# 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—across interconnected sectors otherwise development gains will be short lived and unequally distributed. Biodiversity loss, land and forest degradation, water scarcity, soil erosion and degradation with salinization and desertification, ocean destruction, climate change, and disasters are threatening progress toward sustainable development. Actions to advance economic and social development need to address these threats in managing multiple risks in order to build resilience including through nature-based solutions, sustainable consumption and production practices, accounting for the true value of nature and reducing GHG emissions.

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 vulnerabilities, and nature-based solutions must be scaled up to manage disaster risks, and tackle climate change for building resilience and leave no one behind on the path to social, economic and environmental sustainability. 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 for sustainable livelihoods and inclusive economic growth . The current session will highlight opportunities and innovations in managing multiple risks, including COVID19 pandemic and the unfolding climate and ecological crisis, that can build resilience while securing people's 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 and climate degradation, reverse loss and manage multiple risk, while eradicating poverty, ensuring food security for a growing population, securing livelihoods and promoting resilience?

The current COVID19 pandemic together with unfolding climate and ecological crisis, and conflicts is increasing hunger, food insecurity, malnutrition and overall food crisis, thus showing us the systemic nature of risk affecting and threatening all sectors, all countries and all people across the planet. Earth is one system - a system of systems facing multiple colliding risks. Systems thinking is obvious and essential to create the future enshrined in the 2030 Agenda<sup>1</sup>. This call for urgent systems transformation for the whole of society and demands convergence and coherence of collective actions at scale and from all actors.

The latest UN Common Guidance on Resilience<sup>2</sup>, provides a reference for the UN teams along the humanitarian/development/peace nexus and its public-private and community partners to work together on building resilience across and within systems on multiple risks and at all levels (individual, household, community, territory, ecosystem, infrastructure, institution of one system) supporting essential capacities (preventive, anticipative, absorptive, adaptive and transformative) in order to deliver on sustainability and peace, while leaving no one behind.

A paradigm shift must drive all of our action across and within systems/sectors to prevent, anticipate and manage risk rather than manage crisis, so to reduce human suffering and costs, and secure development gains and prosperity for all. This shift is gradually happening for the agriculture and food systems, where FAO and its partners are providing support to address both immediate emergency needs and the root causes of risk and vulnerabilities in food crisis and protracted crisis situations, and also in most at risk developing countries such as SIDS and LDCs.

On the climate crisis alone, with concerted and convergent action at all levels, the agrifood sectors<sup>3</sup>, offer a suite of climate, environmental, social and economic solutions across essential and complementary functions that are central to local, national and global policy processes<sup>4</sup>. As discussed during COP25<sup>5</sup>, the current agrifood systems (from farm to table) is making everyone uncomfortable and it is time for radical and transformative change. Without these transformative changes to build climate resilient future that is inclusive and just – across scales, sectors and geographies – the life supporting services delivered by the agrifood systems are no longer tenable nor sustainable. The inequalities and power relationships that frequently benefit larger agrifood corporations must be changed urgently so the main food value chains which are commodity focused, do no longer affect the resilience of entire landscapes and the livelihoods of most vulnerable people.

Building climate resilience for transforming the agrifood systems, require systemic efforts with access to knowledge, innovation and finance at all levels, but especially at local territory and community levels. These solutions entail deep structural changes in political, economic and social systems together with unconventional approaches that re-frame current operational and financial models (i.e. repurposing agricultural subsidies); and a collective push for action that capitalizes on already existing solutions to drive them to scale. Together, inclusive, low carbon, resilient and sustainable agrifood systems can deliver at least 7 benefits or functions<sup>6</sup>:

<sup>&</sup>lt;sup>1</sup> 2019, UNDRR Global Risk Assessment Report – GAR19. https://gar.undrr.org/report-2019

http://www.fao.org/in-action/kore/webinar-archive/webinar-details/en/c/1200187/

<sup>&</sup>lt;sup>3</sup> The agrifood system is a current emitter with potential sequestration of at least 30% of GHG.

