will focus on increasing ambitions, building broad-based support and partnerships for transformational change for sustainable development, strengthening policy and regulatory frameworks and scaling up best practices. These actions will deliver science-based solutions for nature across sectors and levels of governance to halt and reverse the loss of biodiversity and ecosystem integrity, which are key to many economic activities and the provision of goods and services critical for human welfare. Together, these actions will set the world on a pathway to ensuring well-functioning ecosystems and environmental safeguards, poverty eradication, social resilience, the creation of green and decent jobs, and a resilient economic and trade system based on more sustainable consumption and production patterns that are in line with internationally agreed norms and standards.

b. ***Realizing impact and strength through partnerships*:** UNEP will strengthen its strategic partnerships with organizations at the global, regional, national and local levels to support Member States in building their capacities, including through facilitating access to appropriate financial and technology-related means, towards the implementation of the 2030 Agenda, the three goals of the Convention on Biological Diversity and its protocols,[16] as well as the agreed post-2020 global biodiversity framework and the relevant decisions of the governing bodies of other Multilateral Environmental Agreements. UNEP will contribute data, knowledge and technical expertise to the United Nations Sustainable Development Group teams at the global, regional and national levels to address environmental concerns, promote better utilization and management of natural resources and integrate biodiversity and ecosystem-based approaches into the planning and delivery of national sustainable development frameworks and Sustainable Development Goal strategies. This will include close collaboration with the secretariats of key Multilateral Environmental Agreements, UNDP, the Food and Agriculture Organization of the United Nations (FAO), the United Nations Human Settlements Programme and WHO to deliver direct benefits for people and nature in Member States. UNEP will mobilize civil-society support for the nature agenda through partnerships, investment in outreach and engagement with key stakeholders, such as academia, civil society, consumers, women, youth, indigenous peoples, technology providers and the private sector. Through the equal engagement of women and men, UNEP will ensure that this support is also gender inclusive. In supporting the humanitarian community and United Nations country teams, UNEP will work through its environmental emergency response partnership with the Office for the Coordination of Humanitarian Affairs. In the field of ocean

16 Including the Sharm El-Sheikh Declaration on Investing in Biodiversity for People and Planet (CBD/COP/14/12), adopted on 15 November 2018.

governance, the Regional Seas Programme will continue to be UNEP's delivery mechanism, working also with other ecosystem-based organizations, such as regional fisheries bodies.

The nature action subprogramme will focus on the comparative advantage of UNEP to achieve three 2025 outcomes

Outcome 1: An economically and socially sustainable pathway for halting and reversing the loss of biodiversity and ecosystem integrity is established

65. UNEP will assist Member States in developing integrated strategies for achieving a sustainable balance between human prosperity and the sustainability of the natural resource base underpinning socioeconomic development. This will require deep transformations in our current economic systems, which currently privatize benefits while externalizing environmental costs and contributing substantially to inequalities. UNEP, in collaboration with its partners, will support these transformations by assisting Member States in developing sustainable economic pathways that benefit both people and nature and through mobilizing public support for the nature agenda. A recognition of the true value of nature, as well as of the cost of its degradation, are essential for the transition to a more sustainable and resilient economy. UNEP will tailor tools and guidance for the valuation of natural capital and the design and implementation of policies and practices supporting the shift to sustainable consumption and production. It will also refine nationally relevant metrics for measuring inclusive wealth and promoting their use in development planning processes, with close reference to the targets and indicators of the Sustainable Development Goals, as well as those agreed under the post-2020 global biodiversity framework. UNEP will also assist countries in developing integrated national infrastructure plans that prioritize ecosystems and ecosystem-based approaches, including natural infrastructure.

UNEP delivers science-based solutions to halt and reverse the loss of biodiversity while restoring ecosystems, which is key to many economic activities as well as the provision of goods and services critical to human welfare.

66. UNEP will support countries in developing policies and incentives that address the drivers of biodiversity loss and promote sustainable and inclusive economic activities in line with multilaterally agreed norms and standards. It will assist countries in developing biodiversity-based economies as an important component of their national economic development that will ensure sustainability and equitable benefit sharing, and build social and environmental resilience.

67. UNEP will support countries in developing the necessary policies, legislation and strategies to make progress towards the Sustainable Development Goals and implement their respective obligations under Multilateral Environmental Agreements while strengthening national institutions and mechanisms to monitor and report on related progress.

68. UNEP will promote social and behavioural change and support sustainable education and youth-led action with outreach campaigns and public engagement and by engaging with formal and non-formal education activities that shift knowledge, attitudes, behaviours and norms to address the indirect drivers of biodiversity loss and the degradation of nature. UNEP will also work with standard-setting and labelling schemes to promote and improve existing consumer information tools by including criteria of the effect of key products on biodiversity, in line with multilaterally agreed norms and standards.

69. UNEP will assist United Nations system entities in leading by example, meaning that they conduct their operations sustainably and disclose progress against key sustainability measures, including biodiversity performance metrics.

Outcome 2: Sustainable management of nature is adopted and implemented in development frameworks

70. UNEP will assist Member States and support United Nations country teams in ensuring that nature is mainstreamed effectively into all key sectors, using a well-coordinated, whole-of-government approach that balances the demands of different sectors**.** The establishment of clear, integrated and well-funded strategies and development plans, supported by rigorous legislation, can redress biodiversity loss. This generates overall policy coherence and public support towards achieving the Sustainable Development Goals and the objectives of the agreed post-2020 global biodiversity framework. UNEP will play a key role in providing normative and analytical tools that assist United Nations country teams in mainstreaming policies

Oceans Advocate, Lewis Pugh, swims the Antarctic to call for more protected marine areas to preserve biodiversity.
Photo: UNEP / O. Nordel

and actions that reduce biodiversity loss and help implement ecosystem-based approaches to maintain ecosystem integrity.

71. UNEP will align its actions with the agreed objectives of the post-2020 global biodiversity framework, without pre-empting its development, working with United Nations system entities and other partners to support countries in its implementation and mainstreaming it into national processes and development frameworks. UNEP support will capitalize on the organization's experience in boosting the financial and technical capacity of countries to fulfil their biodiversity commitments, including through the support of Global Environment Facility. This will enable countries to, for example, apply science-based approaches for the sustainable use of biodiversity and ecosystem services and restore and protect the functional capacity and connectivity within and between freshwater, terrestrial and marine ecosystems. UNEP will also promote and reinforce ecosystem-based ocean governance based on the Regional Seas Programme and implement its organizational mandate as a custodian of several Sustainable Development Goals, assisting all Member States with protecting and restoring freshwater ecosystems and the wealth of freshwater biodiversity they contain.

72. UNEP will support policies and actions on sustainable consumption and production to conserve, restore and safely manage biodiversity and ecosystems. UNEP will support Member States, cities, business and consumers in the re-use, recycling and more efficient, less polluting use of products and materials that tend to have a strong impact on nature, including through a value chain approach and support for indigenous peoples and local communities.

73. UNEP will collaborate with United Nations agencies, funds and programmes to support Member States in strengthening biodiversity and health linkages to manage and reduce risks for both human and ecosystem health and to integrate nature into national and international public health decision making through science-based approaches. In a post-pandemic context, this requires addressing nature degradation as a root cause of zoonotic disease and other novel biological introductions. Work on establishing more sustainable food value chains will be central to this effort, given that so many zoonoses are triggered by unsustainable patterns of food consumption and production. UNEP will also work with partners to strengthen the capacity of countries to implement the One Health approach, focusing on biosecurity measures, and to support the development and subsequent implementation of the Global Plan of Action on Biodiversity and Health. UNEP will also support efforts to mainstream biodiversity for health and nutrition.

74. UNEP will develop and promote frameworks and norms for biodiversity-related financing and infrastructure. By leveraging the enabling subprogramme portfolio on finance and economic transformation, UNEP will support the integration of biodiversity and ecosystem service considerations and related risks into financial and economic decision making. UNEP will provide guidance to governments and financial institutions to achieve positive outcomes for people and nature, in line with the agreed post-2020 global biodiversity framework and relevant environmental targets of the Sustainable Development Goals, focusing on economic sectors with a high impact and dependency on nature. UNEP will also support the development of innovative conservation funding mechanisms that support livelihood opportunities for indigenous peoples and local communities while building sustainability and resilience and strengthening their rights.

75. UNEP will promote the sustainability and transparency of value chains and production methods. It will be critical to ensure that resource extraction and commodity production contribute to healthy ecosystems and socially just outcomes.

UNEP will use opportunities to influence demand-side pressure on biodiversity and ecosystems through consumer information on the environmental footprint of products and by encouraging the adoption of sustainable consumption and lifestyles.

Outcome 3: Nature conservation and restoration are enhanced

76. UNEP will promote sustainable approaches to natural resource management. It will promote transformations in planning and managing land and water use and natural-resource-based value chains with a life-cycle perspective. Building on its experience and collaborative partnerships with agencies with specialized expertise, UNEP will assist Member States in promoting sustainable and resilient food systems, agriculture and fisheries to reverse unsustainable land use, biodiversity loss, habitat conversion, freshwater pollution, and abstraction and depletion of freshwater and ocean resources. Sustainable food systems must be based on the maintenance of healthy freshwater, terrestrial and marine ecosystems. UNEP will continue to assist Member States in strengthening the environmental performance of sustainable and restorative agriculture models through promotion of resource-efficient practices for nature, including but not limited to agro-ecology and regenerative agriculture, in collaboration with its partners. UNEP will enhance its contribution to these objectives by building on its work on, among other things, sustainable land use, natural capital accounting, sustainable consumption and production, landscape management and ecosystem restoration. UNEP will continue to support countries in restoring, sustainably using and conserving freshwater ecosystems to secure the provision of freshwater for the sustainable development of sectors and society. It will continue to support integrated coastal zone management and marine spatial planning and cooperate with relevant organizations. It will also continue to provide guidance for increased knowledge and institutional capacity to implement equitable access and the fair and equitable sharing of benefits arising out of the utilization of genetic resources and catalyze action for the sustainable use of terrestrial, freshwater and marine ecosystem resources. There will also be a focus on adopting holistic sustainable consumption and production approaches, using indigenous and local knowledge, supported by sound science, data and statistics. This will be enabled and scaled up by public and institutional procurement policies and consumer choice.

UNITED NATIONS DECADE ON ECOSYSTEM RESTORATION 2021-2030

77. UNEP will support sustainable habitat management through transformative processes and outcomes, including large-scale ecosystem restoration, complemented by social and behaviour change, to minimize damage to highly valued ecosystems, including damage from disasters, conflict and climate change. UNEP will support Member States' actions to prevent and mitigate ecosystem degradation to restore nature and build back resilience, including through ecosystem-based approaches to disaster risk reduction. For forest ecosystems, UNEP will work with partners and through networks on advancing and strengthening the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries as a platform for halting forest loss and degradation. Together with the FAO, UNEP will lead the United Nations system in implementing the United Nations Decade on Ecosystem Restoration 2021—2030 in marine, freshwater and terrestrial ecosystems. For all freshwater ecosystems (lakes, rivers, wetlands, groundwater), UNEP will drive responsible, freshwater-inclusive decision making, using state-of-the-art tools and near-real-time data to elicit local watershed and transboundary action to protect freshwater biodiversity.

78. UNEP will provide the necessary tools and guidance to develop sustainable blue economies in freshwater, coastal and marine zones. It will also promote transboundary collaboration for the conservation, sustainable use and restoration of vulnerable ecosystems, such as coastal, mountain, lake, river and wetland ecosystems, particularly those vulnerable to the impacts of climate change and pollution. Further promotion of sustainable tourism through the One Planet network and the Global Tourism Plastics Initiative will scale up support for policies and practices that generate tourism revenue while maintaining the biodiversity and ecosystems that attract tourists.

Dumpsite in Croatia. Photo: UN Photo / E. Kanalstein

Chemicals and pollution action

79. Preventing, controlling and managing pollution is central to improving health, human well-being and prosperity for all. Good environmental quality and its positive implications for reducing inequity, ill health, poverty and vulnerability are powerful motivation for moving towards a pollution-free planet. A pollution-free planet would positively impact biodiversity and enhance the health of ecosystems by preventing further damage while increasing resilience. Addressing air pollution and waste is also linked to climate change mitigation, especially when action is taken against short-lived climate pollutants. Chemicals and waste can also be a resource for job creation through reuse as secondary materials. Accelerated action on chemicals and pollution will result in benefits for both nature and people and will be aligned with the beyond 2020 framework for sound management of chemicals and waste, as agreed on by Member States.[17] Scaling up action on chemicals and waste also builds on UNEP experience in the development of large multi-focal-area projects funded under Global Environment Facility. A transition towards a pollution-free planet in line with the Sustainable Development Goals recognizes that, by 2025:

a. the actions adopted in the agreed beyond 2020 framework for sound management of chemicals and waste are taken on board in national planning and development;

b. 30 per cent of the world's population lives in areas where WHO Air Quality Interim Target 3 for outdoor $PM_{2.5}$ (a fine particulate matter) is attained;[18]

c. actions towards modifying economy-wide nitrogen use are in place to halve the losses of anthropogenic reactive nitrogen to the environment;[19] and

d. the capacity of countries to achieve Sustainable Development Goal targets 6.3, 12.3, 12.4 and 14.1 is strengthened.[20]

80. The expected 2030 outcome of this UNEP subprogramme is that significant progress is made towards a pollution-free planet, particularly through the delivery of the *Towards A Pollution-Free Planet Implementation Plan*.

81. The chemicals and pollution action subprogramme will operate through the following principles.

a. Recognizing that sustainable consumption and production and sound chemicals and waste management are intrinsically linked and mutually interdependent: UNEP will support the design and implementation of policies and business practices that reduce harmful chemicals in products and processes. It will also enable consumers to make informed choices about products and related waste. This is in recognition of the importance of adopting resource-efficient and sustainable production practices and avoiding the reintroduction of, or exposure to, toxic materials to the value chain or the environment. Sustainable consumption and production results in lower throughputs of materials, less waste and lower health risks.

b. Working through partnerships towards a pollution-free planet: UNEP will maintain a strong focus on addressing various pollution streams and leveraging collaboration with partners, including the Global Environment Facility secretariat, and the Multilateral Environmental Agreements (the Minamata Convention on Mercury, the Basel, Rotterdam and Stockholm conventions and the Montreal Protocol). UNEP will work through global, regional and subregional networks, forums and coalitions focused on pollution reduction, such as the Climate and Clean Air Coalition, antimicrobial resistance through the One Health alliance, and regional ministerial forums on health and the environment. UUNEP will collaborate with other United Nations entities – including WHO, the FAO, the United Nations Children's Fund and UNDP – and other organizations, including the World Bank, the World Trade Organization and the Organization for Economic Cooperation and Development, scientific institutions, national agencies,

17 http://www.saicm.org/Beyond2020/IntersessionalProcess/tabid/5500/Default.aspx.

18 The WHO Air Quality Guideline for outdoor air quality is set at a level intended to be protective of human health. For countries with high air pollution levels (https://www.stateofglobalair.org/air), there are three interim targets. The ambition is for the proportion of the world's population living in areas where interim Target 3 is attained 30 per cent by 2025, compared to 18 per cent in 2017.

19 As per the Colombo Declaration on Sustainable Nitrogen Management, which followed the adoption of Environment Assembly resolution 4/14 on sustainable nitrogen management.

20 Sustainable Development Goal indicator 6.3.1: Proportion of domestic and industrial wastewater flows safely treated; indicator 12.3.1: (a) food loss index; and (b) food waste index; indicator 12.4.1: number of parties to international Multilateral Environmental Agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement; indicator 12.4.2: (a) hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment; and indicator 14.1.1: (a) index of coastal eutrophication; and (b) plastic debris density.

BY 2025

The actions adopted in the agreed beyond 2020 framework for sound management of chemicals and waste are taken on board in national planning and development.

30 per cent of the world's population lives in areas where WHO Air Quality Interim Target 3 for outdoor $PM^{2.5}$ (fine particulate matter) is attained.

Actions towards modifying economy-wide nitrogen use are in place to halve the losses of anthropogenic-reactive nitrogen to the environment.

The capacity of countries to achieve Sustainable Development Goal targets 6.3, 12.3, 12.4 and 14.1 is strengthened.

TOWARDS A POLLUTION-FREE PLANET

non-governmental organizations, foundations, and the private sector to assist Member States in implementing pollution reduction efforts.

c. ***Recognizing that global and regional environmental agreements provide a collaborative framework for governance and time-bound actions*:** While Multilateral Environmental Agreements are key to sound management of chemicals and waste, important implementation challenges remain, including: availability of data, information and knowledge; policy design; adequate legislation; implementation and enforcement capacity and compliance mechanisms; availability of infrastructure and accessible clean technologies; institutional and technical capacity; business and industry leadership; intersectoral collaboration and transboundary cooperation; and true-cost pricing. UNEP will support countries in developing the necessary policies, strategies and legislation to implement their respective obligations under the Multilateral Environmental Agreements while strengthening national institutions and mechanisms to monitor and report on related progress.

d. ***Responding to country priorities and needs to reduce and prevent pollution*:** UNEP will assist in identifying the types and extent of pollution and offer remedial and preventive actions, highlighting the importance of investing in local and national pollution action, including through the United Nations Sustainable Development Cooperation Framework. UNEP will promote mutual learning and transfer of effective policies, good practices, experiences, initiatives and green technologies within and across countries and local contexts. UNEP will apply a gender lens to this work, supporting countries to ensure that their efforts to reduce and prevent pollution are gender-sensitive.

e. ***Working to support system-wide changes to address pollution***: UNEP will develop mechanisms to incentivize and redirect public and private finance and investments to cleaner economic activities by internalizing the costs of pollution in financial decisions and adopting public disclosure and pollutant release and transfer registers. UNEP will contribute to building circularity and the necessary preconditions, including the absence of toxic chemicals, across value chains. The sound management of chemicals and waste enables circular approaches in high-impact sectors[21] by offering the knowledge and experience of the chemicals and waste communities on the sound management of substances throughout their life cycle to develop innovative circular solutions and avoid regrettable substitutions. Recognizing the importance of the private sector in developing sustainable alternatives with a clear understanding of life-cycle impacts, UNEP will ensure a system-wide approach. UNEP will also promote end-of-life policies (such as extended producer responsibility) and promote and communicate to consumers the practices that keep products in the economy longer.

21 Chemical-intensive industry sectors (based on the *Global Chemicals Outlook II*) (e.g., food and agriculture systems, extractives, transportation, building and construction, energy, electronics, pharmaceuticals and textiles).

The chemicals and pollution action sub-programme will focus on UNEP's comparative advantage to achieve three 2025 outcomes

Outcome 1: Human health and environmental outcomes are optimized through enhanced capacity and leadership in the sound management of chemicals and waste

82. UNEP will promote sound science and information and knowledge sharing on chemicals, waste and pollution. It will foster and facilitate access and sharing of up-to-date, credible and relevant information, data and statistics. This will enable better-informed actions to prevent and address pollution and its impacts and promote systemic shifts at all levels of governance and among consumers. UNEP will support countries in undertaking analysis and using tools to identify the most polluting economic sectors and products. It will work with partners to support countries in adopting pollutant release and transfer registers and linking them to the UNEP World Environment Situation Room.

83. UNEP will accelerate policy shifts towards the sound management of chemicals and waste. It will support the design of science-based, integrated and coherent regulatory frameworks and policies, build on the polluter pays principle, and use life-cycle approaches. This will assist in strengthening implementation and effectiveness — taking advantage of environmental data insights as enabled by digital technologies — and significantly reducing the harmful effects of chemicals

of major public health concern.[22] UNEP will support efforts to eliminate the production, distribution and trade of such chemicals and promote sound chemicals and waste management in accordance with the objectives of the chemicals and waste Multilateral Environmental Agreements. UNEP will align its actions with the agreed objectives and outcomes of the beyond 2020 framework for sound management of chemicals and waste as these are developed, supporting countries in their implementation and providing technical support on issues of concern, scientific data and information, and indicators, in line with Environment Assembly resolutions.[23] Sustainable consumption and production policies will be pursued, in alignment with the vision of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP) (A/CONF.216/5). UNEP will also support Member States and stakeholders in their efforts to prevent and mitigate environmental and health threats through the use of a One Health[24] approach.

84. UNEP will strengthen institutions and build capacity to act. It will support Member States with technical capacity and institutional strengthening, including implementation of cross-sectoral national chemical management regimes and integrated approaches to financing, through the promotion of knowledge and information sharing, policy support, rapid response support, tools and good practices. Integrated approaches through multi-sectoral engagement, especially of the health and environment sectors, will be supported at all levels and in close collaboration with relevant United Nations entities, including in the context of the UNEP COVID-19 response and future pandemic preparedness.

85. UNEP will raise ambition and leadership on sustainable and healthier living through advocacy, champions and UNEP's convening power. Taking into account lessons learned and experiences with the Strategic Approach to International Chemicals Management, UNEP will leverage the Inter-Organization Programme for the Sound Management of Chemicals and engage policymakers, youth, academia, civil society, financial institutions and the private sector to gain support for positive environmental change, reducing and preventing pollution and promoting sustainable, healthier living. UNEP, with partners, can reach millions through robust campaigns such as #BreatheLife, #CleanSeas, #BeatPollution and #TimeforNature, observance of the International Day of Clean Air for blue skies[25] and the New Plastics Economy Global Commitment.

22 https://www.who.int/ipcs/assessment/public_health/chemicals_phc/en/.

23 E.g., Environment Assembly resolutions 4/8 and 2/7 on sound management of chemicals and waste and resolution 1/5 on chemicals and waste.

24 https://www.who.int/news-room/q-a-detail/one-health.

25 https://www.un.org/en/observances/clean-air-day.

Outcome 2:

Waste management is improved, including through circular processes, safe recovery of secondary raw materials and progressive reduction of open burning and dump sites

86. UNEP will mainstream the 3Rs (reduce, reuse and recycle) and circular processes across waste flows while ensuring safe secondary raw materials recovery. UNEP will identify innovative solutions to build circularity across resource- and chemicals-intensive industry sectors. It will work with companies, research institutions, the waste management sector, civil society groups, and other stakeholders, in accordance with the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, to offer alternatives to current linear economic models. It will also work with municipalities and development organizations to create local employment opportunities. It also involves mainstreaming pollution reduction and sound management of chemicals and waste into development and humanitarian action and helping relevant actors address environmental risk factors negatively affecting the health of the most vulnerable populations.

87. UNEP will support countries and stakeholders in reducing the use of materials, energy, water and agricultural inputs through the adoption of resource-efficient and circular approaches whenever possible. Such approaches can reduce waste streams and improve secondary flows, provided these are free of toxins, while enabling resource access, affordability, availability and sustainability for all, resulting in job creation and improving community health and climate resilience.

88. UNEP will support efforts to identify and close open dumpsites, in partnership with entities such as the International Solid Waste Association and United Nations Human Settlement Programme, and encourage national and local efforts for mandatory waste collection and segregation at source.

89. UNEP will scale up ongoing efforts on greening waste and wastewater management infrastructure. It will support governments at all levels in developing, implementing and complying with resilient and effective waste and wastewater management systems and sustainable infrastructure, including natural infrastructure.[26] Partners will include multilateral development banks, wastewater and solid waste management associations, and the private sector, and supporting action will include adopting ecosystem-based approaches and upstream solutions that promote circularity and can be monitored using key environmental, health and climate indicators.

26 The term "natural infrastructure" refers to a strategically planned and managed network of natural lands, such as forests and wetlands, working landscapes and other open spaces, that conserves or enhances ecosystem values and functions and provides associated benefits to human populations.

Outcome 3: Releases of pollutants to air, water, soil and the ocean are reduced

90. UNEP will support the shift away from the generation, production and use of harmful chemicals that pose a risk to human health and the environment while promoting sound management of chemicals and waste in general. UNEP will continue working to minimize the adverse effects of such chemicals on human health and the environment, supporting the implementation of the Multilateral Environmental Agreements and the agreed beyond-2020 framework for sound management of chemicals and waste. UNEP, with partners, will aim to ensure that regulations, standards and policies are in place to facilitate the shift to safer alternatives. It will strive for the identification, phasing-out and sound management of chemicals in products and processes to reduce the risks to human health and the environment and minimize the waste and pollution generated. UNEP will increase and disseminate knowledge on chemicals of public health concern,[27] develop and implement methodologies and tools for tracking and controlling such chemicals and

UNEP helps prevent pollution, improving health and human well-being while safeguarding ecosystems and increasing their resilience to shocks.

support sectors in designing products and processes that are safer and cleaner, including through green and sustainable chemistry. Safe production processes and safeguards will benefit from fiscal instruments that reflect the polluter pays principle and correct for market failures.

91. UNEP will influence producer, procurement and investment decisions regarding chemicals use by fostering more informed consumer choices based on awareness of the environmental footprint of products consumed and used. Sustainable and responsible consumption choices will be aided by increased awareness, accurate and relevant information, and fiscal incentives, as well as by ensuring consumer engagement by providing reliable sustainability information. UNEP will work with governments and information providers (companies and standard-setting and labelling schemes) to increase the availability of clear, reliable information on chemicals in products, contributing to consumer literacy, in line with multilaterally agreed norms and standards.

92. UNEP will support ongoing efforts to reduce in-country and transboundary air pollution. It will improve air quality monitoring and assessments and support air quality management plans and actions at the national and subnational levels, targeting specific sectors, including mobility, industrial operations, energy, waste and agriculture, while assisting countries in identifying related local health priorities and multiple benefits. Through regional monitoring networks and partnerships on air quality, UNEP will address the mitigation of short-lived climate pollutants that cause air pollution and climate change, thus promoting and scaling up integrated action towards achieving Paris Agreement targets. UNEP will work with the Office of the United Nations High Commissioner for Refugees and the United Nations inter-agency Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement,[28] which aim to support access to clean energy for refugees and people displaced by conflict and environmental stresses, in particular women, to avoid the health impacts from inefficient cooking practices and lighting and the related unsustainable deforestation.

93. UNEP will scale up ongoing efforts to address land-based sources of freshwater and marine pollution, especially nutrients, chemicals and plastic and other forms of marine litter. Through the Global Partnership on Marine Litter, the Global Partnership on Nutrient Management, the Regional Seas Programme and relevant digital platforms, UNEP will support stakeholders in taking an evidence-based approach to identifying key sources, pathways and hazards, from source to sea and across product life cycles. Action on the most problematic products, sources and sectors will be prioritized through action plans on marine litter and nutrients. To address global plastic pollution, UNEP will engage all stakeholders in the plastics value chain in scaling up resource efficiency, sustainable materials management and circularity, by building political support and leadership for reducing and reusing plastics; supporting countries, cities and businesses in meeting their commitments and voluntary actions to tackle plastics pollution, including through legislative guidance; and raising awareness on innovative solutions, alternatives and new business models.

27 https://www.who.int/ipcs/assessment/public_health/chemicals_phc/en/.

28 https://www.humanitarianenergy.org/what-is-the-gpa.

Foundational subprogrammes

Science-policy

94. **Science is the foundation for any policy setting and for identifying potential solutions to the environmental challenges we face**. The core mandate of UNEP is to keep the world environment situation under review and strengthen the interface between science and policymaking across the sustainable development agenda. The science-policy subprogramme delivers scientifically credible and unbiased data, information and knowledge and provides policy-relevant analysis and recommendations to catalyze and accelerate solutions and actions for the environment based on continuous global status and trends.

95. **The science-policy subprogramme will focus on the following actions and interventions to underpin the achievements of the UNEP thematic subprogrammes.**

a. ***Increasing the uptake of science for transformative action*:** UNEP will provide expertise on environmental matters, bringing the latest scientific evidence and multidisciplinary analysis on the state of the world environment and related trends to the attention of policy and decision makers at all levels and the public at large. UNEP will build the capacities of government and non-government actors at national and local levels to take up the latest scientific information to inform policy development and drive transformative and systemic actions on the challenges of climate change, biodiversity loss and pollution while pre-empting the rise of other environmental challenges. The subprogramme will reach beyond the environmental community and make the case for putting the environment at the centre of economic and social decision making. Through gender-responsive partnerships across all geographic areas, involving governments and non-governmental organizations, and the business and the citizen community, UNEP will aim to be a catalyst of systemic and transformative shifts that can drive progress towards the aspirations of the 2030 Agenda.

