United Nations High Level Political Forum on Sustainable Development, July 2020 Preparatory process

Session: Protecting the planet and building resilience

Pursuing policies, investments and innovation to address disaster risk reduction and protect the planet from degradation

Introduction

The 2030 Agenda is rooted in the idea that human development and wellbeing cannot be achieved without simultaneously safeguarding and investing in nature and managing disaster risk in a systemic manner—otherwise development gains will be short lived and unequally distributed. Biodiversity loss, land and forest degradation, climate change, and disasters are threatening progress toward sustainable development. Actions to advance economic and social development need to address these threats and build resilience including through nature-based solutions, sustainable consumption and production practices and accounting for the true value of nature.

The past decade—in particular the COVID-19 crisis—has revealed the systemic nature of risk and the cascading impact of disasters across all three dimensions of sustainable development. The natural environment is humanity's first line of defense against many hazards, and nature-based solutions must be scaled up to manage disaster risks, build resilience and leave no one behind. These issues are addressed directly in SDGs 12, 13, 14, and 15, but they are foundational to the entire 2030 Agenda, including poverty eradication, health, food security and inclusive economic growth and sustainable livelihoods. The current session will highlight opportunities and innovations that can build resilience and manage risk while securing livelihoods and safeguarding the planet.

Guiding questions

Please consider the 4 questions below and submit written responses totaling **2000 words or less.** (Though the average should be 500 words per question, it is fine to use more words on one question and fewer on another, to total 2000.) Please draw from your field of expertise and experience and be as concrete and tangible as possible. Please provide your responses in a Word document by **12 May** to rambler@un.org.

1. Systems transformation

What are the fundamental systems transformations needed to halt nature degradation, reverse loss and manage risk, while eradicating poverty, ensuring food security for a growing population, securing livelihoods and promoting resilience?

1.1 Systems exist at different scales and thus require different types of interventions. At a local and more physical level are the very **ecological systems** (eco-systems) we all depend on for our every-day needs. Ecosystems provide critical provisioning, regulating and cultural services as shown in the table below.

Provisioning services	Regulating services	Cultural services
Products obtained from	Benefits obtained from regulation	Non-material benefits obtained
ecosystems	of ecosystem processes	from ecosystems

 Food Freshwater Fuelwood Fibre Biochemicals Genetic resources 	Climate regulationDisease regulationWater regulationWater purificationPollination	 Spiritual and religious Recreation and tourism Aesthetic Inspirational Sense of place Cultural heritage 	
Supporting services			

Services necessary for the production of all other ecosystem services

• Soil formation • Nutrient cycling • Primary production

Maintaining eco-system integrity at a local level is essential for the delivery of a continuous supply of these services. Unsustainable levels of over-exploitation or disturbance of natural eco-systems, through e.g. invasive species, can clearly disrupt the supply of services, thereby undermining livelihoods of directly dependent communities.

The recent IPBES report identified that 80% of assessed SDG targets cannot be achieved if the natural environment continues on its downward trajectory of degradation. The continued attention on the maturing SDG 2020 targets, especially those relating to the natural environment, must be maintained to ensure other targets can be achieved. Integrated solutions generally deliver optimal outcomes as cobenefits are realized thus the integrity of the SDG framework with a continued balance on social, environmental and economic targets is essential.

1.2 The **food and agricultural system** is one of the major drivers of environmental degradation, as well as being a major contributor to GHG emissions.

The transformation of the global food system requires a fundamental rethink and redesign of supply, trade and demand. At the heart of the problem is a driver that is not restricted to food production – the undervaluation of the variety of valuable services ecosystems provide to society. An example would be the carbon storage function provided by forests and other natural or semi-natural habitats. If the true value of forests cleared to grow commodities such as soy and oil palm were reflected in their price, the cost of products that include them would be higher, and demand would fall. This principle applies to a multitude of food – and non-food – supply chains, including cocoa, beef, dairy, timber, fish and more. The result is poorly paid workers, loss of nature, and reduced food security and resilience. This applies as much in developed countries as developing countries. 40% of farms in the UK would not be viable without subsidies, but many of them grow grain to feed animals while the UK imports huge volumes of fruit and vegetables, at least some of which could be grown locally. At the same time, much of the low-cost, soy-based feed used to grow chickens in Europe and Asia comes from converted habitat in countries like Brazil, reducing carbon storage, destroying biodiversity and leaving local people struggling to make a living.