<sup>&</sup>lt;sup>4</sup> Transforming the agrifood systems is central to the delivery of the Sendai framework on DRR, Paris Agreement, Biodiversity Convention, UN Desertification Convention and overarching SDGs.

<sup>&</sup>lt;sup>5</sup> 2019, COP25, UNFCCC Marrakesh Partnership for Global Climate Aaction-MPGCA Agrifood roundtable event - <a href="https://unfccc.int/sites/default/files/resource/Agrifood RT roundtable outcome 1212.pdf">https://unfccc.int/sites/default/files/resource/Agrifood RT roundtable outcome 1212.pdf</a>

<sup>&</sup>lt;sup>6</sup> 2019, COP25, UNFCCC Marrakesh Partnership for Global Climate Aaction-MPGCA Agrifood roundtable event - <a href="https://unfccc.int/sites/default/files/resource/Agrifood RT roundtable outcome 1212.pdf">https://unfccc.int/sites/default/files/resource/Agrifood RT roundtable outcome 1212.pdf</a>

- 1. Offer an attractive and just source of livelihoods (especially for youth) with employment, income and food for more than 2.5 billion people, including some 500 million smallholders, who provide 80% of the food supply in developing countries and 50% globally. A thriving food and agriculture sector that is inclusive, productive, regenerative and profitable, and can feed sustainably an additional 2 billion people by 2050. A sector that elevates diversity over mono-cropping and gives economic viability to local produce by eliminating perverse subsidies and capturing its full value at a fair price to local producers, while also internalizing the critical climate and environmental functions performed.
- 2. <u>Provide sustainable diets and well-nourished populations</u>, with 820 million people lifted from undernourishment and 680 million people from obesity avoiding USD 4.5 trillion per year in costs from this double burden. Ensuring access to safe, nutritious and healthy diets can also avert 11 million deaths per year and meet the needs for quality food rich in micro-nutrients across all sectors of societies, especially for those most vulnerable to climate risks from extremes and variability.
- 3. <u>Secure the health and wellbeing of youth</u> and future generations as informed and capable change agents in shifting to healthy and climate friendly diets to be a key source of solution to climate change especially in the city-region continuum. Re-envisioning food labels to match the concerns for health, justice, climate and environmental impacts is the first step in the process. Food product innovation, such as plant-based foods, offer real-time solutions to shift consumption preferences to more sustainable, environmental and climate friendly diets.
- 4. Reduce damage and loss and risk from multiple hazards: diversified and resilient food and agriculture systems that anticipate, cope and adapt to the threats and impacts from multiple disaster and climate change risks, provide the potential to eliminate 26-80% of climate-related damage and loses (especially from drought) currently absorbed by the sector.
- 5. Act as a climate change mitigation solution with low carbon and low emissions along the whole food value chain. Carbon sequestered into soils and forests has the potential of capturing 30% of GHG. Halting deforestation from food value chains, preventing soil degradation and mainstreaming regenerative food production, are all part of nature-based solutions that deliver tangible GHG mitigation/adaptation/resilience benefits while also preserving biodiversity-rich landscapes as irreplaceable, life supporting services.
- 6. <u>Reduce environmental impact</u> through sustainable management of renewable natural resources at ecosystem, species and gene levels, as part of nature-based solutions, with smallholders acting as custodians of natural resources. Helping to reverse ocean and fisheries collapse and increasing in terrestrial and marine biodiversity and ecosystems services for safeguarding key life supporting functions is also essential.
- 7. Eliminate food loss and waste from the current 30% global average that carries a price tag of USD940 billion per year in economic losses. Creative business to business agricultural platforms already exist and connect producers and sellers directly to eliminate food waste at source and provide market opportunities to imperfect and surplus product that would otherwise go to waste. On the consumption and retail side, halving per capita global food waste is another area where innovative platforms and practices already play a key role to climate change and environmental solutions.