UNEP delivers scientifically credible and unbiased data, information and knowledge and provides policy-relevant analysis and recommendations to catalyze and accelerate solutions and actions for the environment based on continuous global status and trends.

b. ***Providing authoritative science, delivered with greater coherence and integration*:** UNEP will continue to be an authoritative voice on the environment in the global scientific community, collecting, analyzing and synthesizing scientific data that speaks to the interconnected challenges of climate change, biodiversity loss and pollution. The signature, policy-relevant scientific assessments of UNEP include its flagship *Global Environment Outlook* reports, the *Emissions Gap* and *Adaptation Gap* reports, the *Frontiers* reports, the *World Water Quality* assessment report and the *Global Resources Outlook*, *Global Waste Management Outlook* and *Global Chemicals Outlook* reports. UNEP will ensure these assessments complement and connect with the existing scientific literature to increase their impact and uptake in policymaking. To that end, UNEP will continue facilitating the Ad Hoc Global Assessments Dialogue,[29] involving the Intergovernmental Panel on Climate Change, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the International Resource Panel and the processes for the development of the *Global Environmental Outlook* and the *Global Sustainable Development Report*, among others. UNEP will add value to these processes by proposing systematic and integrated solutions to the challenges of climate change, biodiversity loss and pollution, based on a systemic and trans-disciplinary analysis of their interconnections in relation to socioeconomic and equity issues. Through the mutual sharing of data and information, methods and tools, key findings and expertise, this process will suggest policy options to move from business as usual towards sustainability in a cost-effective manner. The dialogue will also contribute to the preparation and delivery of coherent and mutually reinforcing messages that can inform international negotiations and decisions in the framework of Multilateral Environmental

29 The Ad Hoc Global Assessments Dialogue builds on Member States' request, in Environment Assembly resolution 4/23, on keeping the world environment under review: enhancing the United Nations Environment Programme science-policy interface and endorsement of the Global Environment Outlook, that the Executive Director of UNEP "continue to promote greater coherence and coordination of global assessments undertaken within the United Nations system and in cooperation with relevant international bodies and the secretariats of the Multilateral Environmental Agreements."

Climbing to an observation platform in the area of Danum Valley Field Center. Sabah, Malaysia.
Photo: CIFOR / G. Girard

Agreements and other internationally agreed frameworks, as well as global environmental platforms such as the United Nations Environment Assembly.

c. ***Closing the gap regarding the availability of environmental data is essential for assessing and reviewing progress towards the achievement of the Sustainable Development Goals and fostering synergies among the Multilateral Environmental Agreements***: UNEP will continue to measure and monitor countries' progress towards the Sustainable Development Goals and other internationally agreed environmental goals, providing timely data analysis and early warnings for policy and decision makers. UNEP will contribute to easing the burden of country reporting on progress by building as much as possible on existing credible data and reliable baselines and by aligning its reporting requirements with the Sustainable Development Goals indicators. UNEP will facilitate open-access and inter-institutional data and information exchanges, including at the national, regional and subnational levels. Pursuing greater scientific collaboration with the global and regional Multilateral Environmental Agreements, as well as facilitating coordination and exchanges among the Multilateral Environmental Agreements themselves, while respecting their mandates, will allow for greater harmonization of country data and methodologies for tracking progress. It will also facilitate better analysis and comparability for decision making.

d. ***Digitizing scientific knowledge and democratizing availability while anticipating emerging issues through foresight and horizon scanning***: Digital tools and technologies can accelerate the integration of environmental analysis with social and economic data, as well as better equip decision makers at all levels to assess the effectiveness, relevance and impact of global environmental policies. To that end, the World Environment Situation Room will be an asset for UNEP intervention at the local, regional and international levels. In line with the aspirations of a new global environmental data strategy,[30] UNEP will continue to leverage the Situation Room as a leading global digital environmental platform for enabling governments, the public at large, as well as the broader United Nations system and particularly United Nations country teams,

30 Through the ministerial declaration of the United Nations Environment Assembly at its fourth session, "Innovative solutions for environmental challenges and sustainable consumption and production" (UNEP/EA.4/HLS.1), Member States committed themselves to supporting UNEP in developing a global environmental data strategy by 2025 in cooperation with other United Nations bodies.

to visualize the state and performance of the world environment underpinned by economic and social data. The Situation Room will draw on near-real-time maps supported by geospatial technologies and offer a public knowledge platform informed by in situ satellite and data modelling sources, as well as citizen science. This system will measure the effectiveness of the pace and scale of the required policy transformations for the environment and enable the assessment of options for action. As part of the horizon-scanning and foresight process, the Situation Room will also contribute to tracking emerging environmental and human health risks, bringing these to the attention of governments for the purpose of prioritizing research informed by large-scale systematic analysis and taking political actions, including at the United Nations Environment Assembly and other forums.

e. ***Developing an inclusive science-policy interface that speaks to all***: An effective science-policy interface capable of catalyzing transformative policies and decisions must be supported by inclusive environmental and social advocacy. In this respect, UNEP intervention will focus on building the capacities of national and local decision makers to manage and synthesize scientific knowledge and embed science in their decisions that drive action on climate change, biodiversity loss and pollution. UNEP will pursue broad stakeholder engagement as a critical step in enhancing societal understanding, acceptance and uptake of its scientific analysis. Through platforms and networks such as the Science-Policy-Business Forum on the Environment, the International Resource Panel, the World Adaptation Science Programme and the One Planet network, among others, UNEP will serve as a knowledge broker that builds consensus around existing and emerging environmental issues. UNEP will be a facilitator that enables partnerships and joint action across stakeholders from the scientific and policy communities, with societal endorsement. Communication and advocacy will remain key tools to spur societal engagement. To that end, UNEP will communicate its scientific information in a language that is accessible to all and that can influence and stimulate inclusive decision making and environmental action at the appropriate scale and pace.

UNEP will contribute to climate stability by providing scientific information that measures progress towards carbon neutrality and resilience and assesses the potential and risks associated with the measures applied. It will compile, assess and communicate the latest climate-related scientific data and propose policy options to help public- and private-sector decision makers engage in ambitious climate actions in line with the goals of the Paris Agreement.

UNEP will make living in harmony with nature a reality by providing the scientific information and data needed to secure policies and actions for nature. Science will be the basis for justifying the uptake of such systemic policies, actions and solutions across all sectors to halt and reverse the loss of biodiversity and ecosystem integrity in line with the targets and goals of the agreed post-2020 global biodiversity framework.

UNEP will take us towards a pollution-free planet by facilitating access to up-to-date, credible and relevant scientific information, data and statistics on chemicals, waste, and pollution. This will encourage systemic shifts towards less polluting outcomes at all levels of governance and in all relevant segments of society, including consumers, and inform the design and implementation of the necessary regulatory frameworks and policies.

Science-policy: a foundation

UNEP will put science at the centre of sound environmental governance. Access to the latest environmental information, horizon scanning and informed analysis of the interconnections between the three mutually reinforcing crises of climate change, biodiversity loss and pollution will drive coherent, more system-level decision making towards more effective legal and institutional environmental frameworks at the national and regional levels, including the agreed post-2020 frameworks, and stronger human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment for all.

UNEP will ensure that sound science supports finance and economic transformations. It will triangulate science with the policy and business community to nudge finance and market systems towards sustainable shifts, advocate for the adoption of sustainable consumption and production patterns at all levels and accelerate societal changes towards more circular economic and business models.

UNEP will leverage digital transformations to digitize scientific knowledge and democratize its availability. It will capitalize on the World Environment Situation Room as the prime global digital platform for enabling governments and the public at large to visualize the state and performance of the world environment, drawing attention to new and emerging environmental issues and offering an analysis of the effectiveness and impact of existing environmental policies, underpinned by economic and social data.

Environmental governance

96. Environmental governance is the institutional and legal architecture needed to make environmental goals and commitments a reality. Supporting countries in developing and implementing environmental policies in an integrated manner and abiding by strong legal and institutional frameworks that effectively achieve environmental goals in the context of sustainable development at the global, regional and national levels is part of UNEP's core work. This subprogramme supports coherent decision making towards more effective legal and institutional frameworks that underpin the achievement of internationally agreed goals for climate, biodiversity and pollution in the context of the 2030 Agenda.

97. The environmental governance subprogramme will focus on the following actions and interventions to underpin the achievements of the UNEP thematic subprogrammes.

a. ***Strengthening the transformative role of the United Nations Environment Assembly as the highest global environmental decision making body to deliver on the environmental dimension of the 2030 Agenda for Sustainable Development*:** UNEP will continue to work closely with Member States, Multilateral Environmental Agreements secretariats, United Nations entities and United Nations major groups and stakeholders to ensure that environmental considerations, particularly those identified as emerging challenges by the United Nations Environment Assembly, are well reflected and integrated into relevant intergovernmental discussions at the international level. Through its regional offices, UNEP will provide robust support to regional environment ministers' meetings and facilitate sharing of inputs and coherent environmental messaging across the regional environment ministers' meetings, the regional forums on sustainable development, the United Nations Environment Assembly and the high-level political forum on sustainable development. UNEP will also leverage its role as the secretariat and chair of the Environment Management Group to better mainstream environmental issues into the work of the United Nations system while helping to coordinate the group's environmental activities for maximum impact and efficiency.

b. ***Amplifying impact across the global environmental agenda through enhanced cooperation with the Multilateral Environmental Agreements*:** UNEP will enhance programmatic cooperation with the respective secretariats and governing bodies of the 15 Multilateral Environmental Agreements that it administers, as well as other global conventions, such as the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification, by developing practical tools and working methods to support coherent and effective implementation both within and across their thematic clusters at the international and national levels. In this context, in collaboration with other United Nations system organizations, UNEP will provide rigorous support for the development and implementation of the agreed post-2020 global biodiversity framework and the beyond-2020 framework for sound management of chemicals and waste. UNEP will continue to deliver on its mandate as an implementing agency of the Multilateral Fund for the Implementation of the Montreal Protocol, and will work closely with relevant stakeholders, partners and funding mechanisms, such as Global Environment Facility and the Green Climate Fund, to support countries and regions in implementing the Multilateral Environmental Agreements effectively.

c. ***Supporting countries in identifying integrated approaches to the three dimensions of sustainable development, including the incorporation of environmental considerations into sustainable development planning***: In the spirit of paragraph 88 of the Rio+20 outcome document, ***The Future We Want***, UNEP will support countries in building their legal and institutional frameworks and capacity to mainstream the environment into national planning and development processes. Particularly as the custodian agency for Sustainable Development Goal indicator 17.14.1, "Number of countries with mechanisms in place to enhance policy coherence of sustainable development", UNEP will work closely with countries, at their request, to promote integrated approaches and policy coherence for sustainable development that address the

Supports countries in developing and implementing environmental policies in an integrated manner and promotes coherent decision making towards more effective legal and institutional frameworks that underpin the achievement of internationally agreed goals for climate, biodiversity and pollution in the context of the 2030 Agenda.

Recyclers work at a recycling plant in Montevideo, Uruguay. Photo: Reuters / A. Stapff

economic, environmental and social dimensions in a balanced manner. UNEP will assist countries in aligning their relevant national policies with the international goals of the Multilateral Environmental Agreements and the Sustainable Development Goals and their associated targets while providing advisory services, awareness-raising and support for data collection and environmental knowledge management.

d. ***Supporting countries in building relevant capacity in environmental law and contributing to the environmental dimension of the 2030 Agenda for Sustainable Development through the Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme)*:** UNEP support will include results-oriented, gender-responsive and country-driven strategic activities to promote public participation, access to information and access to justice in environmental matters. Special focus will be placed on disaster and conflict-affected countries, including through actions that target the most vulnerable populations. In coordination with the national focal points for the Montevideo Programme, UNEP will provide enhanced and sustainable capacity-building support for key environmental law stakeholders, including judges, prosecutors and enforcement officers. UNEP will also produce guidance products, including national, regional and global analyzes and assessments based on robust environmental data. It will track and advance shared understanding and facilitate action on key emerging issues related to environmental law.

e. ***Leading the United Nations system and supporting national governments, at their request, in the development and implementation of environmental rule of law***: UNEP has a clear mandate to lead the United Nations system in supporting governments in the development and implementation of environmental rule of law.[31] Under the Montevideo Programme, UNEP will promote information and data exchange, education, capacity building and technical assistance, with a view to strengthening national environmental governance systems, improving environmental rule of law and contributing to the environmental dimension of the 2030 Agenda at the international and national levels. As part of this support, UNEP will conduct biennial data-informed global assessments of environmental rule of law that will track and report on core elements of environmental rule of law, including laws and institutions, civic engagement, rights and justice.

f. ***Advancing human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment***:[32] A safe, clean, healthy and sustainable environment is integral to full enjoyment of a wide range of human rights, including the rights to life, health, food, water and sanitation. It is therefore key to protecting and improving human

31 See UNEP Governing Council decision 27/9, on advancing justice, governance and law for environmental sustainability. The UNEP mandate on the rule of law and the means for UNEP to achieve it were strengthened through the adoption of Environment Assembly resolution 4/20 on the Fifth Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme V).

32 The second Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme II), which was adopted by UNEP Governing Council decision 17/25 of 21 May 1993, included the "further development of environmental rights" (Programme area H, activity (c)) as a concept for further consideration and development. The Fourth Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme IV), adopted by UNEP Governing Council decision 25/11 of 20 February 2009, included human rights and the environment as an element of the programme. The Fifth Montevideo Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme V), adopted by Environment Assembly resolution 4/20, includes a strategic activity to promote the recognition of the mutually reinforcing relationship between environmental law and the three pillars of the Charter of the United Nations.

lives, and particularly those of the poor and marginalized. In partnership with the Office of the High Commissioner for Human Rights and other actors, UNEP will support countries, at their request, and collaborate with the wider United Nations system to enhance the effective and inclusive promotion, protection and respect of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment,[33] including through the implementation of relevant Human Rights Council, General Assembly and Environment Assembly resolutions.[34] This will support countries in upholding human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, while making continued progress towards realizing universal recognition of the human right to a clean, healthy and sustainable environment.

33 Human Rights Council resolution 37/8 of 22 March 2018, on human rights and the environment, adopted at the 37th session of the council, noted that more than 100 states had recognized some form of a right to a healthy environment in, inter alia, international agreements, their constitutions, legislation or policies.

34 Including Human Rights Council resolution 40/11 of 21 March 2019, on recognizing the contribution of environmental human rights defenders to the enjoyment of human rights, environmental protection and sustainable development, adopted at the 40th session of the council, as recalled by General Assembly resolution 74/146, adopted by the assembly on 18 December 2019; UNEP Governing Council decision 27/9 of 22 February 2013; Environment Assembly resolution 4/17 of 15 March 2019; and Environment Assembly resolution 4/20 of 15 March 2019.

UNEP will contribute to climate stability by promoting the environmental rule of law to help achieve the aims of the Paris Agreement. National governments will be supported through the promotion of information and data exchange, education, capacity-building and technical assistance, to strengthen national environmental governance systems and improve the rule of law, with the aim of fully implementing the Paris Agreement.

UNEP will make living in harmony with nature a reality by supporting countries in developing legislation that has impact. Countries will receive support in developing the necessary policies, legislation and strategies to implement their respective obligations under the Multilateral Environmental Agreements in a coherent manner while strengthening national institutions and mechanisms for monitoring and reporting on related progress. In this context, UNEP will provide guidelines and tools for effective implementation.

UNEP will progress towards a pollution-free planet by advocating for the right to a clean, healthy and sustainable environment. Countries will receive support in developing the necessary policies, legislation and strategies to implement their respective obligations under the Multilateral Environmental Agreements in a coherent manner. In this context, UNEP will provide guidelines and tools for effective implementation. The Montevideo Programme can accelerate policy shifts towards the sound management of waste, including marine litter, with a focus on the environment and health nexus. UNEP will continue to support human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment.

Environmental governance: a foundation

UNEP will use the science-policy interface to support strong environmental governance. National governance frameworks will be strengthened through the promotion of information and data exchange, education, capacity-building and technical assistance, to strengthen national environmental governance systems and improve the environmental rule of law based on proven scientific evidence.

UNEP will promote integration of the environmental dimension when supporting finance and economic transformations. Strengthening the environmental dimension of economic policy decisions will lead to enhanced coherence in approaches to sustainable development and the uptake of sustainable development in national planning and policymaking. It will also assist countries in drawing up and implementing effective policy, and enabling frameworks that cut pollution through cleaner economic activities that also reduce biodiversity loss.

UNEP will use digital transformations for coherent and inclusive environmental governance. UNEP will accelerate support for the scale-up of knowledge management and data reporting at the national level. This will support countries in the coherent implementation of the Multilateral Environmental Agreements and increase the understanding of the data linkages between climate change, biodiversity loss and pollution in the context of sustainable development, including as it pertains to human health.

Enabling subprogrammes

Finance and economic transformations

98. Shifting finance and business practices towards sustainable patterns of consumption and production – and towards reducing climate impacts, biodiversity loss and pollution – is crucial to realizing the aspirations of the 2030 Agenda. Important opportunities exist to decarbonize and manage resources more responsibly while also addressing sustainability, poverty, equity, employment, economic growth, security and health objectives. Three of the six One Planet network programmes are helping to create enabling environments and shift markets and preferences: sustainable public procurement, consumer information, and sustainable lifestyles and education. With digital technologies and connectivity, new ways for natural resources to support sustainable and inclusive rural and urban transformation are being tested and piloted. UNEP will build on and integrate its decades-long normative work on sustainable finance, the inclusive green economy and sustainable trade, consumption and production and will leverage the United Nations reform and its partnerships to take such initiatives to scale in countries in support of an environmentally, socially and economically sustainable post-COVID-19 recovery and environmental sustainability.

99. The finance and economic transformations subprogramme will focus on the following actions and interventions to facilitate the achievements of the UNEP thematic subprogrammes.

a. ***Building on and integrating UNEP initiatives in support of inclusive green economies in countries:*** Bringing together its many complementary initiatives, UNEP will assist countries in drawing up and implementing effective frameworks for sustainable consumption and production, including resource efficiency and circularity, and reflecting them in relevant national plans and policies.[35] UNEP will support practices that reduce pollution and address drivers of biodiversity loss through cleaner, more resource-efficient economic activities that improve climate stability, reduce biodiversity loss and move economies and societies towards a pollution-free world. Activities will include support for re-purposing subsidies and fiscal and pricing reforms for sustainability and a transition to inclusive green economies, which will be implemented through United Nations country teams and partners.

b. ***Supporting business models and policies for accelerating sustainable consumption and production, including through resource-efficient and circular approaches***:[36] UNEP and its networks, including the One Planet network, the Partnership for Action on Green Economy, the Green Growth Knowledge Platform and Global Opportunities for Sustainable Development Goals, will support countries, cities and businesses in accelerating a transition to value chains that are more circular, cleaner and more resource-efficient, among other pathways to accelerating sustainable consumption and production. This ranges from the extraction and use of natural resources to product design, sustainable management and circularity of material flows, creation of the right sustainability incentives and enabling of policy frameworks for circularity and sustainable materials, as well as business ideas for various industry sectors, such as construction and infrastructure. UNEP will use enabling tools, such as sustainable public procurement, education and consumer information, to influence behaviour and shift consumption, as well as underlying assessment methodologies, such as urban metabolism, circular jobs and life-cycle approaches, to identify new opportunities. These approaches can be adjusted to target and support small and vulnerable suppliers and markets, taking into consideration global, regional, national and local contexts. The digital ecosystem will be harnessed to maximize sustainability gains from the transformation and monitor its impacts, guided by data analytics using science and consumer-based approaches. Digital technologies can also ensure access to better choices, addressing sectoral hot-spots, nudges and incentives that can complement informed choices and increase information on efficient and resilient value chains. They can also help consumers identify and purchase goods and services that are more sustainable, more efficient and less polluting.

UNEP promotes the shift of finance and business practices towards sustainable patterns of consumption and production – and towards reducing climate impacts, biodiversity loss and pollution to realize the aspirations of the 2030 Agenda.

35 See Environment Assembly resolution 4/1 on innovative pathways to achieve sustainable consumption and production.

36 See Environment Assembly resolution 4/1.

Solar panel trees at Quranic Park in Dubai, UAE.
Photo: Reuters / S. Kumar

c. ***Accelerating the alignment of finance with sustainability objectives and policy priorities***: The UNEP Finance Initiative will work through its various normative initiatives, such as the Principles for Responsible Banking, the Principles for Sustainable Insurance, the Net-Zero Asset Owner Alliance and the Principles for Positive Impact Finance, to align banking, insurance and investment practices to support inclusive green economy transformations. UNEP will work with its partners to scale up its engagement with industry, business and investor communities to shift towards a greater sense of responsibility to people and the environment in high-impact sectors, such as extractives, infrastructure and agriculture. UNEP will seek to promote access to sustainable digital finance that is gender-responsive, including for micro-, small- and medium-sized enterprises.

d. ***Supporting cities, infrastructure, buildings and construction in urban and peri-urban areas to become more resource efficient, circular and clean***: With the onslaught of COVID-19, cities and urban dwellers were fully exposed to their dependence on nature and their sometimes fragile value chains for bringing food and critical supplies, with the pandemic coming on top of a housing crisis and exacerbating existing inequalities. The findings from the International Resource Panel – such as the Weight of Cities report – and the work of 10YFP will inform a systems approach aimed at transforming finance, governance, business models and key sectors in urban areas to increase their resilience to pandemics and other shocks and scarcities. UNEP will focus on more sustainable and resilient value chains in the food, buildings, mobility, extractives and energy sectors, and it will spur integrated approaches to planning and design, particularly in public and private infrastructure, connecting grey, blue and sustainable infrastructure.[37] In doing this, UNEP will work with the United Nations Human Settlement Programme in support of subnational governments, given their essential role in creating change and implementing policy decisions, as well as across all levels of government.

e. ***Catalyzing green investment for an inclusive and sustainable rural transformation in support of jobs and ecological resilience and restoration***: In the context of COVID-19 and other socioeconomic

37 This will build on the GEF Sustainable Cities Impact Programme, with an integrated approach and emphasis given to circularity, ecosystem-based approaches through integrated planning and design, and greening of cities to enhance quality of life.

drivers, with many migrants returning to rural areas, ensuring ecosystem resilience and job opportunities to enable the absorption of the returnees will be critical. UNEP will work with other United Nations entities and its partners in government and industry to provide sustained long-term support for a sustainable recovery. It will use advanced tools to support restoration of degraded ecosystems and investment in nature for new job opportunities, biodiversity enhancement and climate mitigation and adaptation, as well as to support the transition to sustainable agriculture and food systems, and to enhance inclusive environmental governance for natural resource management more generally.

f. ***Providing inclusive wealth statistics to better inform the links between natural assets, poverty and inequality and thereby enhance the capacity of Member States to deliver on the 2030 Agenda*** *(UNEP, 2018)*: Poverty and inequality are likely to influence other trends in the post-pandemic world, as suggested in the latest report of the Secretary-General on progress towards the Sustainable Development Goals (E/2020/57). Climate change and biodiversity loss, combined with the impact of the pandemic, will hit the poorest hard, aggravating existing disparities and pushing people below the poverty line. UNEP's work on inclusive wealth will support national statistics offices in their efforts to monitor the environmental dimension of the Sustainable Development Goals and develop a statistical infrastructure for inclusive wealth statistics, which will present an opportunity to explicitly define the recovery from COVID-19 in terms of sustainable development, linking to the aspirations of the Paris Agreement and the Beyond GDP[38] movement.

38 The Beyond GDP initiative is about developing indicators that are as clear and appealing as GDP, but more inclusive of environmental and social aspects of progress. See https://www.weforum.org/agenda/2016/04/beyond-gdp-is-it-time-to-rethink-the-way-we-measure-growth/.

UNEP will contribute to climate stability by promoting business models and markets for decarbonization, adaptation and resilience. It will engage value chain actors in adopting energy- and resource-efficient solutions, advocate for financial alignments and disseminate consumer information tools to support sustainable lifestyles.

UNEP will make living in harmony with nature a reality by developing and advocating for sustainable finance and economic measures that redress biodiversity loss, promote consumption and production practices that reduce pressure on ecosystems and nature, and reflect the importance of the socioeconomic dimension of nature and biodiversity. It will promote the economics of biodiversity, identifying its value, its link to human health and the socially just outcomes of natural resource management.

UNEP will support countries in transitioning towards a pollution-free planet by promoting the internalization of the true costs of pollution in financial and economic decisions by public and private actors, to redirect finance and investments towards cleaner and safer economic activities, more responsible behaviour, healthier people and a healthier planet. It will recognize the intrinsic links and mutual interdependence of sustainable consumption and production and sound chemicals and waste management by adopting a system-wide value-chain approach to addressing pollution.

Finance and economic transformations: an enabler

UNEP will leverage the science-policy interface by drawing on robust and relevant science and data to enhance the understanding, acceptance and uptake of sustainable choices by actors along the value chain, including economic policymakers and the financial sector, and to inform public and private investment.

UNEP will leverage environmental governance frameworks, in partnership with non-state actors, to address support and strengthen the institutions that guide and shape market behaviour and promote coherent and integrated approaches to addressing unsustainable patterns of consumption and production. It will aim to mainstream aspects of sustainable finance and economics into sectoral, institutional, legal and regulatory frameworks.

UNEP will enhance its use of digitalization to make sustainable finance more accessible and better adapted to public and private users of all sizes and to bring footprint and life-cycle information to consumers, businesses and policymakers. It will also engage partners to reduce the environmental footprint of the information and communications technology sector. These actions will build on the recognition, in the Addis Ababa Action Agenda, of the need to secure additional finance for the transition to sustainable consumption and production.

Digital transformations

100. Digitalization is sweeping the planet — changing our economy, society, institutions and even our humanity. However, this does not always happen in an inclusive, equitable or sustainable manner. The High-level Panel on Digital Cooperation (2019) reports that the digital transformation has implications for all 17 Sustainable Development Goals and their 169 targets,[39] while the World Economic Forum (2018) estimates that artificial intelligence alone has over 80 different applications for the environment, including through transforming traditional sectors and systems to address climate change, protect biodiversity and bolster human well-being.

UNEP integrates environmental and sustainability norms and goals into the global digital economy. It will use digital tools to accelerate and amplify impact across the three thematic subprogrammes and bring more transparency to our knowledge of the state of our planet.

101. UNEP has the responsibility to integrate environmental and sustainability norms and goals into the global digital economy.[40] It will therefore use digital tools to accelerate and amplify impact across its three thematic subprogrammes and bring more transparency to our knowledge of the state of our planet. In line with the Secretary-General's road map for digital cooperation (A/74/821), the Secretary-General's data strategy and the System-wide Road Map for Innovating United Nations Data and Statistics (CEB/2020/1/Add.1), UNEP will use digital entry points and digital ecosystems strategically to embed relevant environmental data and analytics into the work of the entire United Nations system. UNEP will also consider how to align the digital transformation subprogramme with the key recommendations of the Secretary-General's road map for digital cooperation.