Alongside this fundamental principle, other contributing factors include poor governance and decision making, especially exclusion of rights holders; the buying power of large corporations (a handful of large companies control a very large percentage of the world's food); and society's desire for what can be called a 'western' diet high in protein, sugar and fat. A particularly important factor is the very low proportion of the value of food that ends up with the farmer, fisher or grower, making it hard if not impossible for those people to live well and make more sustainable choices about how to grow, farm or fish.

Transforming the food system therefore requires a fundamental reform of demand and supply. This should include a revaluing of ecosystem services, where their actual and potential loss is better reflected in the price of food; the involvement of rights holders in decisions on the use of land and sea; a more equitable distribution of control of food systems away from large corporations; a commitment to reward farmers, fishers and growers fairly; and a societal shift in diets.

- 1.3 The ultimate and underlying driver of environmental degradation is the **economic system** as it is currently structured. There are some fundamental weaknesses in the current system that do not account for the natural environment or resulting inequality in economic decision-making. Systematic economic reform will be necessary to achieve the SDGs. A number of factors interplay but the significant elements that need reforming are
 - 1 re-purposing economic policy to prioritise wellbeing of people and planet, above GDP
 - 2 re-purposing business towards social purpose
 - 3 valuing nature in policy decisions
 - 4 aligning financial and economic resources for nature and climate for better protection of public health and people's livelihoods
 - 5 transforming the finance sector to long-termism, via regulation and incentives

2 Specific actions to drive transformation

Please describe 2-3 specific, promising actions at different levels that can drive these systems transformations. These actions could relate for instance to scaling up the use of nature-based solutions, sustainable consumption and production, or other approaches. How have these actions helped (or how *could* they help) break down siloes, support the systemic management of risk, and trigger positive changes in society? How can co-benefits between actions be maximized and the risk in trade-offs stemming from these actions (i.e. negative impacts on other aspects of the 2030 Agenda) managed?

2.1 Re Food system reform:

- An undertaking at a global level to improve governance and decision making around food production, including shifting the benefits to local people so they can achieve a fair and reasonable standard of living, including access to healthy food, without destroying their environment
- An undertaking at global level to include the true value of ecosystems and the services they
 provide in decision making, including and especially where conversion of natural and seminatural habitats is concerned. See the Principle of Public Money for Public Goods (as enshrined
 in forthcoming UK Agriculture Bill).
- The redressing of subsidies that promote destructive practice, or the use of inputs rather than agro-ecology is also key. Conversely the support for extension services in agro-ecology would also be a real positive step. See EU Farm to Fork Strategy.
- A commitment at global level to ensure all food produced comes from landscapes and seascapes
 that achieve a sustainable balance between nature, food production and people's wellbeing.
 Ensuring rights holder participation in land planning is key to these processes.

- A commitment from food and food retail companies to work with producers and consumers to
 ensure environmental and social risks and impacts are removed from supply chains. This should
 include government regulation to ensure Due Diligence is undertaken to ensure corporate
 commitments.
- A commitment from government and business to incentivise a shift in diets that will reduce
 environmental and social impacts. National Dietary Guidelines should be assessed for their
 environmental impact and ensure guidance is adjusted accordingly. WWF has a forthcoming
 report that will show that in many cases current dietary guidelines in many developed countries
 are not in line with commitments made to Climate Frameworks etc.
- The implementation of a set of rules and principles already exists for Food Safety see Codex Alimentarius (FAO/WHO). A similar progressive process should be established for minimum environmental standards for the international trade in food (what has been dubbed a Codex Planetarius).
- Providing support and incentives for sustainable agriculture will help protect the livelihoods of smallholder producers. Policies should aim to reduce significantly the use of chemical pesticides and fertilisers and promote agro-ecological practices. They should also maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels. Farming subsidies must be reformed to incentivise positive practices which restore land and nature, rather than degrade it.
- Countries need to ensure transparent and sustainable value chains in order to stop the
 conversion of forests, wetlands, grasslands and savannahs and other critical ecosystems for
 production of agricultural commodities. The uptake of sustainable diets can also be increased by
 including environmental and climate change impact considerations into food-based dietary
 guidelines and strengthening related information on food choices that do not have a negative
 impact on nature, climate and human health.