Today, we have many of the existing and potential solutions at hand to transform the current agrifood system so that it delivers an inclusive, low carbon, resilient, healthy and prosperous future for all.

# 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 prevention, impact mitigation and anticipation of multiple risk management measures, 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 across sectors and related SDGs? How can cobenefits 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?

Protecting the planet and building resilience must be done by transitioning and transforming into regenerative, inclusive, resilient and sustainable agriculture and food systems. This is urgent because of the central role of agriculture and food systems in performing multiple live support functions such as: livelihoods, employment and income, food supply, nutrition and health, ecosystem services, climate GHG mitigation along food value chain, resilience building with reduced risks and damage & loss.

Transformation for resilience building is happening when implementing multiple disaster and climate risk management measures across geographies and time scale in the agriculture and food systems <sup>7</sup>. Such measures include:

- 1. Agro-climatic and disaster risk information systems
- 2. Early warning systems and early action (EWEA) or forecast based financing (FbF)
- 3. Climate and disaster risk governance (i.e. risk driven policies, planning processes, awareness raising, knowledge management and capacity building, ...)
- 4. Shock-responsive risk transfer mechanisms (i.e. social protection and insurance schemes)
- 5. Disaster Risk reduction (DRR) and Climate Change Adaptation (CCA), including renewable natural resource management good practices at farm level
- 6. Emergency preparedness and response
- 7. Climate risk proofing of grey infrastructure along the food value chain
- 8. Nature based solutions (NbS) at ecosystem/territorial level
- 9. Food loss and waste reduction from farm to table
- 10. Climate friendly and sustainable diets

Examples of such type of transformative actions often combining these measures altogether are given below.

(1) Early warning and Early Action systems, as part of information and preparedness systems, can help to reduce the impact of climate related hazards. Optimally, early warning systems provide localized, timely, relevant, reliable and accurate multi-hazard alerts, which help to prevent, mitigate the impact and better prepare for adverse effects on lives and agriculture-based livelihoods. FAO works together with national governments and humanitarian, development and scientific partners to implement its

<sup>&</sup>lt;sup>7</sup> UN Climate resilience-A2R study on tracking progress on climate resilient agrifood systems - <a href="http://www.a2rinitiative.org/new-blog/2020/1/9/a2r-tracking-progress-study">http://www.a2rinitiative.org/new-blog/2020/1/9/a2r-tracking-progress-study</a>

Early Warning Early Action (EWEA) approach that monitors risks information systems and translates warnings into anticipatory actions. Every quarter, FAO prepares an Early Warning Early Action report, extracting information from its Global Information and Early Warning System on Food and Agriculture (GIEWS), the Agriculture Stress Index System (ASIS), the Integrated Food Security Phase Classification (IPC) among others, to rank risks by their likelihood and potential impact on agriculture and food security and identifies the best early action before the shock happens. Then based on early warning and clear triggers, FAO's Special fund for Emergency and Rehabilitation Activities (SFERA) and its resource partners can release money that enables the organization to support early actions to reduce the impact of disasters and crisis. These anticipatory actions are varied and flexible, ranging from cash transfers for fishing communities to safely store their nets ahead of an impending cyclone, to livestock treatments for herders as a drought approaches, to flood defences before a severe rainy season to protect crops and seeds stocks. For example, a study was conducted to analyse the outcomes of monitoring early warnings on drought and taking targeted early actions in the south of Madagascar between 2017 and 2018. It evaluated their effectiveness and quantified the benefits of acting early. The return on investment analysis showed that a beneficiary household gained USD 78 on average in increased vegetable production and avoided the loss of staple crops. The cost of running the intervention and buying seeds and equipment was USD 31.8 for each household. This produced a benefit-cost ratio of 2.5, which means that for every USD 1 invested by FAO, households gained USD  $2.5^{8}$ .