102. The digital transformations subprogramme will focus on the following actions and interventions to facilitate the achievements of the UNEP thematic subprogrammes:

a. ***Supporting and scaling up environmental change through an effectively governed and inclusive data architecture and digital ecosystem for the planet*:** UNEP will contribute technical expertise to the development and consolidation of an open and inclusive global digital ecosystem for people and the planet based on digital norms and governance frameworks that integrate datasets and analysis of climate change, biodiversity loss and pollution. Datasets from the public and private sectors will be used to produce actionable, real-time and predictive insights that will contribute to an automatic monitoring of global, national and local progress towards key climate, biodiversity and pollution targets for the Sustainable Development Goals and relevant internationally agreed frameworks, including the Multilateral Environmental Agreements. To the extent possible, these datasets will be published as digital public goods. In delivering this work, UNEP will complement and synergize with the work of other United Nations entities, providing analysis and guidance to help mitigate the direct environmental impacts of digital technology supply chains, energy requirements and e-waste, as well as addressing risks arising from misinformation on digital platforms. All these results will be achieved by leveraging the science-policy subprogramme, especially UNEP work on statistics and Sustainable Development Goal indicator monitoring and the World Environment Situation Room, in line with the aspirations of the global environmental data strategy and the Secretary-General's data strategy.

b. ***Catalyzing a transformative use of environmental digital public goods to amplify and accelerate progress towards global climate, biodiversity and pollution goals and targets*:** UNEP will aim to catalyze and inspire actions, investments and partnerships that use digital public goods and digital technologies to achieve greater efficiency, effectiveness and transparency in advancing internationally agreed climate, nature and pollution goals and targets, as well as innovations in decarbonization, dematerialization and detoxification. This will include partnerships with public- and private-sector actors to harness data, digital technologies and computational sustainability to amplify and accelerate deeper

39 Of the 169 Sustainable Development Goal targets, 103 are directly influenced by a combination of seven digital technologies, including: digital access, fast Internet, cloud computing, Internet of things, artificial intelligence, extended reality and blockchains (GeSI and Deloitte, 2019).

40 In Environment Assembly resolution 4/23, on keeping the world environment under review, Member States recognized the existence of gaps in knowledge about the state of the environment resulting from a lack of current data and of information generation and dissemination, and they requested UNEP to develop and prioritize a long-term data strategy in support of the identification of comparable methods for data collection and analysis and promotion of their harmonization, and the improvement of platforms that provide a repository function to allow open access to up-to-date, quality-assured, credible and relevant data. Under that mandate, along with the other mandates provided in the resolution, UNEP has an institutional responsibility to integrate environmental and sustainability values and goals into the global digital economy.

structural transformations to drive markets, value chains, consumer behaviours and decision making towards achieving sustainable outcomes.

c. ***Strengthening environmental digital literacy and e-governance capacities of diverse stakeholders to engage in the environmental dimensions of digital transformation, with an emphasis on the Global South*:** This investment is a prerequisite for stakeholders to effectively design and deploy digital technologies and related digital transformation policies to solve climate, biodiversity and pollution challenges and support the nexus of environment, digital technology and e-governance. To that end, UNEP will work through partnerships to enhance the environmental digital literacy and e-governance capacities of diverse stakeholders by building inclusive, gender-responsive and human-rights-based digital capacity, facilitating policy dialogue, enhancing education curricula and fostering social, innovative collaboration, and the development of new communities of practice that can contribute to closing the digital divide. Upon request, UNEP will assess the national digital infrastructure needed to produce digital public goods for the environment and to support e-government services. UNEP will also seek to inspire and catalyze citizen science, open innovation and social collaboration through various digitally oriented challenges, hackathons, conferences, innovation labs, impact hubs, moonshots and other competitions. Specific focus will be placed on supporting small- and medium-sized enterprises, social entrepreneurs, women, indigenous peoples, youth and underrepresented stakeholders.

d. ***Improving institutional efficiency and impact through a digitally enabled UNEP*:** UNEP will integrate a range of digital technologies, processes and practices into all areas of the organization to improve the way in which it operates, innovates, delivers value, engages with stakeholders and builds capacity. UNEP will strive to become a digital organization that treats data as a strategic asset that can drive insights, innovations and impact, including through better project design, implementation and impact evaluation.

UNEP will contribute to climate stability by accelerating the adoption of low-carbon behaviours and products by consumers and citizens. Digital solutions will drive sustainable lifestyles and the consumption of low-carbon goods and services through increased carbon emissions transparency. UNEP will communicate carbon footprint information through certifications, digital applications and e-commerce platforms. It will also scale up efforts to reduce the carbon footprint of the information and communications technology sector, focusing on data centres, blockchain applications and the gaming sector.

UNEP will make living in harmony with nature a reality by accelerating and scaling up the development and adoption of sustainable technologies to support the conservation, sustainable use and equitable sharing of the benefits of biodiversity. It will convene and accelerate partnerships to take up emerging digital technologies that can help society achieve nature and biodiversity goals. In addition, UNEP will stimulate a digital network on the status of nature and biodiversity, including trends, pressures and human responses, as a digital public good, to inform public and private decision making. Mitigating the impact on nature of value chains linked to information and communications technologies will also be explored.

UNEP will amplify the adoption of clean technologies and digitalized circular approaches towards a pollution-free planet. It will explore the significant potential of digital technologies and circular design to contribute to reducing waste and pollution. Likewise, the adoption of chemicals and pollution monitoring and data-sharing standards throughout the product life cycle can support transparency in materials traceability, from raw materials through production and consumption to disposal or reuse. Finally, UNEP will support global efforts on the challenge of e-waste, emphasizing the need for circular approaches to dealing with electronic goods.

Digital transformations: an enabler

UNEP will accelerate the science-policy interface through increased influence, uptake and impact of digital public goods produced by scientific analysis on environmental priorities. It will contribute to global environmental data principles, safeguards, standards and norms to underpin an open data infrastructure and a digital ecosystem for the planet. UNEP will use digital tools to conduct science-based analysis of environmental trends in climate, nature and pollution and monitor progress in the achievement of the targets of the Sustainable Development Goals and the implementation of the Multilateral Environmental Agreements. Customized environmental data and analysis will be made available to the wider United Nations system through the World Environment Situation Room.

UNEP will strengthen global and national capacity to digitalize environmental governance and collective action. This includes contributing to global principles, standards and norms on open data, inter-operability and licensing, data quality assurance, human-centred design and safeguards for public-private partnerships. UNEP will support the digital literacy of environmental stakeholders, including through digital challenges, moonshots and hackathons. There will be a specific focus on supporting small- and medium-sized enterprises, social entrepreneurs, women, indigenous peoples, youth and underrepresented stakeholders that suffer from the digital divide.

UNEP will accelerate finance and economic transformations with digital public goods and insights informing sustainable investments. Digital public goods will enable the design of inclusive green economy policies and help in the assessment of environmental risks, insights and natural capital accounting to inform investment decisions. UNEP will support the public disclosure of information and tracking of value chain performance using standard environmental-social-governance investing criteria. It will also seek to use digital technologies to support sustainable consumption and sustainable lifestyles, including through the application of behavioural economics.

Four levers of change for better delivery

Photo: Visualhunt/SDG Action Campaign

103. To enhance the delivery of the transformational systemic shifts outlined in this Medium-Term Strategy, UNEP will address four key levers of change. These represent a combination of internal and external actions and opportunities that will drive UNEP toward greater effectiveness while accelerating impact.

Multilateral Environmental Agreements and their "multiplier effect"

104. The Multilateral Environmental Agreements are one of the foundation stones of national policymaking and the work of UNEP, and they play an indispensable role in implementing the 2030 Agenda and achieving the Sustainable Development Goals. Recognizing and respecting the autonomy of the Multilateral Environmental Agreements, UNEP will promote coherent and synergized cooperation across all the Multilateral Environmental Agreements to increase their impact and deliver enhanced results across the 2030 Agenda.[41] UNEP will continue to support Member States in the implementation of Multilateral Environmental Agreement decisions and, in this context, will facilitate a coherent and integrated approach to achieving the Sustainable Development Goals, brokering cross-institutional cooperation and partnerships, creating the required policy instruments and legislation and developing related capacities.

41 Paragraph 89 of "The future we want" recognizes the need to "enhance synergies promote policy coherence at all relevant levels and enhance coordination and cooperation among the Multilateral Environmental Agreements" in the chemicals and waste cluster, as well as in the biodiversity cluster and within the broader United Nations system. The Environment Assembly also recalled this paragraph in its resolution 2/17, on enhancing the work of the United Nations Environment Programme in facilitating cooperation, collaboration and synergies among biodiversity-related conventions, which, among other things, mandated UNEP to strengthen coherent system-wide action on capacity-building for facilitating coherent and effective implementation of the biodiversity-related conventions.

UNEP will strive to maintain a high level of global environmental multilateralism, focusing on current challenges, including climate change, biodiversity loss and pollution, along with opportunities and emerging needs. UNEP will demonstrate that a networked and inclusive multilateralism is fundamental to discovering and implementing lasting solutions to global challenges.

105. The relationship between UNEP and the Multilateral Environmental Agreements will continue to be underpinned by regular dialogue and joint messaging and advocacy – and informed by mutual exchanges of science-based data and holistic assessments for increased strategic and programmatic cooperation – towards common goals. Stronger focus will be placed on cross-cutting areas, such as sustainable consumption and production, climate change, biodiversity and pollution and human rights, including the rights of indigenous peoples and local communities, as well as on issues of intergenerational equity and gender equality.

106. The post-2020 frameworks for biodiversity and chemicals and waste will provide key guardrails. Central to UNEP engagement with the Multilateral Environmental Agreements will be continued support for the agreed post-2020 global biodiversity framework and the beyond-2020 framework for sound management of chemicals and waste, along with leveraging of linkages and integrated approaches with the Paris Agreement.

Raising environmental ambition within the United Nations system through United Nations reform

107. The United Nations reform process aims to reposition the United Nations development system with a stronger, better-defined collective identity as a trusted and effective partner to countries in implementing the 2030 Agenda. By reducing systemic fragmentation, duplication and operational inefficiencies, the reform presents a tremendous opportunity for UNEP to commit to its role as the leading environmental voice in the United Nations and fulfil its coordination mandate on the environment within the United Nations system more effectively through its array of regional policy and operational assets.

108. UNEP will approach the United Nations reform through the unified thematic lens of climate change, biodiversity loss and pollution while strengthening integration across all aspects of the United Nations mission, including on development, peace and security,

humanitarian operations and human rights, within the mandate of UNEP.

109. To better leverage the opportunity offered by the reform, UNEP will review its operational arrangements and processes to ensure that they are aligned with the reform guidelines, tools, mechanisms and digital requirements. UNEP will strengthen staff capacity across the organization to contribute substantively by identifying opportunities and applying adaptive management methods to implementing the United Nations reform at all levels.

110. UNEP will foster impact-oriented partnerships with its United Nations sister entities, drawing on their respective strengths and capabilities to improve United Nations system-wide operational coherence. This will offer unique policy and operational opportunities to leverage the technical and operational expertise of other entities for greater joint impact, while amplifying UNEP programme delivery.

UNEP will approach the United Nations reform through the unified thematic lens of climate change, biodiversity loss and pollution to enhance its guiding role, raise ambition and accelerate and scale up progress towards the Sustainable Development Goals.

111. UNEP regional offices will be the anchor for delivering the organization's strategic aspirations and securing stronger engagement at the regional and country levels. They will serve as conduits of UNEP alignment with the United Nations reform guidelines and processes, securing a better understanding of and responsiveness to national and regional contexts and needs, as well as enhanced engagement with United Nations resident coordinators and peace operations and stronger collaboration with United Nations country teams, the regional Development Coordination Office and the regional economic commissions. In contributing to the design and implementation processes for common country analyzes and United Nations Sustainable Development Cooperation Frameworks, UNEP will ensure that science informs policy. Decisions from these joint processes will inform the organization's own programme planning and implementation at the country level and its modalities for engagement in the work of the United Nations country teams. UNEP will support countries in ensuring due consideration of environmental matters in their voluntary national reviews in a feedback loop between country-level, regional and global environmental priorities.

112. UNEP will participate actively in regional platforms and processes such as the regional collaborative platforms, opportunity- and issue-based coalitions, regional knowledge platforms and other joint United Nations platforms. UNEP will secure stronger engagement in these platforms while leading environment-related opportunity/issue-based coalitions and providing strategic support to regional ministerial environmental forums, inter-ministerial committees and forums for joint ministers' meetings. UNEP will draw linkages between the decisions of these forums and its own programme planning and implementation and will foster synergies between the forums and the Environment Assembly, as well as with the regional forums for sustainable development.

113. UNEP will contribute to key intergovernmental and inter-agency coordination mechanisms. By providing evidence-based environmental information and raising public awareness of critical and emerging environmental issues, UNEP will influence global environmental policymaking under the global intergovernmental processes and deliberations of the General Assembly, the Economic and Social Council, the Human Rights Council and the Security Council (where mandated to do so), among others. At the inter-agency level, UNEP, as chair of the Environment Management Group, will enhance United Nations system-wide coordination related to specific issues in the field of the environment, harnessing the Environment Management Group's collective capacity to develop transformational responses for a more sustainable world, including in a post-COVID-19 scenario. UNEP will also support the integration of environmental sustainability into policy, programme and operational guidance within the United Nations system by engaging in the United Nations Sustainable Development Group, the United Nations System Chief Executives Board for Coordination and other ad hoc processes and by supporting the dissemination of their decisions and guidance tools through regional and country mechanisms.

114. UNEP will advance the United Nations system corporate environmental performance, supporting the delivery of the Strategy for Sustainability Management in the United Nations System 2020-2030 (CEB/2019/3/Add.2) and its follow-up process through upgraded reporting, coordination and technical assistance, including through partnerships with sister entities. In the spirit of delivering as one, UNEP will continue to generate knowledge and advocate for, and

curate the creation of, a support system that will feed into and enhance the United Nations leadership's vision for corporate sustainability, including through improved partnerships with the United Nations and other international organizations.

Inclusive multilateralism for stronger global environmental governance

115. UNEP will value and uphold inclusivity to promote transparent and accountable environmental governance at all levels. In today's rapidly changing environment, UNEP will strive to maintain high ambition in global environmental multilateralism, focusing not only on current challenges and opportunities but also on emerging needs, particularly those of future generations, and the need for digital cooperation on global environmental issues.

116. UNEP will build an inclusive environmental multilateralism to mobilize all those who can influence the changes needed to achieve the Sustainable Development Goals. Nearly 30 years after its adoption at the 1992 Earth Summit, Principle 10 of the Rio Declaration on Environment and Development – one of the cornerstones of stakeholder engagement in environmental policy and decision making – remains as relevant as ever.[42] Powerful young voices within a revamped worldwide environmental movement have shown the power of committed individuals to influence decisions on planetary justice. In commemorating the 75th anniversary of the adoption of the Charter of the United Nations, the Secretary-General stressed the need for "an inclusive multilateralism, drawing on the indispensable contributions of civil society, business, cities, regions and, in particular, with greater weight given to the voices of youth" (United Nations Secretary-General, 2020b). UNEP will leverage these new-found societal commitments to engage in strategic partnerships with major groups and stakeholders[43] and the public at large, benefiting from their effective technical and advocacy functions. As part of this engagement, UNEP will continue to promote faith-based organizations and communities as custodians of far-reaching, value-based perspectives on environmental sustainability that speak to billions of people around the world.

UNEP will strive to maintain high ambition in global environmental multilateralism, focusing on current challenges, opportunities and emerging needs, as well as digital cooperation on environmental issues.

117. UNEP will leverage the United Nations Environment Assembly – the world's highest-level decision making body on the environment – as the primary global platform for environmental action. Environment Assembly sessions serve as an opportunity for the international community across all sectors, levels of government and walks of life to come together to discuss and address global environmental issues. Driven by sound science, the Environment Assembly will continue to inspire, identify and capture bold transformative actions for the environment while focusing on solutions that speak to all. UNEP will support the Environment Assembly in enhancing its relationship with the Multilateral Environmental Agreements and its contribution to the implementation of the 2030 Agenda, by strengthening convergence and dialogue on common strategic actions and shared experiences and providing increased visibility to the decisions of the governing bodies of the Multilateral Environmental Agreements.

118. UNEP will support stronger engagement with the private sector as a key partner in driving systemic shifts to sustainable pathways. Building on its strategy for private-sector engagement (UNEP, 2020b), UNEP will engage the private sector in significant shifts that will result in the generation of sound policies and sustainable technologies, including digital technologies, informed by state-of-the-art scientific knowledge. UNEP will interact with the private sector at various levels, including through open networks, policy discussions and multi-stakeholder forums such as the United Nations Environment Assembly, as well as on specific applications of digital technologies for the environment. Through partnerships and alliances

42 Principle 10 reads: "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, everyone shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."

43 Agenda 21 recognized that sustainable development requires the meaningful involvement and active participation of the following nine "major groups": business and industry, children and youth, farmers, indigenous peoples, local authorities, non-governmental organizations, the scientific and technological community, women, and workers and trade unions.

Protest against the use of plastic, Ggaba Beach, Uganda.
Photo: UNEP / S. Foote

with the private sector, UNEP will target specific objectives and engage in high-impact advocacy actions to promote the policy and cultural shifts needed to orient producers and consumers towards sustainability. Key sectors where UNEP will strive to achieve such systemic shifts include energy production and consumption, food systems, infrastructure and the built environment, chemicals and waste management, the extractive sector, sustainable value chains for less resource- and pollution-intensive products, global financing, and market and investment systems.

Innovative communication as a driving force for empowered environmental advocacy

119. UNEP communications will help deliver coherence and consistency across the broad spectrum of environmental action. Communication efforts will be informed by the latest available science, including social science, and will be aimed at shaping the global narrative around the environment by generating political and social commitments and bringing about the societal and policy changes required to tackle the challenges outlined in the situational analysis section of this document.

UNEP communications will help deliver coherence and consistency across the broad spectrum of environmental action to spur societal engagement and stimulate inclusive decision making and environmental action.

120. UNEP will take a highly innovative approach to its communications, using its growing foothold in digital spheres and social media spaces to reach and engage with an expanding range of audiences and stakeholders. UNEP will focus on empowering individuals and groups for environmental action, placing emphasis on voices from sectors and actors typically outside the environment space. UNEP will amplify the voices of youth, consumers, environmental entrepreneurs, activists, innovation leaders and faith-based actors and organizations, among others.

121. UNEP will focus on delivering high-impact stories to enhance the understanding of environmental sustainability and its benefits and to mobilize societal behavioural change. By using innovative practices of storytelling, including immersive digital technologies, UNEP will highlight and share case studies on nexus issues and the linkages between the environmental, social and economic dimensions of sustainable development. These lessons will be adapted to local contexts and scales.

Looking forward:
driving change towards the future we want

Non-profit group SeaWomen of Melanesia, 2021's Champion of the Earth for Inspiration and Action, chart the health of the fragile coral reefs that surround Melanesia, a grouping of island nations in the South Pacific.
Photo: UNEP / R. Paul

122. Achieving climate stability, living in harmony with nature and moving towards a pollution-free planet by 2050 will require a recalibration of our economies and societies towards more sustainable and equitable models. Based on the latest science, this strategy provides the focus needed for transformative actions that target the drivers of climate change, biodiversity loss and pollution. It sets out the actions needed to reshape consumption and production patterns for sustainability, so that human well-being and the health of the planet's ecosystems are no longer threatened by a deteriorating environment.

123. This strategy sets out a focused and cohesive path for UNEP to curate solutions that can contribute to achieving the aspirations of the 2030 Agenda and implementing paragraph 88 of *The Future We Want* (A/RES/66/288), guided by a long-term vision of planetary sustainability for people, prosperity and equity. UNEP will leverage the Decade of Action and help Member States deliver on the Sustainable Development Goals by being a catalyst and facilitator of ambitious action on climate change, biodiversity loss and pollution. UNEP will employ clarity and focus to deliver efficient and effective programmes, for tangible and sustainable results.

124. UNEP will not embark alone on the journey charted by this strategy. It will leverage the United Nations development system reform to engage the wider United Nations system in stronger, more coordinated and mutually supportive environmental action while solidifying its ability to meet individual country needs. UNEP will engage with the Multilateral Environmental Agreements to amplify their impact and bring about more coherence in how they cooperate and benefit from each other. UNEP will operate on the basis of an inclusive multilateralism that reaches beyond governments and supports systemic shifts, with the help and collaboration of the private sector and business community, youth, civil society at large and faith-based organizations.

125. This is how UNEP will drive the change towards the future we want.

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World Bank Group

CLIMATE CHANGE ACTION PLAN 2021-2025

Supporting Green, Resilient, and Inclusive Development

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CLIMATE CHANGE ACTION PLAN 2021-2025

Supporting Green, Resilient, and Inclusive Development

CONTENTS

A program in Zambia has established nearly 250 farmer field schools that are training over 10,000 farmers on climate-smart agricultural practices, boosting yields and incomes while helping conserve forests. —PHOTO: SARAH FRETWELL/ WORLD BANK

EXECUTIVE SUMMARY

Introduction

Our collective responses to climate change, poverty, and inequality are defining choices of our age. We must tackle them together to deliver on our twin goals of reducing poverty and boosting shared prosperity. The COVID-19 pandemic and economic crisis have been devastating, and as we support countries to respond to the ongoing crisis and build back, there is an urgent need to integrate climate and development strategies to deliver green, resilient, and inclusive development. There will be trade-offs when implementing an ambitious climate agenda, including transition costs, but these can be reduced through a people-centered approach, effective fiscal and social policies, and policies supportive of attracting private sector investment. The cost of not addressing climate change is already immense and will only get more expensive. The World Bank Group (WBG) recognizes that globally, the poor, who are the least responsible for greenhouse gas (GHG) emissions, often suffer the most from climate change impacts.

WBG client countries and private sector clients have powerful reasons to fight climate change. Not only are many of them highly vulnerable to climate impacts, which threaten their ongoing development and the well-being of their people, but as the global economy moves toward a net-zero future, they need to stay competitive. A well-managed transition can ensure that climate action brings more and better jobs and reduces poverty. Accelerating economic transformation is the best way to boost employment sustainably. The WBG will work with both the public and private sectors to support the climate agenda. For example, public sector interventions can help countries implement policy and regulatory reforms and create incentives to crowd-in private sector participants and to catalyze private sector investment, using our menu of advisory and financial instruments.

The WBG is the largest multilateral provider of climate finance for developing countries and has increased financing to record levels over the past two years. Building on our long-standing support for climate action, we intend to go further and faster to help countries integrate climate into their development agendas. The context today is vastly different from 2016, when the WBG launched its first Climate Change Action Plan 2016–2020. In addition to the COVID-19 pandemic, in the last two years major advanced and developing countries have committed to net-zero targets by 2050 and pathways to peak in 2030.

The Climate Change Action Plan 2021–2025 aims to advance the climate change aspects of the WBG's Green, Resilient, and Inclusive Development (GRID) approach, which pursues poverty eradication and shared prosperity with a sustainability lens. In the Action Plan, we will support countries and private sector clients to maximize the impact of climate finance, aiming for measurable improvements in adaptation and resilience and measurable reductions in GHG emissions. The Action Plan also considers the vital importance of natural capital, biodiversity, and ecosystems services and will increase support for nature-based solutions, given their importance for both mitigation and adaptation. As part of our effort to drive climate action, the WBG has a long-standing record of participating in key partnerships and high-level forums aimed at enhancing global efforts to address climate change.

The new Action Plan represents a shift from efforts to "green" projects, to greening entire economies, and

from focusing on inputs, to focusing on impacts. It focuses on (i) integrating climate and development; (ii) identifying and prioritizing action on the largest mitigation and adaptation opportunities; and (iii) using those to drive our climate finance and leverage private capital in ways that deliver the most results. That means helping the largest emitters flatten the emissions curve and accelerate the downward trend and ramping up financing on adaptation to help countries and private sector clients prepare for and adapt to climate change while pursuing broader development objectives through the GRID approach.

The WBG will advance efforts on a number of fronts:

I. Aligning Climate and Development

This Action Plan starts from the premise that climate and development need to be integrated, both to facilitate successful mitigation and adaptation, and to ensure economic development is sustainable. We will do so by (i) ramping up engagement at the country level on climate and development diagnostics, planning, and policies to help countries reach their climate and development objectives; (ii) aligning WBG financial flows with the goals of the Paris Agreement to further mainstream climate into our development activities; and (iii) increasing climate finance for mitigation and adaptation in ways that deliver the most results.

Country Climate and Development Diagnostics, Planning, and Policies

We will build a strong analytical base at the global and country level, including by introducing Country Climate and Development Reports (CCDRs) that address the interplay between climate and development. CCDRs will be used to inform, prioritize, and sequence climate action through the country engagement process and thus implement the Action Plan. These CCDRs will investigate how climate change and decarbonization may impact a country's development path and priorities, and identify potential mitigation, adaptation, and resilience-building actions to improve development outcomes. They will support the preparation and implementation of our client countries' Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTSs) and will feed into the WBG's Systematic Country Diagnostics, Country Private Sector Diagnostics, and Country Partnership Frameworks. Over the next year, we plan to complete up to 25 CCDRs, focusing for this first round on developing countries with particularly large carbon emissions and/or great climate vulnerabilities. These diagnostics will underpin country-level dialogue on policy directions and institutional strengthening. We will support a "whole of economy" approach that focuses on policies and plans to create the right enabling environment for climate action and deliver transformative change, including private sector led growth. Beyond greening projects, the WBG will focus on the greening of entire economies, while supporting a just transition.

Aligning our Financial Flows with the Paris Agreement

The WBG is committed to aligning its financing flows with the objectives of the Paris Agreement. We define alignment as providing support to clients that is consistent with pathways toward low-carbon and climate-resilient development. For the World Bank, we plan to align all new operations by July 1, 2023, the start of fiscal year 2024. For IFC and MIGA, 85 percent of Board-approved real sector operations will be aligned starting July 1, 2023, and 100 percent two years later, starting July 1, 2025. To achieve this, both institutions will begin aligning 100 percent of their projects at the concept stage

well ahead of July 1, 2023. Once a methodology for financial institutions and funds is finalized among multilateral development banks (MDBs), a similar approach will be taken for this business as well. The Paris Agreement recognizes that countries have different circumstances and gives countries latitude in the pathways they choose to achieve the overarching goal of low-carbon, resilient development. Our support to countries and private sector clients similarly respects individual country needs and circumstances in integrating climate and development outcomes and shaping green, resilient, and inclusive pathways. The WBG will produce a Paris alignment implementation plan with clear timelines and deliverables.

Increasing our Climate Finance and Impact

We commit to achieving 35 percent in climate finance for the entire WBG, as an average over the five years of 2021–2025. This is a big step up from the average of 26 percent on average achieved in FY2016–2020 and an even bigger step up in dollar terms, as the WBG's total financing has also expanded. This Action Plan highlights the centrality of adaptation, with at least 50 percent of IDA and IBRD climate finance to be allocated to adaptation, to support a range of activities that reduce vulnerability in line with the strategic directions set in the WBG Action Plan on Climate Change Adaptation and Resilience.[1] Similarly, IFC and MIGA understand that adaptation is critical and are stepping up efforts to identify private sector investment opportunities in this area. A new WBG report will guide efforts as we work across the WBG to pilot approaches in several countries to develop supportive policies and regulations to help drive private sector investment.[2] We will also enhance our results orientation by developing metrics, where relevant, that better capture our climate impact, including as measured through GHG emissions reduction.

II. Prioritizing Key Systems Transitions

We will support transformative public and private investments in five key systems: energy; agriculture, food, water, and land; cities; transport; and manufacturing. These systems are being prioritized because they contribute the most to emissions—together, they produce over 90 percent of global GHG emissions—and face significant adaptation challenges, which makes support for adaptation a critical priority for all five. These systems are also critical to achieving development goals. Transforming them is key for countries at all stages of development and requires action from the public sector to catalyze the private sector, both to unlock major economic opportunities and create new jobs and to reduce emissions and limit the impacts of climate change. The WBG will give priority to climate action across these sectors—where possible, also supporting natural capital and biodiversity—to deliver impactful country operations and programs, including public and private sector investments, guarantees, and advisory services. Significant investment in education, training, and retraining to develop skills in these key sectors is essential for people in our client countries to benefit from the new and better jobs created through these systems transitions.