2.2 Re Economic System Reform:

- Wellbeing metrics for people and planet: Develop national wellbeing metrics that prioritise people and planetary health above GDP, as a measure of progress and development. Governments and business that realign to such social outcomes will be more sustainable in the long-term. Examples of such leadership are seen with "Wellbeing Economy Governments" such as New Zealand, Scotland, Iceland. Of particular note is the New Zealand Living Standards Framework, that has been used to set its budget, and Bhutan's GHI (Gross Happiness Indicator).
- **Re-purposing business with social purpose:** The B-Corporation movement illustrates what can be done when businesses re-organise their purpose to the greater good of society. There are currently over 2,500 Certified B Corporations in more than 50 countries.
- **Finance Sector Reform:** There are many voluntary initiatives in the finance sector that are well intended to drive reform towards sustainability. One example is The Principles for Responsible Banking that provide the framework for a sustainable banking system and help the industry to

demonstrate how it makes a positive contribution to society. The Principles are accelerating the banking industry's contribution to achieving society's goals as expressed in the Sustainable Development Goals and the Paris Climate Agreement. However, despite these excellent intentions time is short and more mandatory regulations will be required to move whole sectors to be Paris and SDG aligned if we are to stop catastrophic climate change.

- Valuing Nature: Ensuring nature protection is at the core of decisions across economic sectors for nature and climate for better protection of public health and people's livelihoods, recognizing the intrinsic value of nature as providing essential ecosystems services required for human survival and wellbeing. Examples include:
 - The Myanmar government developed its Green Economy Policy Framework to guide national development planning; natural capital assessment was undertaken and provided analysis that informed this Framework.
 - The Belize government's Coastal Zone Management Authority and Institute (CZMAI) quantified the ecosystem services provided by corals, mangroves, and seagrasses to inform the Belize Integrated Coastal Zone Management Plan. The ICZMP then harmonized objectives around infrastructure, securing water and food supplies, risk management for coastal hazards, tourism benefits, and conserving coastal biodiversity such as coral reefs and mangrove forests. The Integrated Coastal Zone Management Plan (ICZMP) was approved by the Government of Belize in 2016 (http://whc.unesco.org/en/news/1455) and dubbed by UNESCO as "one of the most forward-thinking ocean management plans in the world".

2. Means of implementation and the global partnership for development (SDG 17):

Achieving the 2030 Agenda relies on a combination of means of implementation to catalyse action and engagement, harness synergies and reduce trade-offs. Please discuss the means of implementation, including finance, partnerships, and capacity building, needed to make the necessary transformations. How can science, technology and innovation (STI), including social innovation and local and indigenous knowledge, be mobilized to advance these transformations?

3. Covid-19 crisis

What does the Covid-19 crisis reveal about the human-nature relationship and systemic risk creation? How can nature-based solutions contribute to a post-COVID-19 economic and social recovery that is more sustainable, equitable and resilient? What immediate and medium-term steps are needed to ensure that the post-COVID-19 economic and social recovery is sustainable, equitable and resilient. How can we redirect financial flows and direct recovery efforts to create better outcomes for people, prosperity and planet?

The launch of the Global Sustainable Development Report in 2019 proclaimed the need for a new relationship between people and nature if we are to achieve Agenda 2030. C19 shines a tragic and dramatic light on these prophetic words that must be heeded for the sake of humanity.

The World Health Organisation (WHO) reports many early C19 cases were associated with a permanent live animal market in Wuhan, China, indicating it played a key role in the initial phase of the outbreak.

Genetic analyses show the virus likely occurs naturally in wild bats and crossed over to humans via an unknown animal host.

Regardless of its origins, scientists and public health officials have been warning for years that humans have created the ideal conditions for more frequent spillovers of increasingly virulent pathogens with the potential for a zoonotic disease outbreak (those that move from animals to humans), of pandemic proportions.