(2) Risk and shock informed Social protection<sup>9</sup> is a central component of FAO work on reducing rural poverty and strengthening resilience. For example, FAO is implementing the Poverty, Reforestation, Energy and Climate Change (PROEZA) project, which presents an innovative Green Climate Fund (GCF) approach to improve the resilience of households vulnerable to impacts of climate change in Paraguay. It proposes a paradigm shift towards low-emission sustainable development pathways with a dual approach: on one hand, achieve climate mitigation and adaptation, and on the other, contribute to extreme rural poverty reduction. PROEZA aims to: (i) implement incentives to mitigate climate change through planting fast growing trees in mixtures with valuable native species and (ii) contribute to reduce rural extreme poverty, particularly within forest communities and indigenous peoples, through the diversification of production and options to increase family incomes through the establishment of climate smart agro-forestry production systems and/or multifunctional "close to nature: planted forests. One important innovation of the project includes strengthening the existing national social protection programme. In this context, building on Paraguay's national flagship social assistance programme, *Tekoporã* (a conditional cash transfer, social protection programme), allows to (i) ensure the poorest are benefiting from climate adaptation interventions, while (ii) addressing the economic barriers to progressively transition from subsistence to productive and sustainable livelihoods. To reach the poorest, PROEZA targets participants of Tekopora and provides a "cash transfer top-up" during the project's duration (5 years) as an incentive payment (E-CCT) conditional on the successful establishment and care of agroforestry production systems promoted by PROEZA. The project also acknowledges the need for differentiated packages across income groups and thus proposes specific activities for poor and extreme poor families, addressing their barriers for adopting sustainable practices, as well for medium sized land owners to incentivize the adoption of certified

<sup>8</sup> http://www.fao.org/3/ca3933en/ca3933en.pdf

<sup>&</sup>lt;sup>9</sup> The latest reference publication done by FAO and IFRC on social protection and climate risk is: <a href="http://www.fao.org/social-protection/resources/resources-detail/en/c/1250961/">http://www.fao.org/social-protection/resources/resources-detail/en/c/1250961/</a> and its new interactive elearning tool: <a href="http://www.fao.org/policy-support/resources/resources-details/en/c/1152576/">http://www.fao.org/policy-support/resources/resources-details/en/c/1152576/</a>.

"New Generation Forest Plantations". PROEZA introduces an innovation for altogether achieving rural poverty reduction and environmental resilience and sustainability, the first of its kind combining social protection, climate adaptation and mitigation measures in the forestry sector.

- (3) Nature-Based Solutions- NbS are actions that help to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits (IUCN, 2019). Adopting an ecosystem approach to risk informed and sustainable management of natural resources and the different factors that can interact, such as biodiversity, habitats, activities of pollinators and soil organisms, is essential for building the resilience and sustainability of agrifood systems in a changing climate threathened by colliding crisis. The "Kihamba" agroforestry system covers 120 000 hectares of Mount Kilimanjaro's southern slopes in Tanzania. The 800-year-old system is one of the most sustainable forms of upland farming. Without undermining sustainability, it has been able to support one of the highest rural population densities in Africa, providing livelihoods to an estimated one million people. This agroforestry system has a multi-layered vegetation structure, which is similar to a tropical mountain forest that maximizes the use of limited land, provides a large variety of foods all year round and offers substantive environmental services beyond the areas where it is practiced. Due to the high quantities of biomass it produces and its capacity to recycle organic matter on farms, the agroforestry system contributes significantly to carbon storage. The trees and dense vegetation help considerably to ensure that Mount Kilimanjaro can remain the 'water tower' for the region. As an ecologically compatible cash crop, coffee allowed the agroforestry system to adapt successfully to the emerging cash economy. Under FAO's Globally Important Agricultural Heritage Systems Initiative (GIAHS), activities were piloted in 660 households to enhance farmers' cash income, while preserving the ecological and social integrity of the Kihamba system. It is expected that the interventions in coffee management alone will increase farm cash income by 25 percent in three yea 10.
- (4) Low carbon and resilient good practices and technologies at farm and community level, help to reduce the underlying risks of food and nutrition insecurity as well as may increase yields, enhance diversification and decrease vulnerability against production loss and/or failure due to the impact of disaster and climate extremes and variability. Disaster Risk Reduction –DRR and Climate Change Adaptation-CCA (or resilient) good practices in agriculture are highly context- and location specific and not all have the potential for wider upscaling. However, if well-tailored and targeted, upscaling which is driven by evidence should be pursued. FAO promotes an inventory of these good practices and technologies through the Technologies and Practices for Small Agricultural Producers (TECA) and Knowledge Sharing Platform on Resilience (KORE)<sup>11</sup>, which are online, centralized, integrated and action-oriented platforms to help facilitate the exchange of knowledge and thereby helping family farmers build their resilience to food insecurity and malnutrition in the face of recurrent climate related shocks and stresses. FAO also helps to quantify the costs and benefits of DRR-CCA or resilient good practices, through a cost-benefit analysis (CBA) methodology. This CBA methodology was developed to help generate greater evidence on the return of investing in resilient agriculture practices. FAO conducted a CBA analysis of 36 different farm-level use of DRR practices and