Energy

As the WBG invests in expanding energy access—about 800 million people worldwide still lack electricity—we urgently need a global transition to low-carbon energy that is resilient to climate change and extreme events. WBG priorities in the sector include helping countries with power sector planning, energy subsidy reforms, and improving the operational and financial performance of utilities;

investing in projects to increase energy access, including through renewable energy and improved energy efficiency; and a just transition away from coal. Priorities for climate-focused action in this sector will depend on the country context: in high-emitting middle-income countries, for example, key steps may include retiring coal-fired power plants, replacing fossil fuels across the economy, and removing market barriers for green technologies, all while maintaining a just transition, which requires appropriate financing. For lower-income countries still working to provide energy access to all, it is crucial to invest in low-carbon baseload capacity, including renewable energy.

Agriculture, Food, Water, and Land

The WBG will step up support for climate-smart agriculture (CSA) across the entire agriculture and food value chains, including the blue economy, via policy and technological interventions, using nature-based solutions where appropriate. Doing this can achieve triple-win benefits: enhancing productivity, reducing GHG emissions, and improving resilience. The WBG will address policy options and trade-offs involved in tackling food loss and waste. It will help countries manage flood and drought risks together, reducing the water-related shocks and protecting livelihoods and productive resources. The WBG will pilot in operations a low-cost, near real-time Monitoring, Reporting and Verification (MRV) Protocol that can leverage private capital for enhanced soil carbon sequestration. IFC will work with clients to improve productivity while reducing input use, GHG emissions per ton of output, and decreasing post-harvest losses in supply chains globally.

Cities

The WBG will step up support to cities, including technical assistance and financing, to help them decarbonize and build resilience, while supporting broader development goals. This means supporting policies, regulations, and investments to improve urban air quality; decarbonize urban energy systems; promote green and resource-efficient buildings and infrastructure; promote integrated solid-waste management and circular-economy approaches; improve urban transportation; and improve the coverage, efficiency, and resilience of urban water supply, sanitation, and wastewater treatment. Improving urban land use planning and regulations is particularly important. IFC will scale up strategic partnerships through a fully integrated investment and advisory approach to help cities address current market failures, such as limited funds for project preparation, low creditworthiness, and lack of technical expertise. IFC and MIGA will scale up their green building business, both through direct financing and de-risking of asset owners, and by increasing the use of green mortgages and green construction finance through financial intermediaries. The WBG is helping countries and cities adopt integrated waste management and circular economy approaches to advance climate, development, and broader sustainability goals.

Transport

The WBG approach to low-carbon, resilient transport will support improvements in urban mobility and accessibility as well as in logistics and freight. This includes planning, developing, and managing integrated transport systems, including high-quality public transit to replace private vehicles and fragmented informal urban transport services, as well as supporting active mobility (such as walking and cycling). Digital technologies and electric vehicles (EVs) hold significant potential, especially as the power sector is decarbonized, as do pricing and regulatory reforms for fuels and vehicles. Interventions to decarbonize the freight sector and deliver competitive logistics include re-engineering supply chains, including supporting the development of third-party logistics and temperature-controlled logistics,

changing inventory practices, bringing production closer to customers, shifting to lower-carbon transport modes, switching to energy-efficient and low-carbon vehicles across modes—including in maritime transport—and optimizing networks. IFC and MIGA will also support investments in energy-efficient equipment and infrastructure, particularly in ports and airports.

Manufacturing

The WBG will help manufacturing sectors to get on a path toward decarbonization via resource efficiency, low-carbon solutions, and circularity. The WBG will work with industrial parks to help them offer low-carbon industrial infrastructure and services through its eco-industrial parks program. It will also support countries and their industries in developing sectoral policies that promote low-carbon and resilient growth, while helping to improve their green competitiveness, engage the private sector, and improve disaster preparedness. IFC leverages and promotes climate finance products and advisory services, and MIGA provides de-risking products, to support proven abatement measures and innovative technologies that clients would like to implement. IFC and MIGA will work with corporate clients in manufacturing, especially in GHG-intensive base materials sectors, to help them meet their climate strategies and targets.

III. Financing to Support the Transitions

Meaningful climate action will require scaling up finance. This is especially important to help poorer countries make large investments in global public goods, such reducing coal usage, and finance adaptation efforts, which require spending upfront but provide growing benefits over time. Developing countries will need an estimated $4 trillion per year in investments up to 2030 to build infrastructure to meet their development needs. These investments will enable developing countries to build sustainable and resilient infrastructure, create new jobs, and where relevant leapfrog to low carbon solutions. Current finance flows fall far short of that. To successfully achieve climate and development objectives, the world must mobilize trillions of dollars in the coming decade. Existing public, private, and concessional climate finance needs to be deployed in more transformative and catalytic ways, leveraging additional capital to bridge the gap between available resources and needs.

IBRD, IDA, and IFC have a financial model of issuing AAA-rated bonds in the capital markets, which leverage scarce shareholder capital with substantial private capital mobilization. To further increase the financing available and maximize the use of finance for climate action, the WBG will: (i) help client countries boost their public domestic resources; (ii) increase mobilization of international and domestic capital, including catalyzing domestic private capital; and (iii) support global efforts to raise and strategically deploy concessional climate finance to de-risk climate investment.

The broader financial sector can and must play a key role as well, both in mobilizing capital for green and low-carbon investments, and in managing climate risks. The WBG will support greening the financial sector across emerging markets through its work with central banks, national development banks, and private sector financial institutions, including through targeted advisory engagements to equip clients with the necessary frameworks to create enabling environments and risk mitigation practices to embrace climate action, while also enabling innovative and scalable funding mechanisms in support of sustainable investments.

Conclusion

Tackling the climate crisis while meeting urgent development needs is the fundamental challenge of our time. Building on the achievements of the WBG Climate Change Action Plan 2016–2020, this second Action Plan has been developed in the exceptional context of a global pandemic, with a global economic collapse of a speed and scale not seen in decades, and deep uncertainty about the future. There is now a window of opportunity—and an imperative—to transition to a low-carbon and resilient development pathway, and to do so while supporting natural capital, economic growth, and job creation. The WBG, through its global advocacy, convening power, and support to client countries and the private sector, will be a key participant in this effort. With new diagnostics that will help identify the most impactful adaptation and mitigation opportunities, expanded support for the development of country-owned NDCs and LTSs, and stepped up support for a just transition, our goal is to integrate climate and development by ramping up financing for climate and a just transition to deliver the best results for the people of our client countries.

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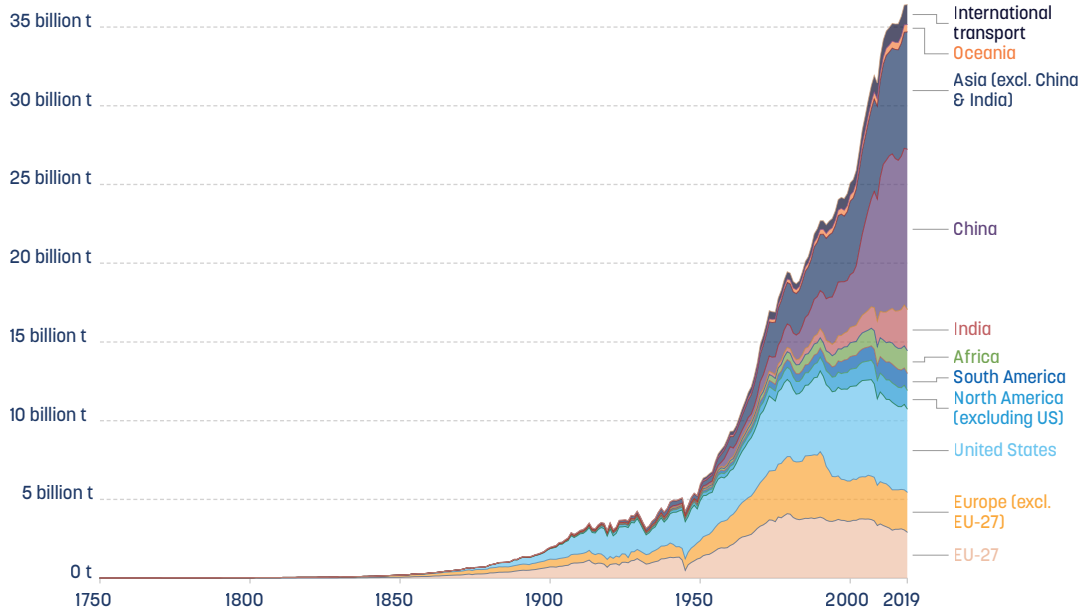
In Niger, Amadou is adapting to drought and desertification by diversifying his crops to grow casava and planting drought-resistant millet seeds. —PHOTO: KAIA ROSE/ WORLD BANK

INTRODUCTION

OVERVIEW

Climate change, poverty, and inequality are defining challenges of our time—and it is crucial that we tackle them together, recognizing the interconnections between people, the planet, and the economy. The COVID-19 pandemic and its economic impacts have been devastating, and many countries are still deep in the COVID crisis, even as they face growing climate change impacts. These crises have further aggravated growing structural weaknesses of the last decade. As we support countries and private sector clients in responding to the ongoing crisis and build back, there is an urgent need to integrate climate and development strategies to support green, resilient, and inclusive development.[3] Even if the Sustainable Development Goals (SDGs) are achieved by 2030, climate change could easily erode those gains.

FIGURE 1: Annual Total CO_2 Emissions by World Region, 1750–2019



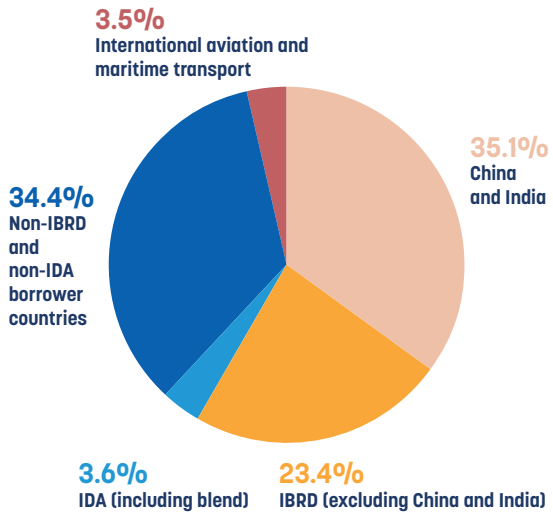
Note: This measures CO_2 emissions from fossil fuels and cement production only— land use change is not included. 'Statistical differences' (included in the GCP dataset) are not included here.

Source: Our World in Data based on the Global Carbon Project

Climate change impacts—in terms of lost livelihoods, food and water insecurity, and adverse human capital impacts—together with poverty and inequality, present a serious threat to the World Bank Group's (WBG) twin goals of alleviating extreme poverty and boosting shared prosperity. Where climate change interacts with other social, economic, and environmental pressures, compound risks emerge that can increase vulnerability, exacerbate grievances, and deepen pre-existing fragility.[4] Climate change also increases the risks of internal displacement, migration, and instability. The costs of unabated climate change mount every year, and prompt and ambitious climate action is needed in all countries. Leveraging and mobilizing private capital in support of this agenda is also of paramount importance, to achieve both scale and impact.

Historically, industrialized countries have been the largest contributors to global emissions, but some emerging economies are now among the top emitters in absolute terms. In 2019, China and India collectively contributed 35.1 percent of global CO_2 emissions; all other IBRD borrowers combined, 23.4 percent, non-IBRD and non-IDA borrowers, 34.4 percent; and IDA-eligible countries, only 3.6 percent.[5] As emerging and developing economies account for over half of global growth in output and consumption—and are going to drive global growth—it is crucial to flatten the GHG emissions curve and accelerate the downtrend, especially for the highest-emitting emerging economies, and decouple emissions from growth through green, resilient, and inclusive development, which will also bring new jobs and growth opportunities.

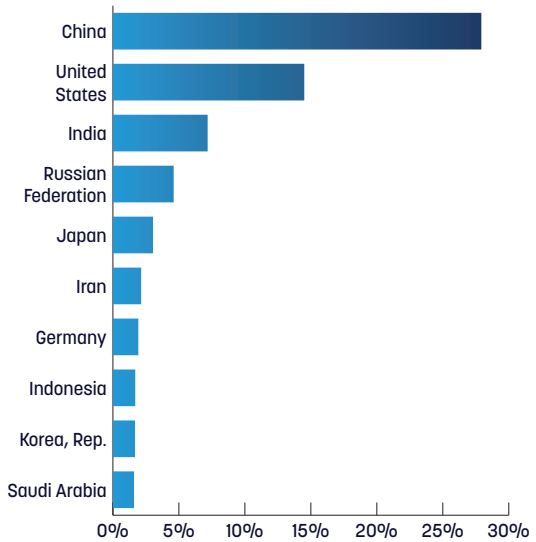
FIGURE 2: Share of Global CO_2 Emissions by World Bank Lending Category, 2019



Note: This figure is an estimate based on combined data from the Global Carbon Project (2020) and World Bank Country and Lending Groups (2019).

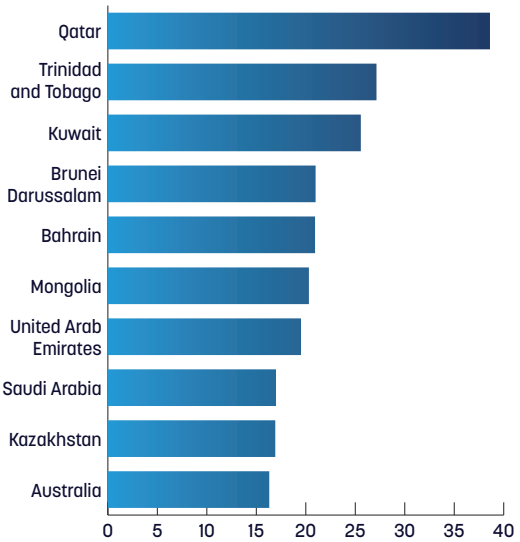
Globally, the poor, who are the least responsible for GHG emissions, often suffer the most from climate change impacts. In the last decade, IDA countries were affected by almost eight times as many natural disasters as in the 1980s, resulting in a tripling of economic damages.[6] Similarly, Small Island Developing States (SIDS), countries affected by fragility and conflict, and low-income countries

FIGURE 3: Highest-Emitting Countries, 2019 (% of absolute global CO_2 emissions)



Source: Our World in Data based on Global Carbon Project (2020).

FIGURE 4: Highest-Emitting Countries per Capita, 2019 (tons CO_2 per capita)



Source: Our World in Data based on Global Carbon Project (2020).

FIGURE 5: WBG Climate Change Action Plan 2021-2025 at a Glance

PRINCIPLES

PEOPLE

NATURE

PARTNERS

GRID FRAMEWORK

- Create opportunities for the poor and vulnerable
- Tackle poverty, inequality, and climate change simultaneously
- Scale up interventions to match the urgency of the climate and COVID-19 crises
- Address global challenges through international cooperation
- Tailor to country needs and implement through country programs

ACTIONS

OPERATIONALIZING THE ACTION PLAN

1 ALIGNING CLIMATE AND DEVELOPMENT

- Country climate and development diagnostics, planning, and policies
- Alignment with the Paris Agreement
- Climate finance and impact

2 PRIORITIZING KEY SYSTEMS TRANSITIONS

- Energy
- Agriculture, Food, Water, and Land
- Cities
- Transport
- Manufacturing

3 FINANCING TO SUPPORT THE TRANSITIONS

- Boosting client countries' public domestic resources
- Mobilizing and catalyzing private capital
- Concessional finance

are among those facing severe impacts from climate change. This means that even countries that have historically been low GHG emitters have powerful reasons to fight climate change: many are highly vulnerable to climate impacts, which threaten their ongoing development and the well-being of their people. This Plan affirms the centrality of adaptation efforts for the poorest and most vulnerable countries and commits to boosting our support for adaptation and resilience.

The Climate Change Action Plan 2021–2025 aims to advance green, resilient, and inclusive development by enhancing support for WBG clients to integrate climate into their development strategies. The new Action Plan has been developed in the midst of the COVID-19 pandemic, an unprecedented humanitarian and economic crisis, resulting in rising unemployment, lower growth, and fiscal and debt sustainability crises in a number of client countries. The core of the Plan is to ramp up climate finance in ways that make the greatest impact, addressing client countries and private sector clients' short-term and long-term needs. That means helping the largest emitters flatten the GHG emissions curve and accelerate the downtrend, while also ramping up financing on adaptation to help countries build resilience to climate change. The integration of climate and development is critical to the Plan's success: finding the best opportunities to combine mitigation and adaptation with economic growth and poverty reduction. Private sector engagement is equally important, given the limited capacity available to governments to build and scale climate action. Through partnerships, global advocacy and leadership, and its convening power, including by leveraging the private sector, the WBG will strive to move the needle on global climate action, and to move from greening projects, to greening whole economies.

The WBG's support will be tailored to individual client demand and based on country-specific circumstances. While the contexts and focus areas may be different, there are opportunities to support a low-carbon transition and build resilience across all client countries, including private sector clients. In low-income countries, we will focus on supporting climate-smart development, adaptation, and resilience-building, while advancing development goals such as improved access to energy, greater agricultural productivity, enhanced mobility, and sustainable urbanization. This will help those countries avoid locking into high-carbon development pathways. For countries dealing with fragility, conflict, and violence, we will prioritize resilience-building, with a particular focus on the nexus of climate and other risks. Adaptation and resilience are also top priorities in SIDS, but with an emphasis on building local capacity and preparedness to respond to catastrophic risks. In middle-income countries, many of which are already large or fast-growing carbon emitters, there will be a strong focus on accelerating the low-carbon transition—aiming to avoid stranded assets and ensure a just transition—while building resilience.[7] WBG engagements with upper-income clients—countries above the IBRD graduation discussion income levels, including upper-middle-income countries and high-income countries—will prioritize innovative approaches, knowledge generation, and delivery on global mitigation goals, with positive spillovers for other WBG clients.

DELIVERY UNDER CCAP 2016–2020

The WBG has a significant track record of advancing climate action. In 2016, just after the landmark Paris Agreement, the WBG unveiled an ambitious five-year Climate Change Action Plan 2016–2020 to increase financial and technical support to client countries and private sector clients for mitigation and adaptation, and to unlock opportunities for low-carbon, climate-resilient development. The WBG

committed to increasing climate finance from 20 percent of lending in 2016 to 28 percent by 2020—a target that has been exceeded every year since 2018.

Today, the WBG is the largest multilateral funder of climate investments in developing countries, with $83 billion committed to climate-related investments over the past five years. In 2020, climate-related financing reached a record $21.4 billion, up from $17.8 billion the year before, and from $10.8 billion in the first year of the action plan. The share of WBG projects with some climate finance rose from 26 percent in 2015 to 62 percent in 2020.

FIGURE 6: Achievements under the WBG CCAP 2016-2020

The WBG exceeded its target to increase climate finance to 28% by 2020 in the fiscal years 2018, 2019, and 2020. The WBG delivered over $83 billion in climate finance, reaching the highest levels ever in 2020 at $21.4 billion, making it the largest climate financier for developing countries.

Renewable Energy

World Bank added **18 GW** of variable renewable energy into grids and **16 GW** of renewable energy generation; IFC added **8 GW** and MIGA added over **5 GW** of generation and integration; totaling **48 GW** for WBG of renewable energy to help communities, businesses and economies thrive.

Adaptation Finance

Boosted adaptation support from 40% of climate finance in 2016 to **52%** in 2020.

IFC and MIGA diversified their support for climate financing, expanding beyond the renewable energy sector.

Hydromet

Ensured that **120 million people** in **50 countries** gained access to hydro-meteorological data and early warning systems crucial to saving lives in disasters.

NDCs

Supported **30 countries** to implement or enhance NDCs and supported over **35 national or sub-national governments** in their efforts to put a price on carbon.

Green Bonds

World Bank issued **$5.9 billion** equivalent in green bonds in 17 currencies; IFC issued more than **$6.6 billion** equivalent in green bonds in 18 currencies; and MIGA's issued its first greenfield infrastructure project bond in Turkey.

Green Buildings & FIs

IFC and MIGA advanced certification programs, and scaled investments in green buildings, and continued to green the financial sector through investments in Financial Intermediaries and through the Sustainable Banking Network.

Under the 2016–2020 Action Plan, the WBG invested in renewable energy and energy efficiency to help clients reduce emissions, adding 48 GW of renewable energy, to help business and communities thrive, backing some of the world's biggest solar projects, such as the Noor concentrated solar power plant in Morocco.[8] The WBG increased energy access through renewable, off-grid solutions, which have reached millions of people in South Asia and Africa; 40 percent of new electricity access for Africans could be provided from renewable, off-grid solutions.[9] The WBG also promoted climate-smart agriculture, increasing productivity while reducing emissions. In addition, we helped countries to mitigate disaster risks, building resilience in people, infrastructure, and economies.[10] Today, the WBG provides a substantial majority of multilateral finance for adaptation in developing countries.

The WBG has been carbon-neutral since 2009 for GHG emissions related to all global facilities and global business travel. Between fiscal years 2010 and 2019, the WBG reduced its facilities-based emissions (Scope 1 and 2) by 27 percent, and it is on track to meet the current target of 28 percent emissions reduction by 2026 from a 2016 baseline, having reduced Scope 1 and 2 emissions by 9 percent as of fiscal year 2019.[11] On the risk side, the WBG's Treasury analyzes climate risks in its investment portfolio along a range of transition and physical climate risk scenarios, estimating both the risks and the opportunities associated with everything from low-carbon technologies, to extreme weather hazards. The WBG will continue to improve its risk assessment for its investment portfolio.

PROMOTING GREEN, RESILIENT, AND INCLUSIVE DEVELOPMENT

The Climate Change Action Plan 2021–2025 is guided by three fundamental principles that drive the WBG's work across all sectors:

» First, people must benefit from the transition to a low-carbon and resilient future. People are at the center of climate action and need support in managing the transition and the changes that come with climate-focused policies. A people-centered approach is essential for the political feasibility of climate action and to ensure that gains and losses from the transition to a low-carbon, resilient economy are shared equitably. This approach requires citizen engagement and participatory processes that consider diverse viewpoints, including gender. The WBG will mainstream gender-sensitive approaches to climate action on the ground. The WBG will increase support for social protection programs including job training, retraining, and education that help people adapt to climate change.

» Second, natural capital is critical to address climate change. Ecosystems are affected by climate change, with negative consequences for human health and well-being. Conserving natural capital, including biodiversity and ecosystem services, can contribute significantly to both mitigation and adaptation. Scaling up investments in emerging markets to strengthen and expand the waste value chain, including to address marine plastics, is critical to generating a sustainable circular economy.

» Third partners are crucial to success. Along with our country clients, the WBG will collaborate with the International Monetary Fund (IMF), development banks, other international organizations, monetary and financial institutions, including central banks, institutional investors, the private sector, think tanks, and civil society organizations to complement our work.

The Climate Change Action Plan 2021–2025 aims to advance the climate change aspects of the WBG's Green, Resilient, and Inclusive Development (GRID) approach, which has been adopted to promote economic progress through a recovery path that is inclusive and consistent with environmental and social sustainability. GRID has five key aspects. First, it prioritizes the creation of opportunities for poor and vulnerable populations in the recovery from COVID-19. Second, it recognizes that the challenges of poverty, inequality, and sustainability are interrelated. Third, it aims to accelerate and scale up interventions and investments to match the urgency of these crises, including by addressing countries' fiscal constraints. Fourth, since impacts are global, GRID recognizes that effective responses require international cooperation. Fifth, GRID is tailored to country circumstances and is

operationalized through our country programs. In the near term, WBG is helping countries navigate the COVID-19 crisis, repairing their economies, and making them more sustainable and resilient. Integrated, longer-horizon GRID planning will aim to repair the structural damage caused by the crisis and accelerate climate action while restoring momentum on economic development, poverty reduction, and shared prosperity.[12]

BOX 1

Partnerships to Drive Climate Action

As part of its efforts to drive climate action at the country level, the WBG has a long-standing record of participating in key partnerships and high-level forums aimed at enhancing global efforts to address climate change. In particular, the WBG maintains a prominent presence at global summits and conferences, including the UNFCCC Conference of Parties (COP), the Convention on Biodiversity, the One Planet Summit, Finance in Common, Innovate4Climate, the G20 Venice Conference on Climate, the UN Climate Action Summit, and the United Nations General Assembly/NY Climate Week.

One area of particular importance is the support we provide each year to the incoming COP presidency to help achieve climate priorities. Such engagement allows us to elevate the work we and our country and private sector clients are doing on the ground, reinforcing our role as the leading multilateral financier of climate action in the developing world. These events also give us the opportunity to showcase new WBG-led research, initiatives, and strategies.

In addition, the WBG is a proud member of various external partnerships that promote mainstreaming climate policies into national planning, including the NDC Partnership (NDCP), the Coalition of Finance Ministers for Climate Action, the Global Commission on Adaptation (GCA), and the Carbon Pricing Leadership Coalition (CPLC). The WBG also partners with MDBs, the IMF, bilateral donors, and other development agencies to harmonize approaches in incorporating climate considerations into project lending and operations in the context of the global agreements.

Source: World Bank.

IDA and IBRD countries will need different approaches as they move to GRID. IDA countries tend to be more vulnerable to climate risks, suggesting the need for greater investments that support adaptation and build resilience, address poverty, deliver basic services, and create jobs. It is also important to avoid investments that increase future risks or leave countries with stranded assets. Many IBRD countries need to make significant shifts toward low-carbon pathways. There are also opportunities to embrace new sources of growth that come from shifting market preferences, leapfrogging to modern, efficient, and competitive technologies. As major companies and investors pivot to greener standards, countries will need to end unsustainable practices that constrain their competitiveness and their access to capital. Developed countries have an important role to play, offering knowledge, innovation, and financial resources to help support developing countries with this approach. The Action Plan will support the climate policy commitments and actions of the IBRD-IFC Capital Increase and IDA19, and inform the strategic directions of the IDA20 climate change special theme.

02

Ramesh, a salt pan worker, cleans his solar panels as the sun rises in the Little Rann of Kutch, India.

—PHOTO: © DOMINIC CHAVEZ/INTERNATIONAL FINANCE CORPORATION

ALIGNING CLIMATE AND DEVELOPMENT

The WBG will step up support to client countries and private sector clients in order to meet both climate and development objectives. We will do so by (i) ramping up engagement at the country level on climate and development diagnostics, planning, and policies to help countries reach their climate and development objectives; (ii) aligning WBG financing flows with the objectives of the Paris Agreement to further mainstream climate into our development activities; and (iii) increasing climate finance for mitigation and adaptation in ways that deliver the most results.

COUNTRY CLIMATE AND DEVELOPMENT DIAGNOSTICS, PLANNING, AND POLICIES

At the country level, the WBG recognizes the need for a consistent and informed country climate discussion, including the interrelated issues of biodiversity and natural capital, anchored in country development objectives. Therefore, we are committed to major engagements on diagnostics and analytics to support national policy and planning for climate. This work will aim to identify and prioritize adaptation and mitigation opportunities—considering trade-offs and transition costs—to deliver the most results in the context of the unique needs, circumstances, and priorities of each of our client countries.

BOX 2

Climate Risks and Macroeconomic Policies

Changes in climate affect macroeconomic outcomes through physical and transition risks. **Physical risks** derive both from gradual changes in temperature, precipitation, and seasonal patterns that can affect crops and labor productivity, and from sudden-onset impacts, such as extreme weather events (droughts, forest fires, hurricanes, floods), which are becoming more frequent and severe and can directly affect consumption, investment, and trade. **Transition risks** result from the adjustment of asset prices in response to climate policies and technological changes during the transition to a low-carbon economy. Countries face transition challenges in managing the potential negative impacts of domestic and international mitigation policies on equity, labor markets, or external competitiveness. The introduction of global carbon prices and other mitigation efforts has adverse impacts on exporters of fossil fuels and high-carbon activities.