Although the COVID-19 pandemic has led to devastating human and economic losses its fatality rate is much lower than other zoonotic diseases like Ebola. But it sends a strong warning. This is not the first time a new and deadly virus has emerged, and it will not be the last. But if a future zoonotic **emerging infectious disease (EID)** was to combine high fatality rates with high transmission rates, the consequences would be even more catastrophic.

Key messages:

- * Zoonotic diseases are not new and previous outbreaks had devastating consequences e.g. the Black Death
- * Zoonotic **emerging infectious diseases (EIDs)** have been responsible for all recent outbreaks and pandemics that have threatened global health and economies, including HIV, Ebola, SARS (severe acute respiratory syndrome), MERS (Middle East respiratory syndrome), and now COVID-19
- * BUT the <u>rate of emergence</u> of novel zoonotic infectious diseases has been increasing in recent decades

Causative factors:

Many animals are reservoirs for potential pathogens – this includes wild animals (e.g. Ebola in bats), domestic animals (e.g. bovine tuberculosis) and indeed humans (e.g. mumps and measles). In many cases, these pathogens do not have any adverse health impacts on the host species but only cause disease symptoms when they jump across (spillover) into a new species. Risk is related to the extent of interactions between people and the animal host population. The greater the interactions the greater the risk of exposure. There are three key drivers leading to greater risk of human exposure:

A. Land use change: Deforestation, habitat loss and fragmentation increase the potential for human-animal interactions that can enable cross-species transmission of pathogens. Land use change has contributed to almost half of the emergence events for zoonotic infectious disease in humans from 1940–2005.

The probability of pathogen spillover (from animals to humans) is highest at intermediate levels of land conversion. The largest, but less frequent, epidemics occur at the highest levels of land conversion.

B. Agriculture and livestock intensification: Expansion of agriculture often encroaches on less disturbed habitats, bringing humans, livestock, and wildlife into closer contact, increasing interactions and potential for pathogen spillover.

Many livestock species are known sources of zoonotic disease risk. Intensive operations, where large numbers of genetically similar animals are raised in close proximity, makes amplification and transmission of disease more likely.

The increasing demand for, and consumption of, animal protein globally will only increase the risk.

C. Exploitation of wildlife: Spillover can happen <u>directly</u> through eating wild meat (e.g. Ebola), direct interaction with live wildlife (e.g. primates or rats), or <u>indirectly</u> through intermediate hosts (e.g. civets in SARS) or domestic animals (e.g. poultry in avian influenza).

The important link between wildlife trade and live animal markets as centres of zoonotic disease emergence has also been demonstrated.

Compounding factors that amplify exposure risk (the likelihood of contact with a pathogen) and/or vulnerability (the likelihood that a given exposure to a pathogen will cause harm):

Climate change: facilitates the increase in geographic range of existing carriers (e.g. mosquitoes) and diseases e.g. Lyme disease and malaria. Whilst there is no evidence that climate change is linked to the COVID-19 outbreak it is possible that novel zoonotic EIDs may increase with climate change, although scientific evidence for this is limited.

Global trade and travel networks connecting remote locations to major population centres across the world helps the spread of disease

Severity of a disease outbreak can be exacerbated by nutritional status, poverty, gender inequality, natural disasters, armed conflict, and health-related social factors in the human population.

Impact on wildlife: Zoonotic EIDs can also **directly threaten ecosystems.** While mortality is rare, Ebola outbreaks in 1997 and 2004 did cause widespread mortality in western gorilla populations in central Africa. Evidence suggests the COVID-19 virus is transmissible to non-human apes, African and Asian monkeys, so it is conceivable they could pose a threat to vulnerable populations.

How can we reduce future risk? - The principle means of reducing risk are by responding to the three key drivers:

- **A.** Addressing land use change for example through adopting policies that reduce deforestation, habitat loss and fragmentation
- **B.** Addressing agriculture and livestock intensification for example by fundamentally revising the global food system and supply chains to reduce the encroachment of agriculture on wild areas;
- **C.** Addressing exploitation of wildlife for example through limiting the potential for viral transmission and amplification in permanent live animal markets, and reducing contact with wildlife associated with high risk for transmitting zoonotic disease,