<sup>10</sup> http://www.fao.org/3/a-i3817e.pdf.

<sup>11 (</sup>http://www.fao.org/teca/en/ and http://www.fao.org/in-action/kore/home/en/)

technologies rom field-level data from 924 farms in ten countries (Bolivia, Cambodia, Colombia, Guyana, Haiti, Jamaica, Laos, Pakistan, the Philippines, Uganda)<sup>12</sup>.

(5) Reducing food loss and waste throughout the food value chain, from production to consumption, is a key priority strategy for food security, nutrition, resilience and sustainability of the different agrifood systems. This has been recognized by the 2030 Agenda for Sustainable Development with its global target 12.3 on food loss and waste reduction. Conflicts, crisis and disasters with climate change and variability, are adversely impacting the entire food value chain. As the frequency and severity of extreme weather events increase, it may lead to substantial damage to crops as well as it may increase the outbreak of new pests and diseases, which may in turn drive more contamination and spoilage of foods. FAO and partners work with countries to reduce food loss and waste. For example, through the SAVE FOOD: Global Initiative on Food Loss and Waste Reduction, FAO supports farmers in developing countries to reduce post-harvest food losses. For example, ensuring that seed storage facilities are climate risk proofed is highly important in the context of increasing climate change with an expected rise in temperatures and humidity levels that can undermine adequate storage of cereals and grains. FAO and partners are promoting the use of metal silos, which have significantly helped to reduce losses. FAO in collaboration with SDC (2015) published a technical manual on the construction and use of family-sized metal silos for storage of cereals and grains<sup>13</sup>. FAO has also developed a seeds toolkit that includes a module that covers all the principles of adequate seed storage in a changing climate<sup>14</sup>.

# 3. 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 tradeoffs. Please discuss the means of implementation, including understanding risks, finance, partnerships, capacity building, and joined up programming needed to make the necessary transformations. How can science, technology and innovation (STI), including social and environmental innovation and local and indigenous knowledge, be mobilized to advance these transformations?

Building resilience bay all actors, is an essential stepping stone for achieving sustainability, peace and prosperity for all. Transformation for protecting the planet and resilience building in the current interconnected COVID19, climate, nature and food crisis, is happening when multiple actors (along the H/D/P nexus) engage together to address the impact of colliding crisis as well as root causes of multiple cascading risks across and within systems. The means of implementation of the urgent systems transformation taking into account these multiple risks is well explained in the UN Common

<sup>&</sup>lt;sup>12</sup> According to its study (2019), these practices and technologies, generated on average benefits that were 2.2 times higher than those practices previously used by farmers under hazard conditions. The average observed benefit-cost ratio (BCR) was 3.7 in hazard cases, while under non-hazard conditions this rose to 4.5. Among the benefits included both increases in agricultural production as well as avoided hazard-associated damage and loss (http://www.fao.org/3/ca4429en/ca4429en.pdf).