The analysis of physical and transitions risks must be systematically included in macroeconomic management. The WBG will support client countries in designing and implementing climate-smart macroeconomic policies by (i) mainstreaming climate considerations in key macroeconomic work and macro-projections via the development of national level macro-models with a climate lens, to assess the impact of climate shocks and climate policies on macroeconomic outcomes and fiscal sustainability; (ii) designing climate strategies that are fiscally sustainable by introducing tailored and politically viable environmental tax reforms that use revenues to maximize development co-benefits; and (iii) linking environmental tax reforms with public investment in adaptation and measures to maintain fiscal space and ease borrowing constraints.

Source: World Bank.

BOX 3

Supporting Clients to Design and Implement Carbon Pricing

Carbon pricing can be a cost-effective policy tool for governments and companies to use as part of their broader climate strategy. Carbon prices are needed to incorporate climate change costs into economic decision-making. If well-designed and sufficiently ambitious, and successfully incorporated into fiscal policy and decision making, carbon pricing can send a strong price signal to incentivize commercial entities and citizens to reduce emissions and the private sector to co-invest in the key systems transitions, reducing the extent of additional public investment needed. Carbon pricing policy options include explicit policies, such as carbon taxes, fossil fuel subsidy reform, emissions trading systems (also known as cap-and-trade systems), and crediting mechanisms, and implicit policies, such as revenue-neutral fee-and-rebate systems and internal and shadow carbon pricing.

Carbon pricing is effective as part of a broader policy package that can tackle other climate change challenges and market failures. Other policies are needed to drive research and development, unlock noneconomic barriers to mitigation, and create low-carbon alternatives and reduce abatement costs in the sectors that are the most difficult and expensive to decarbonize. Carbon pricing can minimize the economic cost of decarbonization when used in conjunction with public investment (e.g., in infrastructure and targeted incentives for technology and innovation), regulatory changes (e.g., for building norms and urban planning), and in the appropriate enabling environment (such as functioning capital markets). Assessing and addressing the distributional impacts of carbon pricing through the design of carbon pricing instruments and/or complementary policies is critical to enable a socially just transition and to contribute to the long-term sustainability of the carbon pricing mechanism.

Well-designed carbon pricing systems can play a role in raising revenues, which can help reconcile the need to finance decarbonization with the need for fiscal sustainability post-COVID. Raising carbon taxes to the level recommended by the Stiglitz-Stern Commission could add between 1 and 3 percent of GDP in national tax revenues in 2030. Carbon pricing revenues can be channeled to catalyze clean investment flows, ease transitions, and support poverty alleviation.

There is increasing client demand for the WBG's technical support on carbon pricing, including its mainstreaming into countries' wider fiscal policy and long-term decarbonization strategies. The WBG, through its combination of macro-fiscal, sectoral, and technical expertise, along with its convening power, is able to provide an integrated perspective of how carbon pricing policies can simultaneously advance environmental, fiscal, sectoral, and macroeconomic objectives.

The WBG is implementing several initiatives to support client countries and the private sector on carbon pricing. On advisory services and analytics, the World Bank is developing a new Carbon Pricing Assessment Tool (CPAT) and is leading work on the inclusion of carbon pricing in long-term climate strategies, the combination of carbon pricing with sectoral mitigation instruments, and its relation to international climate finance. The Bank is also supporting joint global and country analyses of the relative growth and welfare impacts of environmental and conventional taxes, fuel subsidy reforms, and efforts to include carbon pricing within existing commodity taxation systems. IFC is helping to mobilize the private sector to apply an internal carbon price and is advocating for business-appropriate carbon pricing policies in countries.

The WBG is hosting initiatives to support the development of mutually beneficial policies and implementation of carbon pricing, including the Partnership for Market Implementation, the Energy Subsidy Reform Facility, the Coalition of Finance Ministers for Climate Action, the Platform for Collaboration on Tax, and the Carbon Pricing Leadership Coalition. IFC leads private sector engagement for the CPLC and has been instrumental in bringing many prominent companies to the Coalition. The World Bank is also helping countries prepare to participate in international voluntary and compliance markets under the Paris Agreement through its Climate Warehouse initiative and to deploy results-based climate finance through its Climate Emissions Reduction Facility.

Sources: High-Level Commission on Carbon Prices. 2017. "Report of the High-Level Commission on Carbon Prices." Washington, DC: World Bank. https://www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices.

World Bank. 2021. "State and Trends of Carbon Pricing 2021." Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/35620.

The WBG will take a "whole of economy" approach that focuses on policies and plans to create the right enabling environment for climate action. Beyond greening projects, the WBG will support the greening of entire economies. This includes (i) embedding climate priorities in country macroeconomic frameworks that guide fiscal policy and major national investments and account for their climate benefits and risks;[14] (ii) integrating climate planning into national budgets and expenditure frameworks, to provide adequate budgetary support for climate action, optimize the overall allocation of public resources, and unlock private financial flows; (iii) embedding climate objectives in financial sector regulations and incentives, so the sector is resilient both to climate change impacts and to low-carbon transition risks, and to mobilize finance for climate action; (iv) incorporating climate objectives in systems planning, to integrate climate with economic, social-inclusion, and other objectives, assess cross-sectoral links and regional impacts, and identify trade-offs and synergies; and (v) embedding climate objectives in enabling environment policies and reforms to attract private sector investment. To supplement the country-based approach, the WBG will also support regional programs that contribute to climate, nature, and development objectives and it will leverage its leadership and convening power in support of global initiatives and partnerships.[15]

In addition to supporting "whole of economy" policy reforms and institutional strengthening, the WBG will support policy reforms to deliver transformational change. The climate agenda presents an opportunity for economic transformation and the modernization of economies for our client countries and the private sector. This highlights the critical importance of economy-wide aspects of the transition, such as carbon taxation and fiscal reforms to promote innovation and accelerate the transition. Recent evidence suggests that spending on key carbon-neutral or carbon-sink activities can generate net gains in economic activity.[16]

Country Climate and Development Reports

The WBG will develop a new Country Climate and Development Report (CCDR) to enhance climate analysis and policy in its programs, to identify and prioritize opportunities for climate action—including biodiversity and natural capital considerations—and to capture synergies between a country's national climate commitments and development objectives.[17] This new diagnostic will be introduced in fiscal year 2022. The CCDR will provide a strong analytic base to inform country engagement products, such as Systematic Country Diagnostics (SCDs) and Country Partnership Frameworks (CPFs)—CPFs will be critical for operationalizing this Action Plan.[18] Through CCDRs, country engagement products will incorporate climate, biodiversity and natural capital, and disaster risk issues, including as reflected in country climate strategies and NDCs. The goal is to deliver up to 25 CCDRs in the first year and keep them as a core diagnostic thereafter. CCDRs will be made public to inform partner and donor coordination and to engage companies and investors to support climate investments.

IFC and MIGA will work closely with the World Bank to use CCDRs to identify new private sector opportunities for climate business, with a focus on sectors that are seen to have the highest achievable positive impact in a given country. IFC and MIGA will also continue to integrate climate in all new Country Private Sector Diagnostic (CPSDs), building on recent piloting of climate integration in selected countries, and will expand this to more countries.

BOX 4

Climate Change, Ecosystems, and Biodiversity

Climate change threatens the integrity of ecosystems, which play key roles in capturing and storing carbon and in mitigating the impacts of climate change. Climate change and ecosystems degradation combined, in turn, push the planet ever closer to irrevocable tipping points. Terrestrial and marine ecosystems sequester 60 percent of gross annual anthropogenic carbon emissions, so their loss or degradation result in more carbon in the atmosphere. Without wetlands, coastal areas lack crucial protection from storm surges; when forests are lost, water supplies suffer, and torrential rains are likelier to cause landslides.

Climate change is accelerating global biodiversity loss. In oceans, for example, fish stocks and migration patterns are already changing due to warmer waters, acidification, and other factors. Climate change and ecosystems loss combined threaten development gains, and low- and lower-middle-income economies have the most to lose. Comprehensive wealth estimates indicate that renewable natural capital, including forests, mangroves, agricultural land, and fisheries, accounts for 23 percent of wealth in low-income countries. This underscores the need for integrated approaches to climate and ecosystem risks.

Nature-based solutions (NBS)—designed to protect, sustainably manage, and restore ecosystems—could deliver 37 percent of the cost-effective climate mitigation needed through 2030. Investments in green infrastructure, such as mangroves, wetlands, and watersheds, have proven to be cost-effective for water resource and disaster risk management, as they enhance the performance of traditional gray infrastructure and can sometimes even replace it. NBS are thus important for adaptation, protecting livelihoods and built assets from floods, storm surges, and droughts. The restoration of forests, landscapes and coastal ecosystems is also essential for both mitigation and adaptation, and a growing portfolio of World Bank investments reflects this.

Transformative action is needed to address climate and nature together, equitably and inclusively. Separate approaches risk being less impactful and fiscally inefficient. This points to the need for coordinated implementation of the Paris Agreement and the post-2020 global biodiversity framework, expected to be adopted at COP15 of the Convention on Biological Diversity in October 2021. Any response to these two intertwined crises must start by tackling the drivers of climate change and nature loss, then create an enabling environment to attract public and private investments that support climate action while preventing further nature loss.

To move the needle, the WBG will produce metrics and decision-support tools that are based on the best scientific data available and on economic analysis. Comprehensive wealth accounting and integrated ecosystem-economy modeling together can maximize synergies and manage tradeoffs between low-carbon and nature investments. Finally, support to the upcoming Taskforce on Nature-related Financial Disclosures will shed light on nature risks in the financial sector and align broader financial flows with nature objectives.

Sources: IPBES. 2019. "Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services." E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (eds). Bonn: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services Secretariat. https://ipbes.net/global-assessment. Griscom, Bronson W., Justin Adams, Peter W. Ellis, Richard A. Houghton, Guy Lomax, Daniela A. Miteva, William H. Schlesinger, et al. 2017. "Natural Climate Solutions." Proceedings of the National Academy of Sciences *114 (44): 11645–50. https://doi.org/10.1073/pnas.1710465114. World Bank. Forthcoming 2021. "The Changing Wealth of Nations 2021: Managing Assets for the Future." Washington, DC: World Bank.*

Support for National Policies and Strategies

The WBG will support countries in implementing their NDCs and in developing new or updated plans by 2025. NDCs are often the clearest articulation of how a country plans to reduce emissions and adapt to the impacts of climate change within its own development context and offer an opportunity to integrate NBS as part of both mitigation and adaptation action. A February 2021 review of updated NDCs found that although they have improved in quality and ambition, they

collectively still fall far short of the mitigation and adaptation needed to meet the goals of the Paris Agreement.[19]

Countries have also been invited under the Paris Agreement to communicate long-term low-emissions development strategies to mid-century. Long-Term Strategies (LTSs) can inform near-term decisions by outlining a country's future development trajectory and the policy direction and institutional strengthening needed. Where they exist, LTSs, together with NDCs, will inform WBG country diagnostics, including SCDs and CCDRs.

As NDCs and LTSs will play an increasingly important role in the context of Paris alignment, the quality and consistency of these documents is of heightened importance. The WBG will provide funding, technical support, and frameworks to ensure these plans are ambitious, comprehensive, and appropriate—considering development priorities for poverty reduction and physical risks from climate change—and will support countries to align NDCs and LTSs so they are mutually coherent and consistent. Translating specific national climate targets into investment plans can help unlock public and private investment for climate action. To support the private sector, IFC is currently piloting the assessment of high climate impact projects to determine whether they are aligned with NDCs. Based on the pilot, IFC will seek to apply the lessons from these assessments to other similar projects. MIGA is also assessing alignment with countries' NDCs and LTSs for high-climate-impact projects.

Fossil fuel-dependent economies are highly exposed to transition risks from global decarbonization. Fossil fuel-dependent countries face financial, fiscal, social and macro-structural risks from the transition of the global economy away from carbon-intensive fuels. The policy and investment choices to be made in the next decade will determine these countries' degree of exposure and overall resilience.[20] Through its support for NDCs and LTSs, the WBG recognizes national circumstances and development priorities, while making sure that clients have the opportunity to benefit from a wide range of viable and sustainable solutions that support both climate and development. These solutions include carbon capture and storage and circular economy approaches that spur growth and lower exposure to lock-in and other transition risks.

The WBG will also support countries in implementing and/or updating National Biodiversity Strategies and Action Plans (NBSAPs) or similar national plans covering terrestrial and marine biodiversity. NBSAPs focus on a wide range of measures, including integrating actions or policies related to biodiversity into broader development processes or policies and establishing mechanisms to address main drivers of biodiversity loss; ecosystem-level conservation; and crucially, conservation and restoration to improve resilience to climate change and mitigation potential.

NBS, including green infrastructure, will play a critical role in meeting the climate challenge, and the WBG is working to scale up the adoption and integration of these next-generation solutions into sustainable investments. NBS that use ecosystem-based approaches and hybrid "green-gray" interventions are critical tools for addressing climate adaptation and mitigation challenges while driving biodiversity and ecosystem services.[21] The World Bank is working to scale up its work on NBS through the development of a dedicated global program that will strengthen support to governments and Bank teams. This will translate down the line into greater IDA and IBRD investments dedicated to NBS addressing climate challenges.

IFC and MIGA will scale up private sector investment that integrates climate risk management measures and supports adaptation and resilience.[22] Given the critical role of biologically diverse ecosystems in adaptation and resilience, protecting biodiversity, including through NBS, is key. It is important that the private sector develop sustainable business models that accurately reflect this and protect and enhance these systems. IFC will develop new approaches and business models to expand its biodiversity finance and help catalyze private financing in its client markets, including through the development of a taxonomy of biodiversity-related investment activities. MIGA is integrating ecosystem services valuation into its climate risk screening framework. The approach will allow MIGA to demonstrate to its clients the costs and benefits (avoided losses) yielded from the protection of natural capital.

ALIGNMENT WITH THE PARIS AGREEMENT

The WBG will align its financing flows with the objectives of the Paris Agreement. The WBG defines alignment as the provision of support to clients in a way that is consistent with low-carbon and climate-resilient development pathways, aligned with the objectives of the Paris Agreement, and consistent with client countries' NDCs, LTSs, or other national climate commitments. Where these commitments are absent, the WBG is committed to supporting their robust development. Because the Paris Agreement recognizes that countries have different circumstances and gives countries latitude in the pathways they choose, our support to countries and to private clients respects individual needs and circumstances in integrating climate and development. The WBG is committed to leading on the development of methods and metrics needed to close the gap and make Paris alignment a reality.

The WBG will align all new operations starting July 1, 2023 (FY24).[23] For IFC and MIGA, 85 percent of Board approved *real sector* operations will be aligned starting July 1, 2023, and 100 percent of these starting July 1, 2025, two fiscal years later. To achieve this, both institutions will begin aligning 100 percent of their projects at the concept stage well ahead of July 1, 2023. Once a methodology for financial institutions and funds is finalized among MDBs, a similar approach will be taken for this business as well. The WBG is developing rigorous methodologies to assess alignment. The WBG is testing methodologies for investment lending projects, jointly developed with other MDBs, and developing new methodologies for other financing instruments, including policy-based lending and investments in financial institutions and funds. We will roll out alignment across the WBG, including guidance and training at the sector level, and ensure convergence with the new CCDRs and with our existing climate commitments. As a whole, the WBG will present an approach for implementation of our commitment to Paris alignment at COP26 in November 2021.

Paris alignment assessments determine whether an activity advances, hinders, or is neutral to, the attainment of the goals of the Paris Agreement. Financing that is aligned from a mitigation perspective must support or not hinder efforts to limit global warming, recognizing that peaking of GHG emissions will take longer for developing countries. An operation is considered aligned when (i) on climate mitigation, it actively contributes to decarbonization pathways (e.g., renewable energy) or supports activities that do no harm (e.g., education system reform); and (ii) on climate adaptation and resilience, it fully addresses climate risks. Operations that neither harm nor contribute to climate outcomes are considered aligned so long as they fully address any exposure to climate risks and are not inconsistent

with country policies on low-carbon, resilient development. Operations that are considered universally non-aligned include the mining of thermal coal, electricity from coal, extraction of peat, and electricity from peat. The WBG also announced in 2017 that it will no longer finance upstream oil and gas projects starting in 2019; it has not financed any oil pipelines since 2014. This approach will continue during the period of the Action Plan and into the future. Natural gas investments may be considered aligned in countries where there are urgent energy demands and no short-term renewable alternatives to reliably serve such demand. Accounting for unique national circumstances, all WBG investments in new gas infrastructure will be assessed for consistency with NDCs, LTSs, or other national development strategies, and will aim to ensure they do not lead to long-term carbon lock-in, among other considerations.

FIGURE 7: The WBG will be Aligned with the Paris Agreement

- The World Bank will align all new operations starting July 1, 2023 (FY24).
- For IFC and MIGA, 85 percent of Board-approved real sector operations will be aligned starting July 1, 2023, and 100 percent of these starting July 1, 2025, two fiscal years later. Once a methodology for financial institutions and funds is finalized among MDBs, a similar approach will be taken for this business as well.

Definition

The provision of support to clients in a way that is consistent with low-carbon, climate-resilient development pathways, aligned with the objectives of the Paris Agreement, and consistent with client countries' NDCs, LTSs, or other national climate commitments. Where absent, the WBG is committed to supporting their robust development.

Adaptation

Ensure physical risk mitigation measures are fully embedded in project design.

Country Circumstances

Because the Paris Agreement recognizes that countries have different circumstances and gives countries latitude in the pathways they choose, our support to countries and to private clients respects individual needs and circumstances in integrating climate and development.

Mitigation

Ensure investments support limiting global warming to well below 2 degrees, recognizing that peaking of GHG emissions will take longer for developing countries.

FIGURE 8: Ambitious New Climate Finance Targets and Commitments

- WBG climate finance target of 35% on average in FY21-25 for clients in support of green, resilient, and inclusive development. WBG will develop new products and platforms to mobilize climate finance at scale.

WBG Climate Finance (%):

26% → 35%

FY16–20 average delivered

FY21–25 target

Targets are ambitious given:

- composition of our financing portfolio;
- low per capita income levels of client countries and other development priorities for which they must borrow;
- private capital investment constraints in emerging markets;
- increased focus on IDA and FCV countries.

WBG Climate Finance ($ billion):

$16.7 FY16–20 annual average

$21.4 FY20

CLIMATE FINANCE AND IMPACT

With this Climate Change Action Plan, the WBG commits to achieve an average of 35 percent of climate finance for the entire WBG over the five years of 2021–2025,[24] up from a target of 28 percent by 2020. We will also accelerate the mobilization of public and private sector finance for climate and help increase access to concessional multilateral climate finance for our client countries. At least 50 percent of IDA and IBRD climate finance will be for adaptation, while IFC and MIGA will endeavor to scale up private sector climate finance for adaptation. These targets are ambitious given: (i) the composition of our financing portfolio, which includes significant support for human development, which involves lower levels of climate finance than other sectors such as infrastructure; (ii) the low per capita income levels of our client countries and the development priorities for which they borrow; (iii) the difficult years of recovery anticipated following the COVID-19 pandemic; and (iv) private capital investment constraints in emerging markets as a result of COVID-19.

For almost a decade, the climate finance metric has helped mainstream climate action across the WBG. Climate finance measures the share of financing (an input) that can be attributed to activities or policies that reduce or sequester GHG emissions (mitigation) or to reduce vulnerabilities and enable project beneficiaries to adapt to impacts of climate change (adaptation). This standardized system, which the WBG developed jointly with other MDBs, also facilitates comparison with similar institutions. An expanded definition of climate finance, to include a wider definition of green or sustainable finance, would make our achievements much higher than reported climate finance.

The increase in adaptation financing—to at least 50 percent of IBRD and IDA commitments over the five years of this Plan—will support a range of activities that reduce vulnerability. In line with the strategic directions set in the WBG Action Plan on Climate Change Adaptation and Resilience, these activities include delivering high-quality forecasts, early warning systems, and climate information services to better prepare people for climate risks; planning for management of floods and droughts; supporting river basins with climate-informed management plans and improved river basin management governance;

building more climate-responsive social protection systems; and supporting efforts to respond early to, and recover faster from, climate and disaster shocks through additional financial protection instruments.[25]

Beyond climate finance, the WBG reiterates its commitment to:

» Include climate and disaster risk screening in all World Bank financing to identify short- and long-term risks to development projects, policies, and programs. All IFC and MIGA investments and guarantees will be screened for physical climate risk by the end of FY23.

» Incorporate at least one climate indicator, to monitor and track climate results, in all IDA and IBRD operations with over 20 percent climate finance.[26]

» Conduct GHG accounting in all WBG investment financing operations where methodologies are available and use a shadow price of carbon in the economic analysis.[27]

The WBG is committed to collaborating with public and private sector partners to ramp up climate finance in ways that deliver the most results. Recognizing the limitations of climate finance as a metric that focuses only on inputs, and in addition to measuring our alignment with the goals of the Paris Agreement and expanding our focus on indicators to track results, the WBG will also use new metrics to better capture impact. To date, this includes measuring: (i) the resilience of our operations to physical climate shocks—for example, through resilience ratings being piloted under IDA19 that measure the resilience of a project's design, expected performance given identified climate risks, and contribution of the project to building wider resilience for beneficiaries; and (ii) our clients' actual results, including GHG emissions reductions. Where relevant, the WBG will be investing additional resources in data analytics and measurement in order to enhance the results orientation of the Action Plan.

03

Villagers plant trees for a nursery as part of a reforestation project in Mombeya, Guinea.

—PHOTO: VINCENT TREMONT/ WORLD BANK

PRIORITIZING KEY SYSTEMS TRANSITIONS

Five key systems—energy; agriculture, food, water, and land; cities; transport; and manufacturing—together generate over 90 percent of global GHG gas emissions. They must be transformed to address climate change, achieve a resilient and low-carbon future, and support natural capital and biodiversity. These systems face significant climate change impacts as well, making adaptation action critical across all five. They are also critical to achieving development goals. Transforming them is key for countries at all stages of development and requires action from the public and private sector: both to unlock major economic opportunities and create new markets and jobs, and to reduce the trajectory of emissions and limit climate vulnerabilities. Interventions that support these five key transitions will need to take into account macroeconomic and fiscal impacts in addition to managing social and labor impacts.

Climate action focused on both mitigation and adaptation across these key systems can lead to higher productivity, more jobs, more resilient economies, and greater social inclusion. Significant investment in education, training, and retraining to develop skills in these key sectors is essential for people in our client countries to benefit from the jobs created in the green economy. While we invest in a low-carbon future, we must simultaneously invest in adaptation so that countries are better prepared to deal with current and future climate impacts. The WBG will thus prioritize climate action across these systems to advance development objectives through impactful country operations and programs—including support for policy reforms, public and private sector investments, guarantees, and advisory services—and to support a just transition for our clients, including through additional financing. In addition to these five key systems, the WBG will also support adaptation action in other priority areas such as disaster risk management, coastal resilience, and water security.

ENERGY

The energy sector produces three-quarters of global GHG emissions, and coal combustion alone is responsible for nearly a third.[28] Yet today, about 800 million people live without electricity, and hundreds of millions have unreliable access.[29] Almost 3 billion people still cook with biomass, such as wood, and with other fuels that cause severe air pollution, with widespread health impacts. Modern energy services are critical to economic growth and human capital development, which is why achieving SDG 7—access to affordable, reliable, sustainable, and modern energy for all by 2030—is seen as crucial to achieving many other SDGs.[30] The WBG is committed to supporting countries and private clients to expand energy access consistent with the vision of SDG 7.

As we expand energy access, we urgently need a global transition to low-carbon energy. Technological improvements, including energy efficiency, battery storage, green hydrogen, nuclear developments, carbon storage, and decarbonization techniques will be important determinants of new energy directions in client countries.[31] It is also critical to develop solutions that make energy systems more resilient to climate change and extreme events. The WBG's priorities in the sector include helping countries with power sector planning, energy subsidy reforms, and improvements to the operational and financial performance of utilities; investing in projects to increase energy access, including through renewable energy and improved energy efficiency; and regional power cooperation and trade.

Priorities for climate-focused action in this sector will depend on the country context. In high-emitting middle-income countries, for example, key steps may include retiring coal-fired power plants, replacing fossil fuels across the economy, and removing market barriers for green technologies, while working to ensure a just transition. For lower-income countries still working to provide energy access to all, it is crucial to invest in low-carbon and climate-resilient baseload capacity, including renewable energy.

Scale Up Clean Energy Systems

The WBG will substantially scale up financing for clean energy transitions around the world. Clean energy has a key role to play through both utility-scale projects and small-scale projects alike.[32] The fast-declining costs of renewable energy and energy storage technologies, combined with innovative business models, offer significant opportunities to expand energy access and accelerate the energy transition. Renewable energy technologies create jobs throughout the supply chain and can spur broad and sustainable social and economic development. The WBG will continue to invest in renewable energy generation, integration, and enabling infrastructure. The WBG is the largest multilateral financier of mini-grids and off-grid solar, and this scaled-up support will also cover on-grid, off-grid and distributed renewables. A key element in the range of solutions is the Energy Storage Partnership convened by the World Bank, with 35 industry, research, and multilateral partners working to advance research, development, and deployment of energy storage and accelerate access.

The energy transition depends critically on key minerals, several of which are mainly mined in developing countries. The WBG, through its Climate Smart Mining initiative and by supporting private sector mining projects in those key minerals, will support the sustainable extraction, processing, and recycling of minerals and metals needed for low-carbon technologies while minimizing the climate and material footprints throughout their value chain.[33]

As offshore wind technology matures and costs decline, there is significant potential to expand its use in developing and emerging economies. World Bank analyses show excellent potential in several countries and a promising path for medium-term low-carbon electricity generation. Offshore wind projects are large-scale, capital-intensive, and complex, with significant infrastructure needs, requiring a coordinated WBG approach. IFC will evaluate, finance, and mobilize capital for such projects, working closely with the World Bank and MIGA for policy and project development and risk mitigation. In December 2018, the World Bank and IFC jointly launched the Offshore Wind program to assist emerging markets in accelerating their offshore wind uptake. IFC is leveraging its experience in renewable energy project development and financing to help create markets for new clean technologies and business models.

Green hydrogen—defined as hydrogen produced with 100 percent renewable energy—is gaining recognition as an important sustainable fuel. Although further cost reductions in renewable energy to power clean electrolysis are needed for scaling it up, green hydrogen is steadily gaining attention as an alternative to fossil fuel-derived hydrogen. The WBG will facilitate the transformative penetration of innovative renewable energy in client countries, including green hydrogen.[34]

The WBG also sees hydropower as a key clean energy source—and an important option to support

the integration of wind and solar in power systems. The WBG will support countries in developing sustainable and resilient hydropower, while not damaging the ecosystems, and the associated water storage needed, including through regional cooperation to advance complementary investments across countries.

MIGA will seek to further engage investors and scale its renewables portfolio. Utility-scale solar, wind, hydropower, and geothermal will be significant components of its efforts. It will develop innovative ways for its guarantees to support micro- and off-grid solutions that can accelerate electrification to underserved communities, specifically in IDA countries and in those experiencing fragility, conflict, and violence. MIGA will work in coordination with the IFC and the World Bank to provide comprehensive and effective solutions that maximize private sector participation in renewable energy. IFC is taking the lead with private sector clients and is developing a net-zero transition roadmap as part of the initiative. IFC and MIGA may also invest in transmission and distribution, which is key to integrating renewables, balancing the grid, and ensuring private capital flow into generation. IFC and MIGA will also develop business models to mobilize private capital for the significant capital expenditures and efficiency improvements needed in that sector.

Power System Planning

As more people and economic sectors rely on the power grid, it needs to be reliable and resilient. Power infrastructure is vulnerable to many climate change impacts: from reduced water supplies, to more frequent extreme weather events, including severe heat, storms, and floods. System-level and operational planning—such as modifying existing equipment or making choices in selecting new facility sites and equipment purchases—can help build resilience. Actions that reduce demand (e.g., through improved energy efficiency, demand management tools such as smart metering, and reduced transmission losses) can help reduce stress on the overall power system.

Climate resilience is an emerging priority that relates to the stability and performance of energy systems against extreme climate events. This is particularly important as renewable generation and hydropower, as well as energy demand, are highly affected by climate conditions. Distributed energy resources—small-scale power generation from rooftop solar panels or battery storage, for example—can increase resilience, particularly as climate change brings more extreme weather events and greater potential for loss of power. The WBG aims to accelerate investments and mobilize concessional finance for battery storage to help countries integrate more renewable energy. In expanding clean energy systems, such as hydropower, it is crucial that infrastructure is built with attention to climate resilience, water-related shocks, and the multiple uses of reservoirs. This must be supported by sound river basin management and integrate biodiversity considerations to minimize potential adverse impacts. Especially in a changing climate, hydropower development poses risks that need to be assessed and managed carefully; the WBG is committed to supporting countries to develop and finance hydropower projects that are well suited to local conditions and are resilient to climate change. The WBG will be stepping up its efforts to support long-term energy planning and capacity building, focusing on carrying out long-term energy and climate adaptation planning; enhance the collection of meteorological and hydrological data and their use in energy models; and designing and implementing emergency preparedness, response, and recovery planning.

The World Bank will accelerate its support to countries for power system planning to identify and implement cost-effective low-carbon and resilient options. Moving forward, the Bank will work with countries to prepare electrification plans and power sector development plans that incorporate low-carbon and resilient energy scenarios, expand modern energy access, and provide reliable electricity for economic growth. In addition, carbon capture, utilization, and storage (CCUS) may be an important lever for decarbonization.[35]

Attracting finance for clean energy requires proper planning, adequate operational performance, and financial sustainability of the power sector. In many regions, chronic underinvestment and lack of maintenance have led to frequent blackouts and limited energy access for the poor. The World Bank will continue to support policies, reforms, and investments to strengthen the operational, commercial, and financial performance of utilities. For countries that commit to improving the performance of their utilities, the WBG will provide support, including risk mitigation instruments, when relevant, to enable private renewable energy investments at scale, facilitating investment opportunities for IFC and MIGA.

Fossil Fuel Subsidy Reform

The World Bank will continue to support its client countries in advancing fossil fuel reforms.[36] In response to strong demand from client countries for just and inclusive reforms to eliminate or reduce energy subsidies, the Bank will provide technical assistance through its Energy Subsidy Reform Facility and support policy reforms through lending operations. The Bank will focus on protecting the poor in these reforms by strengthening social safety nets and facilitating communication campaigns to address political economy challenges.

Energy Efficiency

Energy efficiency is one of the largest untapped sources of energy, and scaling it up is a critical element of the energy transition. It is often the cleanest and lowest-cost way to expand energy services. Investing in efficiency reduces investment needs for new energy supply, fiscal outlays for subsidies, and costs to consumers—all of which enhances competitiveness and energy security. There is potential all across the economy—from the energy sector itself, to cities, manufacturing, health, education, transport, and water; many engagements will be multisectoral. The WBG will support projects both on the supply side (in power generation and by reducing transmission and distribution losses) and the demand side (industry, municipalities and other public sector users, residential buildings, and agriculture).

IFC and MIGA anticipate increasing support for energy efficiency projects as well. The COVID-19 crisis has reduced financial capacity across sectors to invest in clean technologies, threatening to stall progress. Looking ahead, the energy industry can respond quickly to new incentives, scale up readily available technologies, and create substantial savings and earnings for households and businesses in a post-pandemic recovery. IFC and MIGA aim to scale their energy efficiency finance through credit lines, green bonds, green loans, and guarantees and will work with real sector clients on large-scale energy efficiency investments, helping them to identify opportunities within larger projects. This work will support financial institutions' financing of energy efficiency projects, including industrial and building retrofits.

A Just Transition Away from Coal

Moving away from coal is crucial to achieving the goals of the Paris Agreement. This is a major undertaking that requires dedicated support at the macroeconomic and fiscal levels and across multiple sectors. The World Bank will significantly step up financing and advisory support for a just transition from coal to client countries that request it.[37] The World Bank will support national, regional, and local authorities to develop clear roadmaps for the transition, focusing on governance structures, the welfare of people and communities, and the remediation and repurposing of former mining lands and coal-fired power plants. IFC and MIGA will collaborate with the World Bank in these efforts and will work with their clients to support the coal transition in the private sector, including through innovative financing or de-risking instruments and incentives.

On the supply side, priorities in the transition from coal include accelerating the closure and repurposing of coal mines and coal-fired power plants, with due attention to distributional effects and the promotion of new sources of employment and economic growth for affected people and communities/regions. On the demand side, priorities include reducing, displacing, or avoiding coal use by increasing energy efficiency, switching to low-carbon energy sources, and substantially scaling up renewable energy investments.

In specific cases, natural gas may be useful in accelerating the transition away from coal—depending on country circumstances. For example, natural gas can have a role in providing household and business heating solutions in some countries over the medium term, and may be compatible with a country's goal of long-term decarbonization through the reuse of gas pipelines and other infrastructure for transportation and storage of cleaner hydrogen. Alternatively, a gas power plant may be essential to enhance power supply reliability and grid stability, thus facilitating higher rates of renewables integration. However, the long-lived nature of new gas infrastructure means that it is not always consistent with the need to decarbonize economies within this timescale. All investment in new gas infrastructure will be assessed for consistency with NDCs and LTSs.

The transition away from coal must be done justly, with due attention to people and the distributional effects. A just transition must integrate sustainability, including environmental remediation, as well as decent work, social inclusion, and poverty reduction. In the absence of good policy, there is a significant risk that as countries transition away from coal, workers and entire communities could be stranded. This requires the financing to build new skills, create jobs, and develop a more equitable and resilient economy. Programs to manage the social and labor impacts of the energy transition are a central element of the World Bank's toolkit to facilitate closures and to support a just transition for all. IFC and MIGA will work with their clients and collaborate with the World Bank to explore innovative solutions to accelerate the phase-out of coal and champion a just transition.

The WBG stopped direct financing of new utility-scale coal-fired power projects in 2010, and will significantly increase its programmatic support for the transition away from coal in client countries that request such assistance. The economics, construction and operation times, and emissions of coal power plants cannot be reconciled with the objectives of the Paris Agreement, nor with our efforts to support green, resilient, and inclusive development.

AGRICULTURE, FOOD, WATER, AND LAND

Agriculture and food production are key sources of employment and livelihoods for large numbers of people around the world, including the vast majority of the extremely poor.[38] In order to feed a projected global population of nearly 10 billion by 2050, these systems need to be scaled up even more.[39] At the same time, agriculture, forestry, and land use change produce almost a quarter of global GHG emissions.[40] The largest sources of GHG emissions linked to agriculture are land conversion (e.g., clearing forests for cropland); methane emissions from livestock and rice production; and nitrous oxide from the use of synthetic fertilizers. Agriculture is also the largest user of land and water, with impacts on forests, grasslands, wetlands, and biodiversity. Food and land use systems currently generate "hidden" environmental, health, and poverty costs estimated at almost $12 trillion per year.[41] Major changes are needed, but they must be undertaken with a people-centered approach.

At the same time, agriculture is one of the sectors most vulnerable to climate change, particularly for the most vulnerable populations: small-scale producers in low- and middle-income countries. Key risks to food production include water scarcity due to changes in precipitation and rising temperatures, sea-level rise, extreme weather events, declining biodiversity and ecosystem services, and new pests and crop diseases. Agriculture, food, water and land use are therefore priority sectors for both mitigation and adaptation efforts.

Climate-Smart Agriculture

The World Bank will step up support for climate-smart agriculture (CSA) across the entire agriculture and food value chains through robust policy and technological interventions. Doing this can achieve robust triple-win benefits: enhancing productivity, reducing GHG emissions, and improving resilience. Some subsectors warrant special attention. For example, livestock production is particularly GHG-intensive, but also plays a major role in providing livelihoods and food security—and there are well-known and cost-effective mitigation options.[42] Rice cultivation is a large source of GHG emissions, especially methane, but new varieties, techniques that reduce water use, improved management of inputs, and other strategies can enhance production, reduce emissions, and increase resilience. The World Bank will establish an Early Warning for Early Action Food Security Hub to support early detection and diagnosis of emerging food insecurity crises.

IFC and MIGA promote CSA through their work with private sector clients. IFC will focus on three strategic themes: (i) helping to improve productivity while reducing input use and GHG emissions per ton of output, especially through precision farming and regenerative or conservation agriculture; (ii) making livestock production more sustainable while increasing productivity; and (iii) reducing post-harvest losses in supply chains globally (e.g., through improved logistics and distribution, appropriate packaging solutions, modern storage facilities, and cold chains). IFC is exploring areas that may lead to paradigm shifts, including soil carbon, health, and fertility management, fertigation, commercially viable innovative animal protein alternatives, and new models to promote drip irrigation and build climate resilience. Increasing the volume of IFC's direct investments in agriculture firms and indirect investments in financial intermediaries and MIGA guarantees that contribute to CSA will entail transferring both disruptive technologies and proven interventions as well as business models that

overcome the well-known barriers to investments in this sector. There is a need for aggregation and risk-sharing solutions to align interests and achieve scale. IFC typically works with an "anchor client," such as an integrated food company, processor, trader, or food retailer, to help it implement climate-smart practices across its supply chains. IFC will leverage climate financing products to help build a pipeline with suitable profile clients. Many CSA engagements, especially those that involve financing for supply chain traders, processors, and smallholders, will require leveraging IFC's partner network of financial intermediaries and blended concessional finance to reduce or align risks or partially compensate for the public benefits associated with these investments.

Food Loss and Waste

A third of all food produced globally goes to waste, amounting to significant costs to society. The World Bank is already addressing policy options and trade-offs involved in tackling food loss and waste, and will implement farm-to-fork food system diagnostics to identify cost-effective climate mitigation and adaptation priorities across the value chain.[43] IFC is developing a food losses calculator that will help IFC and its clients to quantify the GHG benefits and cost savings of projects that reduce food losses. MIGA is working with its clients to lower the water and emissions footprints of food manufacturing, and to enhance the climate resilience of agricultural value chains by demonstrating the materiality of climate risks and interventions in the feasibility assessments of projects.

Nature-Based Solutions

The WBG sees NBS as critical elements of the food, water, and land systems transition. In agriculture and food production, NBS can enhance ecosystem functions in landscapes affected by agricultural practices and land degradation, improving water availability and quality, productivity of crop systems, and livestock health. NBS can achieve benefits for soil health, carbon sequestration, biodiversity, and climate resilience, among others. At the sectoral level, the Bank, through the Forest Carbon Partnership Facility, is building capacity for clients in their emission reduction programs and Reducing Emissions from Deforestation and Forest Degradation (REDD+) strategies. NBS can also be applied in coastal areas to stabilize shorelines and reduce flooding and erosion impacts, which helps to maintain fisheries as food sources and sustains livelihoods relating to fisheries, tourism, and recreation. Wetland restoration can also increase the storage capacity of freshwater supply and improve water quality alongside the enhancement of habitat and biodiversity. IFC is in the preliminary stages of developing sector-wide approaches to integrate biodiversity considerations at the earliest stages of landscape planning, particularly for the agriculture and infrastructure sectors. IFC will work to develop new approaches and business models to support biodiversity finance and explore catalyzing private financing in its client markets.

BOX 5

Water, Development, and Climate Change

Water is central to multiple SDGs. It is vital for producing food, and thus for achieving SDG 2, to end hunger; safe drinking water is necessary for achieving SDG 3, good health and well-being; and SDG 6 calls for clean water and sanitation for all. Climate change threatens water supplies through rising temperatures, shorter rainy seasons, more frequent droughts, and extreme precipitation. This has implications for water security and for the viability of agriculture, livestock, and aquaculture, with disproportionate impacts on the poor and most vulnerable.

At the same time, drinking water, sanitation, and irrigation services all demand energy, and demand is projected to grow significantly in the coming years. Water supply systems often use energy inefficiently and also waste water.

Without enhancing water security, regions and countries will not be able to adapt, decarbonize, and be resilient to climate change and other stresses and shocks. Strengthening water security is required for achieving emission reduction goals in the sector, but water also plays a key role in achieving emission reductions in other sectors, such as energy, agriculture, forestry, and transportation (including inland waterways). The WBG aims to support countries to enhance water security, manage water to adapt to and mitigate climate change, and close the gap in the water-energy-GHG emissions cycle through:

- Ensuring that water infrastructure is planned for and designed to address increasing uncertainty under a changing climate;
- Improving energy efficiency in the water sector, both directly and by addressing water leaks and reducing water losses in irrigation, and incorporating renewable energy sources in the delivery of services;
- Promoting circular economy approaches by reducing water losses; managing water demand; recovering and capturing valuable resources such as biogas, nutrients, and heavy metals from wastewater treatment; and adapting reuse of treated effluent and resource recovery;
- Promoting the sustainable diversification of water supplies;
- Promoting good watershed management practices that protect water sources from increased drought and water quality risk, while also protecting or rehabilitating landscapes that act as carbon sinks in the natural environment;
- Designing resilient sanitation service chain to reduce leaks of polluted water into the surrounding environment;
- Increasing and optimizing water storage by conventional surface water storage infrastructure to boost hydropower generation needed to drive the green energy transition, installing floating solar panels on storage reservoirs, scaling-up nature-based solutions, and promoting adaptive and flexible water allocation mechanisms. Combined, these help to build resilience of water services delivery by managing variable water supplies over time and providing protection during floods and droughts;
- Designing water-related infrastructure and pursuing policies to limit and/or reduce the emissions of non-CO_2 GHG emissions, particularly methane and nitrous oxide;
- Harnessing water-energy innovations and digital technologies; and
- Working to ensure that the decarbonization pathways selected by countries do not compromise their water security objectives, and that water is not a limiting factor for achieving them.

Source: World Bank.

Water

Global food security depends on water of sufficient quantity and quality to support the transition. This includes irrigation to expand arable land area, support needed crop production, and provide a buffer from increasingly hot and dry growing seasons. With climate change, the water cycle is expected to undergo significant change, with potentially large negative impacts on food production. In order to meet these challenges head on, countries must invest in better planning and institutional strengthening, increased water storage capacity, improved water reuse systems, and flood and drought infrastructure, including climate-resilient green infrastructure and hybrid green-gray solutions. The WBG will help countries manage flood and drought risks together, reducing the water-related shocks and protecting livelihoods and productive resources. The World Bank will expand access to high-quality hydro-meteorological data and flood forecasting and early warning systems to better manage water risks.[44] It will also expand support to climate-informed river basin management to manage transition risks, including for shared water resources such as lakes, rivers, and other international watersheds that collectively draw on one water resource.

IFC and MIGA will support countries, cities, and industrial players to expand and improve their water operations in order to reach key climate impact mitigation goals and increase adaptation capability and resilience of their infrastructure. As such, IFC and MIGA will work closely with their clients and partners to (i) promote climate friendly and resilient technologies; (ii) reinforce energy and water efficiency initiatives (e.g., non-revenue water reduction, water source management, operations optimization through digitalization); (iii) support economic activities by identifying sustainable sources of water for industrial use and scaling up treated wastewater reuse projects to limit the impact of water supply in water stressed regions; and (iv) invest in wastewater collection and wastewater treatment infrastructures.

Carbon Sinks

Terrestrial carbon conservation in which large volumes of carbon stored in natural forests, grasslands, and wetlands remain stored as carbon stocks is important for climate change adaptation and mitigation and is essential to increasing the resilience of ecosystems. Soils are among the planet's largest reservoirs of carbon. Soil carbon storage can be increased by using plant varieties that have deeper roots, agroforestry, adding organic materials, and changing crop rotations, and avoiding deforestation.[45] Along with its mitigation benefits, enhancing soil carbon can improve soil health and increase yields, and could potentially be monetized by farmers through carbon markets. The World Bank will support countries in providing incentives to farmers to invest in NBS to improve soil carbon storage and build resilience. The WBG will pilot in operations a low-cost, near real-time Monitoring, Reporting and Verification (MRV) Protocol that can leverage private capital for enhanced soil carbon sequestration.

Blue Economy

Fisheries and aquaculture have a significant role in food security and economy of many countries and have the potential to further support the nutritional needs of growing populations. The WBG will focus on helping countries and the private sector to protect marine areas, diversify the blue economy, reduce

marine pollution, and repopulate coral reefs. Healthy oceans provide jobs and food, sustain economic growth, regulate the climate, and support the well-being of coastal and urban communities. The WBG will contribute to blue growth through analytical services, policy dialogue, financing, and supporting activities related to more efficient use of resources, while strengthening waste diversion systems and infrastructure to collect and process plastic materials and recapture the value of plastics in the economy.

De-Risking Private Investment

MIGA will increase its support for sustainable agribusiness transactions. MIGA sees an opportunity to support investors in de-risking private financial flows and climate finance to agribusiness operations and their value chains. MIGA will also increase emphasis on the adoption of climate-smart techniques that lead to increased resilience to climate-related shocks. MIGA will initiate technical guidance on CSA solutions, raising awareness of climate risk identification and management practices, and introducing GHG emissions accounting methods tailored to clients' operations.

CITIES

Cities consume over two-thirds of the world's energy and produce over 70 percent of global CO_2 emissions.[46] Transforming urban systems will be critical for achieving climate goals, and also for achieving SDG 11, to make cities inclusive, safe, resilient, and sustainable.[47] The WBG will support both national and local governments to develop, finance, and implement solutions for cities that reduce emissions, build resilience, and promote shared prosperity. Through its work with governments, the World Bank will also identify opportunities for IFC to support sectors that require more private sector investment—for instance, to retrofit existing infrastructure and improve water operations—and for MIGA to design solutions and provide financing to cities to achieve these goals.[48]

Planning for Low-Carbon and Resilient Cities

The WBG will step up support to cities, including technical assistance and financing, to help them decarbonize and build resilience. This means ensuring policies, regulations, and investments are in place to improve urban air quality; decarbonize urban energy systems; promote green and resource-efficient buildings and infrastructure, through new construction and retrofitting; promote integrated solid-waste management and circular-economy approaches; improve urban transportation, including public transit and non-motorized options; and improve the coverage, efficiency, and resilience of urban water supply, sanitation, and wastewater treatment. Improving urban land use planning and regulations is particularly important. A key enabler of all this work will be the City Climate Finance Gap Fund.[49]

To enhance climate resilience, the WBG will support cities with (i) enhanced access to tools and technical support to integrate climate and disaster risks in spatial planning; (ii) strengthened capacity to effectively prepare for and manage those risks; (iii) assistance to make key infrastructure more resilient, including buildings, schools, and hospitals; (iv) access to more financing for investments in resilience

and in service delivery; and (v) access to more global and regional partnerships to achieve resilience objectives. NBS are also crucial for increasing resilience, including water security, and reducing disaster risks such as floods. Without enhancing water security, many regions and countries will not be able to adapt, decarbonize, and be resilient to climate change and other stresses and shocks. NBS can be used as "green infrastructure," which gains value over time given the range of benefits that are produced as ecosystems mature. Key enablers for this work include partnerships such as the Global Facility for Disaster Reduction and Recovery (GFDRR) and its flagship programs.

IFC will scale up strategic partnerships through a fully integrated investment and advisory approach to help cities address current market failures, such as limited funds for project preparation, low creditworthiness, and lack of technical expertise. This early upstream engagement is designed to pave the way for new and complementary IFC investments, thereby assisting cities in prioritizing projects and increasing the delivery of sustainable municipal infrastructure projects that meet their development goals.[50] IFC's new green cities tool, Advance Practices for Environmental Excellence in Cities Green Program (APEX), supports emerging market cities to accelerate policy actions and investments that contribute to the low-carbon transition and resource-efficient growth pathways.[51] This will be complemented by efforts to further deploy green finance solutions such as green loans, green bonds, and Breathe Better Bonds.[52] MIGA will expand its sustainable cities portfolio through innovative applications of its products to facilitate the modernization of economic and social infrastructure that is aligned with climate-resilient development pathways. MIGA will work with the private sector to adopt a more holistic view so that projects to do not contribute to maladaptation or any other adverse impacts within and beyond the project boundary.

Green Buildings

IFC and MIGA will scale up their green building business, both through direct financing and de-risking of asset owners and by increasing the use of green mortgages and green construction finance through financial intermediaries. IFC will continue to promote Excellence in Design for Greater Efficiencies (EDGE) across a range of asset classes, including green homes, offices, hotels, hospitals, higher education institutions, retail stores, warehouses and industrial parks, light industrial buildings and factories, data centers, airports, and green property funds.[53] IFC will develop green retrofit programs and expand its EDGE certification program to help establish standards in this area. It will also support building owners and clients to achieve their climate strategies and targets and align IFC investments with the objectives of the Paris Agreement. To contribute to adaptation and resilience, IFC will pilot its newly developed Building Resilience Index.[54] MIGA will back investments in green buildings and work with clients to obtain green building certifications, such as the EDGE certification.

Integrated Waste Management and Circular Economy

The WBG is helping countries and cities adopt integrated waste management and circular economy approaches to advance climate, development, and broader sustainability goals. The World Bank will support cities in promoting these approaches across the value chain. IFC will focus on three strategic priorities for the waste sector: (i) strengthening the municipal solid waste value chain from collection to

disposal, particularly in areas where this infrastructure is limited and/or heavily reliant on the informal sector; (ii) promoting sustainable resource recovery solutions, including recycling, refuse-derived fuel, landfill gas capture and use, and waste-to-energy; and (iii) developing capacity to manage specialty waste streams, such as electronics and hazardous waste. These priorities will enable emerging markets to tackle their current and growing waste management concerns and lay the groundwork for a transition to circular economy principles.

BOX 6

Building Coastal Resilience to Protect Lives and Livelihoods

While some climate-change-related impacts on agriculture, such as temperature and rainfall, are similar for coastal and non-coastal settings, there are other factors that impact coastal agriculture, such as soil salinity, coastal erosion, seawater intrusion, and increased exposure to cyclones. Climate-smart agriculture has been adopted in many parts of the world as a way to cope with climate shocks and minimize GHG emissions while sustaining crop yields, and this approach remains relevant for coastal farming, together with integrated coastal resource management and strengthened land use planning.

Beyond agriculture, coastal areas in several countries are highly populated and generate an outsize share of economic growth. This means that large numbers of people and significant assets are vulnerable to coastal climate change impacts. Despite significant progress in recent years—which has saved lives, reduced economic losses, and protected crucial development gains—many countries still need to do far more to address vulnerabilities. The WBG aims to support countries to strengthen coastal resilience in both rural and urban settings, in a number of key areas:

- Strengthening data and decision-making tools by establishing openly accessible natural disaster databases, as well as asset management systems for critical infrastructure;
- Factoring risks in zoning and spatial planning based on the best available information;
- Strengthening the resilience of infrastructure systems and public services by upgrading such assets in the most exposed and under-protected areas and updating existing safety standards;
- Using NBS by tapping into the protective function and economic contribution of ecosystems in a systematic manner; and
- Improving disaster preparedness and response capacity by upgrading early warning systems, strengthening local response capacity, improving social safety nets, and implementing comprehensive risk financing.

Source: World Bank.

TRANSPORT

Sustainable transport is critical for fostering inclusive growth, expanding access to essential services, and combating climate change. The WBG works with clients to provide safe, clean, resilient, efficient, and inclusive mobility. Transport produces almost a quarter of global CO_2 emissions from fossil fuel combustion, and the sector's emissions are rising rapidly.[55] Demand for transport is projected to grow rapidly in the coming decades, as low- and middle-income countries continue their economic development and urbanization. Without aggressive measures, CO_2 emissions from transport are expected to grow by 60 percent between 2015 and 2050.[56] To support a low-carbon and resilient

transport sector, the WBG will support three main pillars of the transport sector: mobility and access, logistics and freight, and resilient transport systems.[57]

Mobility and Access

The World Bank will support cities and urban areas in planning, developing, and managing integrated transport systems, including high-quality public transit to replace private vehicles and fragmented informal urban transport services, as well as supporting active mobility through non-motorized modes. Digital technologies offer significant opportunities to improve efficiency; reduce congestion, air pollution, and GHG emissions; and transform how people and goods move around the world. The Bank will also support governments in efforts to improve urban accessibility by formalizing public transit in areas with large reliance on informal services. This requires careful planning, so that formal services are affordable and meet local mobility needs, and to transition informal operators, so they do not lose their livelihoods. The World Bank's work in this realm will facilitate IFC and MIGA's mobilization of private capital.

Electric vehicles (EVs) hold significant potential, especially as the power sector is decarbonized. A shift to EVs, including private vehicles as well as buses and trucks, would reduce GHG emissions as well as air pollution and associated health impacts. The WBG will support countries or cities in planning and implementing e-mobility solutions, to electrify public transit, green government fleets, adopt micro-mobility solutions, incentivize individual EV adoption, and build the necessary support infrastructure, such as charging stations.[58] A key IFC focus area is electric buses for public transit in cities. IFC is executing a three-pronged approach to scale up its investments in this sector.[59]

Pricing and regulatory reforms for fuels and vehicles can be effective tools for reducing GHG emissions, by raising the price of private vehicle relative to public transit in cities, and by encouraging the purchase of cleaner and more fuel-efficient vehicles. At the same time, most cars, trucks, and buses imported to low-income countries are secondhand, often many years or even decades old, contributing significantly to air pollution and GHG emissions. The World Bank will support fleet modernization, including by supporting policies to regulate the secondhand vehicle market by banning imports older than a certain age or imposing additional excise duties on them.

Logistics and Freight

Interventions to decarbonize the freight sector and deliver competitive logistics include interventions to re-engineer supply chains, change inventory practices, reduce the fragmentation of production, bring production closer to customers, shift to lower-carbon transport modes, switch to energy-efficient and low-carbon vehicles across modes, including in maritime transport, and optimize networks. Green logistics and green infrastructure not only provide improved connectivity, but can also be a cost-efficient way of reducing emissions and climate-related natural hazards, supporting nature and climate objectives. The WBG will support countries in preparing and implementing measures to help decarbonize the freight sector by enabling and incentivizing modal shift, a long-term transition to green logistics, and modernization of the trucking, rail, and maritime sectors. To sustain this transition, IFC and MIGA will support investments in energy-efficient equipment and green buildings in subsectors

such as ports, airports, and shipping, and will expand their climate-related investments in third-party and temperature-controlled logistics.

Resilient Transport Systems

The long-term performance and reliability of transportation systems will increasingly need to consider and plan for climate change and extreme weather events. The WBG will apply a range of tools and approaches to its engagement in building resilient transport systems. These include: (i) upstream sectoral and strategic spatial planning informed by assessments of risk and vulnerability; (ii) resilient infrastructure solutions, which comprise investments in physical infrastructure, new technologies, and community-based adaptation; (iii) enhancing the enabling environment through institutional and capacity support, awareness-raising, and finance to enhance the capabilities of the relevant stakeholders at the policy and regulatory level; and (iv) post-disaster risk and recovery support so that climate change risk and resilience are integrated into rebuilding efforts. These solutions will be underpinned by country-based assessments of a transport system's ability to withstand climate change, based on an inventory of transport facilities, an analysis of climate-related risk factors, potential adaptation responses, and an economic assessment of response packages.

MANUFACTURING

Manufacturing is a significant source of GHG emissions, especially from heavy industries producing base materials such as chemicals, steel, cement, and glass; for which direct industrial processes account for 5.2 percent of global GHG emissions and energy use in industry for an additional 24.2 percent.[60] Base materials are inherently GHG-intensive, but they currently have no technically and economically viable substitutes that can offer similar functions at scale. This is a major challenge, because they underpin a range of economic activities, create jobs along all value chains, and drive the economic growth of countries. These are essential products, from agricultural fertilizers, to fibers, to construction materials, and they enable solutions for housing, waste treatment, food safety, health care, and consumer goods that are central to the quality, affordability, and comfort of modern life. As countries industrialize their economies, it is important to adopt the best available practices and new business models that support sustainability and low carbon development pathways, while working to ensure that manufacturing becomes more resilient to natural disasters.

The World Bank will support countries and their industries in developing sectoral policies that promote low-carbon and resilient growth, while helping to improve their green competitiveness and the role of the private sector. The Bank is looking to maximize its climate impact through the Circular Economy for Private Sector Development Program (CEPSD) by focusing on reducing emissions at base in industries and up the value chain. The WBG is helping all manufacturing sectors to get on a path toward decarbonization and achieving SDG 12— sustainable consumption and production patterns—via resource efficiency, low-carbon solutions, and circularity. Digitalization of industries will greatly affect production efficiency and enable the viability of circular economy solutions. As a large player in the manufacturing space, the Bank will also work with industrial parks to help them offer low-carbon industrial infrastructure and services through its eco-industrial parks program.[61]

The World Bank has launched a Resilient Industries program to improve competitiveness through business continuity planning, improved management of supply chains and industrial parks in the face of natural disasters.[62] The Bank will help developing country governments increase the resilience of their key industries to climate-related and other natural disasters through a focus on business continuity planning. This will be done by analyzing the main risks posed to industries, supply chains, and their employees, and providing instruments related to financing, industrial infrastructure development, and improved preparedness planning. In the event of a disaster, the Bank will coordinate with humanitarian efforts to support rapid damage assessment, address critical infrastructure damage, and develop financing mechanisms to help employees and businesses to shelter and recover. Resilience planning also needs to account for events not linked to disasters, such as rising sea levels. The WBG will support industry resilience solutions, including those related to planning, location of future facilities, and identifying backup supply and distribution chains.

Globally, the largest mitigation potential in manufacturing is in energy-intensive and material conversion industries. IFC and MIGA will apply three principles to investments across heavy manufacturing industries: First, they will not support new coal-fired power projects or wet process in cement. Second, they will differentiate the sustainability and climate "bar" for investments based on the development stage of client countries and promote progressive transitional sustainability improvements where absolute sustainability is not yet achievable. Third, they will assess the sustainability and climate-related drivers in projects, such as (i) energy source and alternatives; (ii) materials used and alternatives; (iii) products produced and alternatives; and (iv) process technology, striving for best-in-class production processes.

IFC and MIGA will work with committed sponsors and private companies that are dedicated to achieving strategic climate and broader sustainability objectives. IFC leverages and promotes climate finance products and advisory services, and MIGA provides de-risking products, to support proven abatement measures and pilot innovative technologies. Core mitigation areas common to all industries include circular economy-type interventions (redesign, reduce, reuse, and recycle products), energy and resource efficiency, use of renewable energy, including distributed generation and both product and manufacturing process related innovations. IFC and MIGA will work with corporate clients in manufacturing to help them meet their climate strategies and targets, aligned with WBG objectives and SDGs.

BOX 7

Financing Adaptation for Impact

In 2020, the WBG delivered more than two thirds of total MDB adaptation finance for developing countries, reflecting its central role in financing adaptation and resilience action worldwide. Increased support on adaptation is critical, especially for IDA countries, fragile states, and SIDS. Investment in adaptation infrastructure is likely to have positive effects on employment, in particular because of the increased demand for construction work in projects to reduce climate-related risks. Climate change is recognized as a driver of fragility and a threat multiplier, making adaptation an important element of the WBG's Strategy for Fragility, Conflict and Violence. It is urgent to scale up action on adaptation and resilience, given the increasingly severe impacts of climate change.

In addition to the IBRD/IDA target of at least 50 percent climate finance for adaptation, the WBG has committed, under its existing Climate Adaptation and Resilience Action Plan, to support a mainstreamed, whole-of-government approach to help countries shift from addressing adaptation as an isolated investment, to systematically managing and incorporating climate risks. This complements the whole-of-country approach outlined above. Successful adaptation requires planning for and doing development differently, systematically taking account of both present-day and future climate risks from the start. A key entry point for mainstreaming adaptation is to provide tools and analytics to line ministries, to help them integrate resilience measures into sectoral investment planning, design, and implementation. The objective is to help client countries benefit not only from individual climate-smart projects, but also from systemic sectoral resilience and disaster preparedness.

Adaptation and resilience are critical elements in the Action Plan, necessary across all areas that the WBG supports clients, and critical for the success of the five key systems transitions outlined in Section 3. In addition to the five key transitions, the WBG will support investments in the following priority areas:

- **Disaster risk management:** Expanding access to high-quality hydrometeorological data and early warning systems and supporting agencies with improved meteorological, hydrological, and/or flood forecasting systems;
- **Water security:** Supporting river basins with climate-informed management plans and/or improved river basin management governance, and providing people with improved flood and drought risk management infrastructure;
- **Coastal resilience:** Helping countries adopt measures to increase their resilience to climate-related shocks and stressors in coastal areas;
- **Human development:** Supporting climate hot-spot countries with human development engagements (education; health, nutrition, and population; social protection and jobs) to effectively implement resilience strategies;
- **Financial protection:** Supporting countries in their efforts to respond early to and recover faster from climate and disaster shocks with additional financial protection instruments, and reduce climate-related risks through financial sector regulatory reforms; and
- **Forests and integrated landscape management:** Supporting interventions through an integrated landscape management approach for avoiding deforestation and promoting landscape restoration or sustainable forest management.

Source: World Bank. 2019. "The World Bank Group Action Plan on Climate Change Adaptation and Resilience."

04

Electric scooters in the World Heritage Site of Luang Prabang in Lao PDR. The World Bank is conducting a study of ways in which the city can enhance green mobility and make its tourism industry more sustainable. —PHOTO: AIDEN GLENDINNING / WORLD BANK

FINANCING TO SUPPORT THE TRANSITIONS

Meaningful climate action will require scaling up finance. This is especially important to help poorer countries make large investments in global public goods, such as reducing coal use, and to finance adaptation efforts, which require upfront costs but yield growing benefits over time. Developing countries will need an estimated $4 trillion per year in investments up to 2030 to build infrastructure to meet their development needs.[63] These investments would enable developing countries to build sustainable and resilient infrastructure, create new jobs, and sometimes leapfrog to low-carbon solutions. Current finance flows fall far short of that figure, however. To successfully achieve climate and development objectives, the world must mobilize trillions of dollars in the coming decade. Existing public, private, and concessional climate finance needs to be deployed in more transformative and catalytic ways, leveraging additional capital to bridge the gap between available resources and needs.

The WBG will continue to play a critical role in mobilizing finance at scale for climate action. IBRD, IDA, and IFC have a financial model of issuing AAA-rated bonds in capital markets, which leverages scarce shareholder capital with substantial private capital mobilization (PCM). For example, since inception, IBRD has directly mobilized capital market resources to provide development financing volumes that are 40 times the amount of capital provided by shareholders.

Along with the WBG committing, on average, 35 percent in climate finance and at least 50 percent of IDA and IBRD climate finance for adaptation, we will use our tools, platforms, and convening power to mobilize international, domestic, concessional, and private finance for mitigation and adaptation. The WBG will structure financial packages that include guarantees, insurance, risk mitigating structures, and capital markets instruments to address incremental costs and other barriers to carrying out the five key transitions outlined in Section III.

To increase the financing available and maximize the use of finance for climate action, the WBG will focus on: (i) helping client countries boost their public domestic resources; (ii) increasing mobilization of international and domestic capital, including catalyzing domestic private capital; and (iii) supporting global efforts to raise and strategically deploy concessional climate finance to de-risk climate investment.

Well beyond WBG financing alone, the broader financial sector, encompassing both the public and private sectors, can and must play a key role in mobilizing capital for green and low-carbon investments and managing climate risks. In emerging markets, the ability to scale green finance provides a pathway to greening the real economy, including by helping high-emitting sectors transition to low-carbon alternatives. The WBG will support greening the financial sector across emerging markets through its work with central banks, national development banks, and private sector financial institutions, including through targeted advisory engagements to equip clients with the necessary frameworks to create enabling environments and risk mitigation practices to embrace climate action, while also enabling innovative and scalable funding mechanisms in support of sustainable investments.

BOX 8

Building Country Financial Stability and Integrity

Regulatory and policy reforms are crucial to greening the financial sector, incentivizing low-carbon, sustainable investments in the real economy, and requiring the sector to address financial risks from a changing climate. The creation of global standards is critical to develop a credible class of climate assets that is recognized by global investors. The WBG is supporting this work through the Coalition of Finance Ministers for Climate Action, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), the Sustainable Banking Network (SBN), and the WBG's close relationships with financial sector standard-setters.

Through both the public and private sectors, the WBG will work toward ensuring that valuation, trade, product, and disclosure standards and requirements are truly global and can be applied in proportionate and appropriate ways in the context of developing countries' markets without unintended consequences that could undermine sustainable investment and capital mobilization in developing countries. The WBG will support market discipline by contributing to transparent rules for disclosure to generate positive externalities that will move markets in a climate-oriented direction. The World Bank will work to build capacity of financial authorities and support regulatory and supervisory reforms that are a prerequisite to scaling green finance through the financial sector. For example, the Bank will work with clients to introduce climate risk in the regulatory framework, and IFC will work with banks to adapt their reporting to the new requirements and help them design financial instruments to green their balance sheets.

The WBG is working to stimulate uptake of such reforms in investments and risk management by the private sector. The "30 by 30 Zero Program", led by IFC and supported by World Bank work on regulatory and supervisory issues, aims to increase the share of climate business in participating banks' portfolios to 30 percent while reducing coal exposure to zero or near-zero by 2030. To achieve this, the program will work to align financial sector policies and strategies with the implementation of NDCs. MIGA is also working with its banking clients to reduce their coal exposures and scale up their climate finance activities. IFC and MIGA also plan to develop an advisory program on climate risk assessment and management for select client financial institutions, and it will share best practices under the Task Force on Climate-related Financial Disclosures (TCFD).

The WBG will also step up support to countries and companies to address financial risks that arise from both slow-onset and sudden-onset climate change impacts. The World Bank is helping countries protect their populations through the Disaster Risk Financing and Insurance Program (DRFIP). The program provides technical advice and grant finance to implement comprehensive financial protection strategies, bringing together sovereign disaster-risk financing, agricultural insurance, property catastrophe risk insurance, and scalable social protection programs.

With respect to financial stability risks, the World Bank embeds climate and environmental risk and opportunity assessments into the Financial Sector Assessment Program (FSAP), jointly with the IMF, and conducts climate risk assessments and stress testing as part of broader climate-related technical assistance programs. This work builds on, and will be increasingly integrated with, foundational macroeconomic climate risk modeling work, including disaster risk scenarios. This includes a focus on transition risks—meaning exposure to abrupt policy, legal, technology, and market changes driven by the need to reduce GHG emissions and physical risks. The World Bank and IFC are also supporting the establishment of the Taskforce on Nature-related Financial Disclosure (TNFD), which is modeled on the TCFD and seeks to create a framework for FIs and companies to assess and report on material financial risks associated with biodiversity loss and their impact on biodiversity. MIGA is also leading on the development of the first political risk insurance country assessment methodology to incorporate climate risk in its ratings typology.

Source: World Bank.

BOOSTING CLIENT COUNTRIES' PUBLIC DOMESTIC RESOURCES

Public finance and domestic resources, including state-owned banks, will be critical to financing global public goods, such as adaptation, mitigation, and a just transition. The WBG will help client countries increase resources for climate action and build fiscal buffers to prepare for climate-related shocks through domestic public finance (including financing released through asset recycling) and realigning incentives through fiscal policy, such as carbon tax and subsidy policies. Specifically, the World Bank will support fiscal reforms, including fossil fuel subsidy reforms, to increase domestic resources for mitigation and adaptation, as well as efforts to improve tax administration. The Bank will help countries to adopt a budgeting approach that prioritizes climate-responsive investments to move from greening projects to greening economies. In that context, the Bank will provide technical assistance to countries to assess the fiscal impact of public-private partnerships (PPPs) for sustainable infrastructure.[64] In addition, the World Bank will provide technical assistance to countries to prepare for and implement carbon pricing. The WBG will support countries in building systems and approaches for domestic carbon markets and for participation in international voluntary and compliance markets, including technical assistance to prepare projects that generate eligible emission reductions that meet these markets' requirements.

MOBILIZING AND CATALYZING PRIVATE CAPITAL

The WBG will work to catalyze and mobilize investment for climate action by (i) supporting upstream efforts to create new, sustainable, and green markets across developing countries that encourage private investment; (ii) expanding access to private capital and green finance; (iii) building climate capital markets; (iv) working with development partners and through capital markets to support finance for adaptation and resilience and finance for biodiversity; and (v) enabling the catalyzation of domestic private capital for climate investment.

Upstream Support

The WBG has played a key role in opening sectors by working with governments on the reform agenda, advising them on PPP structures, and then investing or de-risking directly, with these sectors subsequently able to attract capital based on foundations laid by the WBG. An example is the green bond space in the Philippines: IFC invested in the first few green bond issuances for a total of $450 million; today, this market issues green bonds for about $3 billion per year. This scaling up would not have been possible without the initial work by the WBG in working with the regulators on the regulatory framework, setting standards, and supporting issuers on the structuring of Green Bonds for the international capital markets. The WBG will scale up using similar approach, leading to catalyzing significant capital into the climate space.

IFC and MIGA will work upstream to help build a pipeline of investable projects for the private sector and will provide advisory support to build market awareness of existing products and solutions, improve monitoring and reporting capabilities, and build pathways to align with climate-related commitments. For example, IFC will work with international programs to green the financial sector

through the IFC-led Sustainable Banking Network (SBN). The SBN will continue to coordinate the measuring and reporting of green finance through its 40 member countries, which represent $43 trillion (85 percent) of the total banking assets in emerging markets. Based on the SBN model, IFC has established a new alliance of green commercial banks, focusing initially on Asia. IFC will further scale up the rollout of the Climate Assessment for Financial Institutions (CAFI) tool, a first-of-its-kind impact monitoring and reporting tool for climate impact data that allows users to assess and quantify the climate impact of each project. In addition, IFC's Green Banking Academy, in partnership with Felaban, RENAC (Germany) and other partners, builds knowledge and capacity for banks in Latin America. Building on its success in Latin America, the Green Banking Academy is exploring how to adapt and replicate this model in Europe and Central Asia and in Africa.

Expanding Access to Private Capital and Green Finance

The WBG will work to increase access to private capital for climate investments via guarantees to attract and de-risk private sector investments (equity and debt) and commercial financing to support climate action in developing countries by mitigating real and perceived risks associated with climate investments. As the lack of a bankable project pipeline has been a barrier to private sector mobilization to date, the WBG will support the Global Infrastructure Facility (GIF).[65] In addition, the World Bank is planning a thematic climate guarantee window, which will support risk sharing facilities and innovative financing structures to strengthen the creation of new local currency markets.

The WBG will support client countries' access to ESG investors and build local currency finance ecosystems for key climate transitions in nascent markets through technical assistance and targeted risk mitigation. As leaders in impact investing, IFC and MIGA will help to increase access to private capital by expanding their product offerings, increasing the uptake of and private investment in sustainability-linked loans, ESG-linked loans, and other instruments to connect global investors with climate-friendly investment opportunities in emerging markets. For example, IFC is supporting early-stage ventures for climate technologies through its Cleantech Venture Capital initiative. In addition, IFC's Managed Co-Lending Portfolio Program (MCPP), a syndicated loan platform that has raised $10 billion to date, creates diversified portfolios of emerging market private sector loans, allowing investors to increase exposure or get first-time entry to this asset class. IFC is seeking potential opportunities to expand this innovative program with a targeted impact/climate-focused platform, to give sustainability-driven borrowers access to crucial pools of capital and help increase the amount of impact-focused private investments. MIGA, as one of the only institutions that provide long-maturity guarantees, will be instrumental in establishing continuous climate action, including through the scale-up of its capital optimization product, which is being deployed to support a range of climate loans and other green activities in partnering commercial banks.

IFC will also expand access to green finance through its approach to financial institutions, which represent nearly half of its investments. IFC has a client base of more than 750 financial institutions with $5 trillion of assets under management in emerging markets. This business provides a strong foundation for IFC to continue to lead in the greening of the financial system in emerging markets through new asset classes and redefining sustainable energy finance. To accomplish a green transformation in emerging markets, the financial system needs further capital market development,

new types of climate funds, and new investable products that target climate, sustainability, transition, and other environmental benefits which IFC can provide.[66] IFC will step up support for greening equity investments in financial intermediaries (FIs), aiming to increase climate lending and transparency, and to reduce coal exposure in clients in which it has equity or an equity-like exposure. Under this approach, IFC will no longer invest in the equity of FIs that do not have a plan to phase out their investments in coal-related projects to zero or near-zero coal exposure by 2030. It will also require its equity FI clients to disclose publicly their aggregated exposure to coal-related projects on an annual basis.

MIGA will use its guarantee products to support the greening of FIs, with a focus on promoting the implementation of climate-friendly sustainable financing practices. MIGA's engagement with FI clients is serving to direct the use of proceeds of MIGA-supported finance, or the capital relief facilitated by MIGA's capital optimization product, toward adaptation and mitigation investments, while helping to strengthen those clients' climate risk strategies whenever possible. In particular, MIGA's capital optimization product is proving a successful instrument for engaging with financial institution clients on greening strategies. In step with IFC's approach, MIGA will no longer support FI clients that do not have a plan to phase out their investments in coal and coal-related projects over an agreed period of time, but no later than 2030, and will develop disclosure frameworks for its FI clients.

MIGA will also provide advisory support to FI clients to help them green their portfolios, grow their climate finance business, and mainstream climate risk assessments, including by (i) evaluating the clients' existing capacity and providing guidance on organizational constraints and knowledge gaps related to climate change management; (ii) evaluating their existing portfolio of investments and providing insights on climate finance opportunities in specific markets and regions; (iii) educating clients on relevant climate-related policies, regulations, and low-carbon and climate-resilient development trajectories; (iv) conducting capacity building centered on tools and methodologies to facilitate better carbon and climate risk management; and (v) providing guidance on enhanced climate-related financial disclosures.

Building Climate Capital Markets

The WBG will step up its efforts to develop countries' green bond and loan markets and other innovative financing instruments, including sustainability-linked loans and green mortgages. The WBG will develop tools such as green taxonomies, green bond standards, and supportive risk and reporting regulations to help address these issues. The WBG will also support public institutional investors in integrating climate and broader environmental, social, and governance (ESG) considerations in their investment strategies. IFC will support the growth of green, blue, and other climate-relevant bond markets in emerging markets by developing bond market guidelines and policies in line with international standards. IFC is starting to define criteria for its investments in transition bonds, an increasingly popular asset class for the energy sector, which aim to decrease activities' carbon intensity and set institutions on a path toward further GHG reduction.

IFC will also support the establishment of local markets by issuing local currency bonds and will help banks issue their own green bonds by providing guarantees, acting as an anchor investor, and providing advisory services and tools to help clients develop, issue, and track green bonds. This work

will provide emerging market clients with access to a wider investor base and pave the way for future issuances without enhancement. IFC will also support the green bond issuances of manufacturing, agriculture, and consumer services sector clients, targeting those who have made public climate-related commitments. IFC's green bond funds—the Amundi Planet Emerging Green One (EGO) Fund and the HSBC Real Economy Green Investment Opportunity (REGIO) Fund—aim to stimulate both demand and supply of green bonds in emerging economies and are anticipated to spur investment in adaptation and mitigation projects. The long time frame and large size of these funds is expected to increase the scale and pace of climate finance in emerging markets significantly by crowding in capital from investors and creating new markets. IFC will seek to replicate this model to further develop the green bond market and capitalize on this vast opportunity. Through its Green Bond Technical Assistance Program, IFC is exploring ways to encourage bond issuers in emerging markets to disclose material ESG performance indicators to increase investments in emerging markets as well.

Finance for Adaptation and Resilience and Biodiversity

The World Bank will work with its development partners and through capital markets to crowd in private capital for client countries' adaptation and resilience priorities. The Bank will engage with trust funds such as the Public Private Infrastructure Advisory Facility (PPIAF), which has launched dedicated support through the Climate Resilience and Environmental Technical Advisory (CREST), to deepen climate risk analysis in private participation projects upstream. The Bank will also work with the Quality Infrastructure Investment Partnership (QIIP) to help countries draft or update adaptation strategies and develop policy measures and analyses of investable initiatives.[67] The Bank will also provide support through financial instruments, such as its guarantee program, which will explore launching thematic climate windows to support clients to adopt climate adaptation and resilience technologies in nascent markets. Further, the Bank will employ capital markets to support client countries that suffer losses arising from climate-related disasters. The World Bank Treasury's Capital at Risk Note program issues catastrophe-linked bonds (CAT bonds) that offer payouts when an earthquake or tropical cyclone meets the predefined criteria under the bond terms. These bonds facilitate risk-transfer solutions to Bank's clients using capital markets, where the investors' principal bears the potential risk of disaster losses.

For biodiversity financing specifically, the WBG is committed to helping bridge the financing gap by bringing governments and the private sector together to fund investments to reverse global biodiversity loss. A recent WBG report highlights two approaches to mobilizing private finance for biodiversity.[68] First, it assesses opportunities for "financing green"—that is, financing projects that contribute to the conservation, restoration, and sustainable use of biodiversity and ecosystem services. Second, it looks at "greening finance" by directing financial flows away from projects with a negative impact on biodiversity and ecosystems.

Enabling Domestic Catalyzation

The WBG will leverage both its upstream work as well as its direct investments to enable more private capital mobilization and support the creation of new markets. Leading by example will allow the

WBG to support the significant scale up of investment flows toward climate friendly purposes across developing countries.

The WBG will provide advisory work to client countries to develop scalable platforms, including in solar, wind, and other key infrastructure sectors to build momentum and crowd in private sector investment. The World Bank will employ diagnostic tools, such as Infrastructure Assessment Programs (InfraSAPs), to help prepare the foundations for PCM in client countries and scope lending and non-lending operations that are aligned with both PCM and climate priorities. IFC will support climate capital market development through standard setting and active demonstration. MIGA will complement the World Bank and IFC's upstream policy and market creation work by incorporating insurance or de-risking solutions which have proved instrumental in the creation of new markets.[69] For example, MIGA is collaborating with the World Bank to explore de-risking the exchange of mitigation outcomes in international voluntary and compliance markets.

CONCESSIONAL FINANCE

The scale of resources required to fund climate action on adaptation and mitigation is immense. New sources of concessional finance at scale will be essential. The WBG commits to mobilizing significant resources and building global partnerships and alliances to support its clients and achieve our climate goals.

Concessional finance is critical to de-risk, leverage, and mobilize additional financing for climate action and achieve our climate goals. Concessional finance helps leverage private capital to develop and scale new climate-smart technologies and business models in emerging markets and plays an additional foundational role in catalyzation of private capital into developing countries. Concessional finance also serves as a de-risking tool to bridge gaps in commercial markets. It can enable opening new markets, investing in projects in IDA and FCS countries, and scaling up climate finance for decarbonization in middle-income countries.

IDA, with its significant balance sheet leverage and its country-based relationships and know-how, is a unique and highly impactful vehicle for climate concessional financing. The World Bank will, first and foremost, use IDA19 and IDA20 funds to support countries with concessional climate finance. The WBG will strategically deploy other sources of concessional finance.

The Bank will raise and utilize concessional finance through several umbrella trust funds and financial intermediary funds, which will allocate finance, provide technical assistance, and support flagship analytical and knowledge work that contributes to countries' climate and development policies and plans. In addition, the World Bank support global efforts to mobilize and deploy concessional climate finance through the Climate Investment Funds (CIFs), the Green Climate Fund (GCF), and others to catalyze country-level and private sector transitions.

IFC and MIGA will continue to use blended concessional finance, particularly in countries where the private sector faces higher risks or uncertainties associated with new, unproven technologies or first-

of-their kind projects. Replicating the success of Scaling Solar and other similar initiatives will support private capital without concessionality once early efforts are successful or as risks are reduced.

IFC and MIGA will also leverage concessional finance to help offset the high cost of bringing innovation and technology into emerging markets and incentivize a faster decarbonization. To maximize climate impact, this funding will need to be flexible in terms of geography (including IDA and MICs), technologies, and financing instruments selected. To date, in many of the countries where IFC and MIGA operate, funding sources that are optimal across those dimensions have been very limited. When used and designed effectively, these funding tools will work to drive climate action to benefit vulnerable populations, and others, by using blended finance to de-risk climate projects, push innovative solutions that will achieve the climate impacts intended across client countries and markets, and target commercially viable investments to crowd in private sector funding. This work will complement IFC's upstream approach, which helps to establish the conditions in a country that lead to private sector investment.

05

Estelle Chapron is one of 3,000 trained volunteers who evacuate people and save lives when natural disasters strike Haiti.

—PHOTO: VINCENT THEODORE/ WORLD BANK

CONCLUSION

The WBG Climate Action Plan 2021–2025 reflects our recognition that tackling the climate crisis while meeting urgent development needs is the core challenge of our time. Now more than ever, we must focus on economy-wide green transitions and move from inputs to impacts.

Building on the achievements of the WBG Climate Change Action Plan 2016–2020, this second Action Plan has been developed in the exceptional context of a global pandemic, with a global economic reversal of a speed and scale not seen in decades, and deep uncertainty about the future. As COVID-19 continues to wreak havoc across the world, the WBG is stepping up its support to help client countries in the relief and recovery stages and to regain momentum on the longer-term development agenda. There is now a window—and an imperative—to transition to low-carbon and resilient development pathways, and to do so while supporting economic growth and job creation. The WBG, through its global advocacy, convening power, and support to client countries and the private sector, can and will participate in this effort, with expanded support for the development of Long-Term Strategies, stepped-up support for a just transition, and ambitious actions in sectors that account for over 90 percent of global GHG emissions, while emphasizing the need to boost support for adaptation and nature, and measure the impact of our interventions.

This Action Plan sets out the WBG's contribution to building the critical global coalition needed to step up climate action in our client countries and with the private sector, and to do this while also supporting countries in their pandemic response to support a green, inclusive, and resilient future. While the WBG continues to operate in a highly uncertain environment defined by the pandemic, the risks of inaction on climate are high. Speed, agility, adaptive learning, flexibility, and mid-course adjustments will be critical. Getting it right will mean a safer, more prosperous, and more inclusive future for all.

NOTES

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2. Tall, Arame, Sarah Lynagh, Candela Blanco Vecchi, Pepukaye Bardouille, Felipe Montoya Pino, Elham Shabahat, Vladimir Stenek, et al. 2021. "Enabling Private Investment in Climate Adaptation and Resilience: Current Status, Barriers to Investment and Blueprint for Action." Washington, DC: World Bank. http://hdl.handle.net/10986/35203.
3. World Bank analysis has found that COVID-19 and its resulting economic crisis, compounded by the effects of armed conflict and climate change, are reversing hard-won development gains and pushing millions of people back into poverty. See World Bank. 2020. *Poverty and Shared Prosperity 2020: Reversals of Fortune*. Washington, DC: World Bank. http://hdl.handle.net/10986/34496.
4. Rigaud, Kanta Kumari, Alex de Sherbinin, Bryan Jones, Jonas Bergmann, Viviane Clement, Kayly Ober, Jacob Schewe, et al. 2018. "Groundswell: Preparing for Internal Climate Migration." Washington, DC: The World Bank. https://doi.org/10.1596/29461.
5. The remaining 3.5 percent of global CO2 emissions are from international aviation and maritime transport. The estimates of share of global CO2 emissions are based on combined data from The Global Carbon Project and World Bank Country Lending Classifications (2019). See the Global Carbon Project Supplemental data of Global Carbon Budget 2020 (Version 1.0) [Data set]. Global Carbon Project. https://doi.org/10.18160/gcp-2020; The World Bank Country and Lending Groups (2019). https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.
6. See the International Disaster Database (EM-DAT): https://www.emdat.be.
7. A just transition recognizes that people's livelihoods and communities need to be protected and prepared and that requires a carefully managed approach, implementing safety nets and working to ensure that people have the training and skills they need to avail themselves of new job opportunities in the green economy.
8. For example, the WBG's important role as a primary investor in renewable energy and in opening markets for other private investors has been demonstrated through the successful Scaling Solar initiative, which brings together advisory, financing, and risk mitigation in a one-stop solution, with 1,000 MW of solar power projects under development in Sub-Saharan Africa and beyond.
9. The Group's Lighting Global program has built an international off-grid market that now supports a $1 billion-per-year industry providing energy access to over 150 million people.
10. Through the WBG's interventions, 120 million people in over 50 countries have gained access to hydro-meteorological data and early warning systems that are crucial to saving lives in disasters.
11. Starting in 2006, the WBG became carbon-neutral for its headquarters, including day-to-day operations and business travel, and since 2009, it has been globally carbon-neutral for all of its facility and business travel GHG emissions, including country offices.
12. For a more detailed discussion of the GRID approach, see World Bank Group, 2021. From COVID-19 Crisis Response to Resilient Recovery Saving Lives and Livelihoods while Supporting Green, Resilient and Inclusive Development (GRID). Development Committee Meeting Paper, April 9, 2021. https://www.devcommittee.org/sites/dc/files/download/Documents/2021-03/DC2021-0004%20Green%20Resilient%20final.pdf.
13. World Bank. 2018. "Sustainable Financing for Sustainable Development: World Bank Group Capital Package Proposal", April 17, 2018, DC2018-0002/2. The World Bank will report on the implementation of the IDA climate change special theme through the IDA Results Measurement System (IDA RMS), which tracks results in countries supported by IDA.
14. The World Bank has two macro-modelling systems that address climate considerations and risks: the MFMod system, which is used for short-term and long-term forecasting and policy analysis and the ENVISAGE/MANAGE computable general equilibrium (CGE) models, which are most frequently used in analyzing longer-term questions, notably climate change.
15. For example, the Great Green Wall for the Sahara and Sahel Initiative.
16. Batini, Nicoletta, Mario di Serio, Matteo Fragetta, Giovanni Melina, and Anthony Waldron. 2021. "Building Back Better: How Big Are Green Spending Multipliers?" IMF Working Paper No. 2021/087. Washington, DC: International Monetary Fund. https://www.imf.org/en/Publications/WP/Issues/2021/03/19/Building-Back-Better-How-Big-Are-Green-Spending-Multipliers-50264.
17. The CCDR will assess opportunities and risks that climate change (physical risks) and policies (transition risks) create for the country's development path; existing climate commitments, policies and institutional arrangements in the country to improve resilience and promote decarbonization; the macroeconomic implications of climate change and policies in terms of growth, poverty reduction, fiscal sustainability, and stability of the financial system; and the prioritization of sectoral, cross-sectoral, and macro-fiscal policies to address climate change in the context of development objectives, and identification of operational recommendations. Benchmarking of countries across a range of climate metrics will also support the analysis.
18. Other core diagnostics, such as poverty assessments, public expenditure reviews, and country economic memoranda, are being updated to ensure that they cover relevant climate aspects. WBG CCDRs will be undertaken once every five years for IDA and IBRD countries and are expected to be completed before the preparation of SCDs and CPFs.
19. UNFCCC. 2021. "Synthesis Report by Secretariat on NDCs under the Paris Agreement." Bonn: United Nations Framework Convention on Climate Change. https://unfccc.int/sites/default/files/resource/cma2021_02E.pdf.
20. Peszko, Grzegorz; Dominique van der Mensbrugghe; Alexander Golub; John Ward; Dimitri Zenghelis, Cor Marijs; Anne Schopp; John A. Rogers; Amelia Midgley. 2020. "Diversification and Cooperation in a Decarbonizing World: Climate Strategies for Fossil Fuel-Dependent Countries." Climate Change and Development. Washington, DC: World Bank. http://hdl.handle.net/10986/34011.
21. Browder, Greg; Suzanne Ozment; Irene Rehberger Bescos; Todd Gartner; Glenn-Marie Lange. 2019. "Integrating Green and Gray: Creating Next Generation Infrastructure." Washington, DC: World Bank and World Resources Institute. https://openknowledge.worldbank.org/handle/10986/31430.
22. In March 2021, the World Bank and IFC released a joint report that offers a blueprint for action for governments to catalyze private investment in climate adaptation and resilience. See Tall et al. 2021. "Enabling Private Investment in Climate Adaptation and Resilience: Current Status, Barriers to Investment and Blueprint for Action."

23. As of July 2023, all relevant project documentation will specify the project's alignment with the goals of the Paris Agreement, including the relation of the project to the energy transition, as part of the World Bank's commitment to become Paris-aligned.
24. See WBG press release, "World Bank Group Announces Ambitious 35% Finance Target to Support Countries' Climate Action" (December 9, 2020), available at: https://www.worldbank.org/en/news/press-release/2020/12/09/world-bank-group-announces-ambitious-35-finance-target-to-support-countries-climate-action.
25. World Bank. 2019. "The World Bank Group Action Plan on Climate Change Adaptation and Resilience."
26. Climate indicators monitor and track the progress of climate results; measuring outputs or outcomes of mitigation and/or adaptation intervention of financing and are included in the results frameworks of project documentation.
27. The WBG commits to disclose aggregate gross and associated net emissions. In addition to the current commitment to report aggregate net emissions and aggregate emission reductions: (1) the World Bank will report aggregate gross emissions for its investment operations for which Bank methodologies exist; and (2) IFC and MIGA will disclose aggregate gross and net GHG emissions across direct investment projects that emit over 25,000 tons of CO2e annually and are committed during the fiscal year. IFC and MIGA already disclose aggregate GHG emission reductions from their commitments in mitigation investments, PPP activities, and advisory services.
28. See ClimateWatch data: https://www.climatewatchdata.org/ghgemissions?breakBy=sector&end_year=2018&start_year=1990. For coal-specific data, see IEA statistics: https://www.iea.org/data-and-statistics/data-product/co2-emissions-from-fuel-combustion-highlights.
29. World Bank, IEA, IRENA, UNSD, and WHO. 2018. "Tracking SDG7: The Energy Progress Report (2018)." Washington, DC: The World Bank, International Energy Agency, International Renewable Energy Agency, United Nations Statistics Division, and World Health Organization. http://documents.worldbank.org/curated/en/495461525783464109/Tracking-SDG7-the-energy-progress-report-2018. For an update, including indications of the impact of the COVID-19 pandemic on SDG 7 progress, see the IEA's progress tracker: https://www.iea.org/reports/sdg7-data-and-projections/access-to-electricity.
30. See the SDG 7 web page: https://www.un.org/sustainabledevelopment/energy/.
31. Although all options will be considered for energy sector assessment and longer-term planning purposes, the WBG will not finance nuclear power generation or provide specific technical assistance for its assessment and development, because nuclear energy is not in the WBG's areas of expertise.
32. See, for example: World Bank. 2020. "The Next Generation Africa Climate Business Plan: Ramping Up Development-Centered Climate Action." Washington, DC: World Bank. http://hdl.handle.net/10986/34098.
33. Hund, Kirsten, Daniele La Porta, Thao P. Fabregas, Tim Laing, and John Drexhage. 2020. "Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition." Climate-Smart Mining Facility report. Washington, DC: World Bank Group. https://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climate-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.
34. See Energy Sector Management Assistance Program. 2020. "Green Hydrogen in Developing Countries." Washington, DC: World Bank. http://hdl.handle.net/10986/34398.
35. The World Bank has a number of ongoing initiatives, which are supported by the Carbon Capture and Storage Capacity Building Trust Fund (CSS Trust Fund) established in 2009, with the objective of strengthening capacity and knowledge building, creating opportunities for developing countries to explore CCS potential, and to facilitate inclusion of CCS operations in low-carbon growth strategies and policies.
36. In 2013, the World Bank set up a $20 million Energy Subsidy Reform Facility through ESMAP to help countries reform, reduce, or eliminate fossil fuel subsidies while protecting the poor and vulnerable. The facility has worked in more than 50 countries and activities under the facility have informed more than $16 billion of World Bank financing that included subsidy reform objectives.
37. The Extractives Global Programmatic Support Multi-Donor Trust Fund (EGPS) is already supporting advisory activities and technical assistance in and country engagements for coal mine closure and coal plant decommissioning and repurposing.
38. Globally, about 80 percent of the extremely poor live in rural areas, and most rely on agriculture for their livelihoods. See World Bank. 2020. *Poverty and Shared Prosperity 2020: Reversals of Fortune*. The world's roughly 500 million smallholder farmers are among the poorest groups. See World Bank. 2016. "A Year in the Lives of Smallholder Farmers." World Bank News. February 25, 2016. https://www.worldbank.org/en/news/feature/2016/02/25/a-year-in-the-lives-of-smallholder-farming-families.
39. UN DESA. 2019. "World Population Prospects 2019." New York: United Nations Department of Economic and Social Affairs, Population Division. http://esa.un.org/unpd/wpp/.
40. Data for 2007–2016. See IPCC. 2019. "Summary for Policymakers." In Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems, edited by Priyadarshi R. Shukla, Jim Skea, Eduardo Calvo Buendía, Valérie Masson-Delmotte, Hans-Otto Pörtner, Debra C. Roberts, Panmao Zhai, et al. Intergovernmental Panel on Climate Change. https://www.ipcc.ch/srccl/.
41. Food and Land Use Coalition. 2019. "Growing Better: Ten Critical Transitions to Transform Food and Land Use." Global Consultation Report. https://www.foodandlandusecoalition.org/global-report/.
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43. World Bank. 2020. "Addressing Food Loss and Waste: A Global Problem with Local Solutions." Washington, DC: World Bank. http://hdl.handle.net/10986/34521.
44. For example, the WBG's Agriculture Observatory partners with the private sector and utilizes disruptive approaches to complement traditional hydrometeorological ground stations with remote sensing, machine learning, and artificial intelligence to generate a high spatial- and temporal-resolution weather grid across the terrestrial surface of the planet.
45. The IPCC found that the potential for soil carbon sequestration in croplands and grasslands is 0.4–8.6 Gt CO2-eq per year, equivalent to almost 1.5 times the annual emissions of the United States. See Jia, Gensuo, Elena Shevliakova, Paulo Artaxo, Nathalie De Noblet-Ducoudré, Richard Houghton, Joanna House, Kaoru Kitajima, et al. 2019. "Land–Climate Interactions." In *Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems*, edited by Priyadarshi R. Shukla, Jim Skea, Eduardo Calvo Buendía, Valérie Masson-Delmotte, Hans-Otto Pörtner, Debra C. Roberts, Panmao Zhai, et al. Intergovernmental Panel on Climate Change. https://www.ipcc.ch/srccl/.

46. See Seto, Karen C., Shobhakar Dhakal, A. Bigio, H. Blanco, G.C. Delgado, David Dewar, Luxin Huang, et al. 2014. "Human Settlements, Infrastructure, and Spatial Planning." In Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, edited by O. Edenhofer, R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, et al. Cambridge, UK, and New York: Cambridge University Press. https://www.ipcc.ch/report/ar5/wg3/.
47. See https://www.un.org/sustainabledevelopment/cities/.
48. IFC recently launched the Utilities for Climate (U4C) initiative, which combines Advisory and Investment Services to deliver solutions for water utilities to reach key climate impact mitigation goals and increase adaptation capability and infrastructure resilience.
49. See https://www.citiesclimatefinance.org/green-city-finance-directory/city-climate-finance-gap-fund.
50. According to IFC's 2018 Climate Investment Opportunities in Cities analysis, cities in emerging markets have the potential to attract more than $29.4 trillion in cumulative investments in six key climate sectors (green buildings, renewables, waste, public transport, climate-smart water, and electric vehicle operations) by 2030, as those countries continue to urbanize rapidly.
51. See https://www.apexcities.com.
52. See https://www.climatefinancelab.org/project/breathe-better-bond.
53. See https://edgebuildings.com.
54. See https://www.resilienceindex.org.
55. See International Energy Agency overview of the sector: https://www.iea.org/topics/transport (accessed May 6, 2021).
56. ITF. 2019. "ITF Transport Outlook 2019." Paris: International Transport Forum, Organisation for Economic Co-operation and Development. https://doi.org/10.1787/transp_outlook-en-2019-en.
57. The WBG has established a multi-donor umbrella Trust Fund, the Global Facility for Decarbonization of Transport (GFDT) to help the industry and countries transition to a low/zero-carbon transport system consistent with the pursuit of carbon neutrality by 2050.
58. Sustainable Mobility for All, Sustainable Electric Mobility: Building Blocks and Policy Recommendations. April 2021.
59. IFC's three-pronged approach includes investing in e-bus programs in cities globally to accelerate the deployment of the technology while enhancing IFC's experience of the sector; undertaking upstream programs to develop a pipeline of new programs and investment opportunities, and developing a systematic methodology and support tools to rapidly execute e-bus projects in the pipeline of programs.
60. See Our World in Data based on ClimateWatch, the World Resources Institute (2020) https://ourworldindata.org/emissions-by-sector.
61. The concept of eco-industrial parks and low-carbon zones was led by the World Bank, UNIDO, and GIZ. The number of EIPs globally has seen a steady increase and includes 420 zones. See UNDP, World Bank Group, and GIZ. 2021. "An International Framework for Eco-Industrial Parks, Version 2.0." Washington, DC: United Nations Industrial Development Organization, World Bank Group, and Deutsche Gesellschaft für Internationale Zusammenarbeit. http://hdl.handle.net/10986/35110.
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63. Global Commission on the Economy and Climate. 2016. "The Sustainable Infrastructure Imperative: Financing for Better Growth and Development." The 2016 New Climate Economy Report. Washington, DC, and London. http://newclimateeconomy.report.
64. The WBG will help countries create enabling PPP ecosystems aligned with national climate priorities and public investment and fiscal risk management processes to ensure that PPP projects are green, sustainable, and fiscally sound over their lifetimes, while also leveraging the private sector to enable these projects through IFC and MIGA engagement. Embedding climate considerations in the design of investment strategies and policy frameworks for PPP projects will help create project pipelines that are climate-responsive and able to access green financing downstream.
65. The GIF is a WBG and G20 initiative that addresses market failure and government challenges in infrastructure project supports the preparation and structuring of high-quality and sustainable infrastructure programs and projects in emerging markets that are aligned with the G20 Principles of Quality Infrastructure. To date, the GIF has approved more than 100 projects in 52 countries, which are expected to mobilize more than $50 billion private investment or financing. More than 75 percent of GIF supported programs or projects are classified as "climate smart." The GIF ensures that infrastructure programs and projects are evaluated for opportunities to reduce carbon emissions, build resilience, and promote adaptation.
66. For example, IFC developed the Market Accelerator for Green Construction (MAGC), which focuses on accelerating access to finance through FIs for green construction in 23 emerging market countries, leveraging both investment and advisory support for FIs, developers, green building certifiers, and end users.
67. The QIIP will help find innovative solutions to integrate environmental considerations in infrastructure investments. It looks at the entire process of infrastructure investment and supports countries to use green finance instruments to, transition to long-term low carbon strategies, and leverage disaster risk finance and insurance mechanisms to build resilience.
68. World Bank Group. 2020. "Mobilizing Private Finance for Nature." Washington, DC: World Bank. See infographic (with download link) at https://www.worldbank.org/en/news/infographic/2020/09/25/mobilizing-private-finance-for-nature.
69. One example is the Scaling Solar initiative—spearheaded by IFC with support from the WB and MIGA—which has created viable markets for solar power in Sub-Saharan Africa and provides rapid delivery of low-cost, sustainable electricity, helping countries meet urgent needs.

Soil erosion caused by flooding and cyclones puts coastal communities in Bangladesh at risk.

—PHOTO: MAHFUZUL HASAN BHUIYAN / WORLD BANK

MDB Common Principles for tracking nature-positive finance

1. Introduction

At the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) 26 in Glasgow, United Kingdom, ten multilateral development banks (MDBs) signed a Joint Statement on Nature, People and Planet, which recognises that tackling poverty, climate change and the drivers of nature loss ("nature" refers to biodiversity, ecosystems and the services they provide) are inextricably linked, and affirms their commitment to mainstream nature ever more deeply into their policies, analyses, assessments, advice, investments and operations.

This commitment is reflected in five pillars: (1) leadership to support a sustainable, inclusive, green and resilient post-COVID recovery and to support countries in implement their commitments made in relation to the parties' implementation of the Convention on Biological Diversity (CBD), Paris Agreement, UNFCCC and Leaders Pledge for Nature; (2) tackling the drivers of nature loss by fostering "nature-positive" investments; (3) fostering synergies at national and regional level; (4) valuing nature to guide decision-making and (5) enhancing reporting on efforts to mainstream nature in MDB analyses and operations.

In line with the commitment under pillar 5 to explore the development of tools and methodologies for tracking nature-positive investments across their portfolios, the MDBs have defined a set of Common Principles for tracking nature-positive finance that can be used by each MDB and that may be informative for other investors (including but not limited to capital markets and domestic public budget holders).[1] For the MDBs that intend to identify, track and/or report on their nature-positive finance, these Common Principles will help guide the development and implementation of their respective technical frameworks and internal methodologies as they support countries and private sector clients in implementing the Kunming-Montreal Global Biodiversity Framework (KMGBF).[2]

The Common Principles will also facilitate comparability across MDBs in their respective screening and tracking processes, including communicating on financial contributions to nature-positive outcomes. The Common Principles define nature-positive finance and the eligibility criteria for identifying and tracking nature-positive finance, and outline the steps to identify relevant finance ex-ante.[3]

1. Endorsement of these principles does not imply a commitment on the part of any individual MDB to undertake tracking or reporting exercises.
2. The MDBs acknowledge and thank Trinomics and the Climate Policy Initiative (CPI) for their work developing the tracking methodology options paper published by the MDBs at CBD COP 15, an internal document which greatly informed the drafting of these principles. Please see Inter-American Development Bank (2022) Options for considering nature-positive nature finance tracking and taxonomy, Technical Note no. IDB-TN-02566 prepared by Trinomics and the CPI, https://publications.iadb.org/en/options-considering-nature-positive-finance-tracking-and-taxonomy.
3. MDBs have already adopted such an approach in the Common Principles for Climate Mitigation Finance Tracking.

2. Defining nature-positive finance[4]

Nature-positive finance refers to finance that supports actions that protect, restore or enhance sustainable use and management of nature, or enables these actions (see Box 1),[5] contributing to the implementation of the KMGBF and its broad ambition to halt and reverse nature loss by 2030, with a view to full recovery by 2050.

Such an action must also meet *all* of the following eligibility criteria, as determined by the respective MDB:

1. makes a substantive contribution to nature;
2. has expected positive outcomes for nature that are measurable and can be assessed and monitored against a baseline, where feasible, or otherwise, a business-as-usual scenario;
3. is not expected to introduce significant adverse environmental risks or impacts.

Many projects that promote environmental sustainability have benefits for nature. However, they may not necessarily meet the required criteria to be recognised as "nature-positive" even if they support the broad ambition of the KMGBF. MDBs may nonetheless report those co-benefits separately. The intention of these Common Principles is to set a higher standard for any finance tracked as nature-positive finance and to capture those MDB investments that make a demonstrable positive contribution (directly and/or through co-benefits) to putting nature on the path to recovery as part of implementation of the KMGBF. This definition provides a broad framework for MDBs to develop and implement their own procedures and methodologies to identify and track nature-positive finance. MDBs may choose to track nature-positive finance as a subset of broader green, environmental or other finance categories. These broader categories of finance can also capture investments that mainstream nature considerations within a given economic sector and create broader enabling conditions for nature-positive practices or investments, but where operations might not meet all of the nature-positive criteria.

Box 1. Relevant activity types

The definition of nature-positive finance encompasses the following relevant activity types:

- *Protection* refers to those activities that maintain the current status and condition of biodiversity and ecosystems.
- *Restoration* refers to the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed relative to a reference state.
- *Sustainable use and management of nature* indicates a shift of economic activity away from processes driving nature loss.
- *Enabling conditions* refer to policies, models and sectoral instruments, incentives, data and other tools enabling the above activities.

Nature-positive finance can also deliver tangible development benefits. Nature plays a critical role in providing resources and services that underpin the achievement of the Sustainable Development Goals and are essential to solving many development challenges such as health, jobs and livelihoods, inequality, climate change, food and energy security and fragility. Notwithstanding this, MDBs have environmental and social safeguards in place to ensure that nature-positive investments do not undermine other themes and priority environmental areas of the Sustainable Development Goals.

4. These principles may be revised in the future, following a joint MDB consultative process.

5. Target 19 sets out to "substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with CBD Article 20, to implement national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year [. . .]."

3. Applying nature-positive criteria

3.1. Eligibility criteria

In keeping with the emerging consensus that "nature-positive" should be reserved for finance that is expected to deliver clear positive gains for nature[6], investments must fulfil the three nature-positive eligibility criteria to be tracked as nature-positive finance (see Table 1).

Table 1. Nature-positive eligibility criteria

1. Finance makes a substantive contribution to nature	Substantive contribution can be achieved by (i) reducing pressure on biodiversity or ecosystem services; (ii) directly improving the state of nature (for example, by protecting and restoring ecosystems and enhancing ecosystem services)[7] or (iii) creating the enabling conditions for (i) and (ii).[8] A substantive contribution results in a positive outcome for nature. Activities or finance directly linked to compliance with environmental safeguards do not qualify as nature-positive finance.
2. Expected positive outcomes are measurable	Expected outcomes are measurable and can be assessed against a baseline, where feasible, or otherwise, a business-as-usual scenario or, where feasible, an appropriate baseline.[9] Ex-ante assessments should confirm that nature-positive finance is expected to deliver measurable positive outcomes for biodiversity, ecosystems or the services they provide.[10]
3. Finance is not expected to introduce significant adverse environmental risks and impacts	Finance is not expected to introduce any direct significant adverse risks to, or impacts on, nature or to significantly undermine other environmental or development objectives such as climate change or circular economy transition.[11] MDBs' environmental and social safeguards policies serve as the minimum standard to ensure identification, assessment and management of environmental and social risks and impacts associated with the projects and investments supported.

4. Assessing nature-positive finance

4.1. Screening approaches

Identifying nature-positive finance involves a two-step process:

1. screening finance for eligible activities that protect, restore or enhance the sustainable use and management of nature, or enable these actions, in line with the nature-positive finance definition;
2. applying the three nature-positive eligibility criteria to determine if the associated finance could be tracked as nature-positive finance.

Completing this screening using a combination of a taxonomy of eligible activities (step 1) and a process-based approach (step 2) is considered best practice, as it promotes robustness while building in the flexibility required to operationalise the Common Principles in the development context. If an MDB is relying only on a list of eligible activity types in its assessment, the eligibility criteria must be considered or built into the list.

While coherence is important, each MDB may tailor their taxonomies to the sectors, financial instruments and types of clients relevant to it.

6. MDBs note that several conservation and scientific organisations such as IUCN, WWF and the TNFD are working on definitions of nature-positive finance. This work seeks to outline an operational definition relevant for MDBs for nature-positive finance for a development context.
7. This can be done through the implementation of nature-based solutions as long as these result in positive outcomes for nature.
8. These are inspired by the definition of substantial contribution under the EU Sustainable Finance Taxonomy. Source: Canfora, P., et al. (2022) Development of the EU Sustainable Finance Taxonomy - A framework for defining substantial contribution for environmental objectives 3-6, EUR 30999 EN, Publications Office of the European Union, Luxembourg. ISBN 978-92-76-47898-0, doi:10.2760/256390, JRC126045.
9. This involves considering the expected outcomes of the intervention compared to the business-as-usual or baseline state of — or trends in — biodiversity or ecosystem services before the intervention. Baselines can be established at the scale of the intervention or at the spatial scale at which the outcomes will materialise. For policy interventions, measurable may mean that policies are enabled or enacted to support nature-positive outcomes.
10. *Ex-post* measurement of actual impacts of projects on nature is beyond the scope of the Common Principles; however, it is good practice to monitor outcomes during and/or after project implementation.
11. This criterion should generally applied at the project level (under which multiple activities can fall).

4.2. Financing instruments within scope

Nature-positive finance commitments can be made through various lending and policy-based instruments. Relevant financing instruments include investment loans, policy-based financing, results-based financing instruments, equity investments, MDB assistance to clients in developing sustainable or thematic bonds, guarantees, credit lines, advisory services and grants, among others. For investments where, ex-ante, the use of proceeds has not specifically been defined to be directed to nature-positive investments or activities (as is the case with intermediated financing or sustainability linked instruments), the assessment should be guided by caution and conservativeness.

4.3. Guidance for tracking nature-positive finance

The Common Principles have been designed around the following overarching principles, which are aligned with the Common Principles for Climate (Mitigation and Adaptation) Finance adopted by all MDBs to ensure consistency between the finance tracking methods and to allow for comparability across financial flows. When MDBs choose to track nature-positive finance, the following principles will apply:

a) *Conduct ex-ante tracking:* Nature-positive finance should be identified and tracked based on expected contributions to nature identified at the time of or after board approval or financial agreement signature, and based on available documentation. MDBs recognise that impact tracking is important. It is not the intention of this work to seek to develop impact reporting indicators and metrics.

b) *Track direct financial commitments:* Nature-positive finance tracked by MDBs represents financial commitments, not disbursements. To avoid possible double counting of flows, tracking of nature-positive finance should only encompass funds committed directly by respective MDBs.[12]

c) *Conservative assessment:* If data to support a detailed analysis of nature-positive activities is unavailable or unreliable, eligibility for inclusion is assessed adopting a conservative approach. It is therefore understood that nature-positive finance is to be identified and tracked conservatively.

d) *Granularity:* Qualifying finance should be identified at the most granular level feasible (project activities, sub-components or components).

e) *Clear tracking of climate finance and nature-positive finance:* It is important to identify and tag finance that qualifies as nature-positive finance and climate finance (mitigation or adaptation) separately and in a transparent manner (see Box 2).

Box 2. Tracking climate and nature-positive finance

Given its intrinsic interdependency with several nature-based climate solutions, nature-positive finance can often overlap with climate finance. At the same time, not all climate finance directly benefits nature beyond addressing climate change as a driver of nature loss, and not all nature-positive finance supports climate change mitigation or adaptation. Thus, it is recommended that MDBs track these flows separately, although some finance may be tracked across multiple categories. In instances where they may choose to track aggregated green finance flows, it is essential that MDBs explicitly and transparently tag flows/projects that qualify for both nature-positive finance and climate (mitigation or adaptation) finance.

12. Co-financing provided by other public or private investors and any additional capital that is leveraged as a result of MDB investments (e.g. capital raised through a sustainable bond issued by an MDB client with assistance from the MDB) or parallel financing should be tracked separately (if tracked), except where it is directly managed and committed by the MDB.

5. Next steps for operationalising the Common Principles

Individual MDBs that intend to track and/or report nature-positive finance should operationalise the Common Principles through their respective systems. To support this, and as part of the work to develop these Common Principles, MDBs have been developing a first draft of a list of eligible activities that could be used for screening activities. The list combines elements from various taxonomies in use and development and takes into account the rapidly changing landscape of initiatives underway by such actors as IUCN, the TNFD and OECD.

The MDBs propose to hold a technical workshop in early 2024 to fully develop the draft taxonomy so that it can then guide each MDB as it implements its own framework.

It is expected that some MDBs could start piloting the use of the Common Principles and taxonomy within their own tracking methodologies on a subset of projects during 2024, with the aim for these MDBs to learn from this piloting at CBD COP 16.