<sup>13</sup> http://www.fao.org/3/a-i3632e.pdf

<sup>14</sup> http://www.fao.org/3/ca1495en/CA1495EN.pdf.

Guidance on Resilience<sup>15</sup>, proving advice on why resilience building matter, what are its key elements and how to do joined up programming along the management cycle and with tips and examples of partnership, coordination and financing for resilience. The UN Common Guidance on Resilience fully support SDG17 and the transformation of the agrifood systems as illustrated above.

Urgently transforming the agrifood systems require actions from all, at all levels, bringing inclusive and disaster, climate & environmental risk driven innovations, technologies, marketing, finance and sharing of knowledge while also addressing the inequity of powers between multinational corporations and smallholders with focus on the most vulnerable, poor and marginal groups such as youth, women and indigenous people, particularly in LDCs and SIDs<sup>16</sup>.

#### 4. Covid-19 crisis

What does the Covid-19 crisis reveal about the human-nature relationship and systemic risk creation? How can multiple risk management, including low carbon and 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 COVID-19 crisis has clearly demonstrated the systemic nature of risk across sectors and more specifically the inherent weaknesses of our current agriculture and food system. Not only is our global food system interconnected in a complex and interdependent way along the food value chain from production to consumption, but also with other social, economic and environmental dimensions of sustainability.

The global nature of these systems displays their vulnerability to systematic risks, such as the current pandemic, but also to the multitude of risks that are overlapping and cascading and occurring along each other. The health of humans is directly related to the health of our ecosystems and related agrifood systems, which are directly affected by the impacts of the climate emergency and increasing biodiversity losses. Disrespecting our planetary boundaries and unsustainable use of our limited resources increase our shared vulnerability to these risks. The current health crisis was only the start of a larger crisis that affects social and economic systems, while negatively affecting our food system at large in terms of availability, access and utilization of food. These impacts are hitting the most vulnerable countries and people in regions already affected by multiple risks, such as climate change, food chain crises from animal and plant diseases and pests (i.e. Locust crisis in the Horn of Africa) and conflict situations. The 2020 Global Report on Food Crisis<sup>17</sup> stresses the higher number of people in acute food insecurity (135 million) and the compounding effects of the COVID-19 pandemic.

The COVID19 crisis also demonstrates that safeguarding our agrifood systems is particularly urgent in pandemic contexts. FAO and its partners are busy trying to make sure that the health crisis does not turn into more food crisis. Under the COVID19 global humanitarian appeal, the organization works to (i)

https://unfccc.int/sites/default/files/resource/Agrifood RT roundtable outcome 1212.pdf

<sup>&</sup>lt;sup>15</sup> 2020 UN Common Guidance to help Build Resilient Societies (being finalized by UN interagency process).

<sup>&</sup>lt;sup>16</sup> 2019, COP25, UNFCCC-MPGCA Agrifood roundtable event -

<sup>&</sup>lt;sup>17</sup> http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/1272014/

stabilize access to food by supporting rural incomes and preserving ongoing critical livelihood assistance to vulnerable households; (ii) ensure continuity of the critical food supply chain; and (iii) ensure people along the food chain are not agents of COVID-19 transmission; (iv) better understand and monitor the impacts of COVID-19 on food security and the food supply chains, at all levels.

The COVID-19 crisis has caused human suffering on an unprecedented scale, forcing governments to take drastic measures. Despite an unprecedented drop in emissions due to the halt of economic activities on a global level, caused by the quarantine measures implemented by governments all over the world, these efforts are not sufficient in order to stay below the 1.5C increase in global temperature, advocated for by the IPCC. This not only demonstrates the importance of continued climate action along with our efforts to respond and recover from the COVID-19 crisis across sectors, but it also showcases the urgent need for systemic and transformative changes to our economic, social and environmental systems.

Nature is the first line of defence to natural disasters including climate-related disasters and epidemics, and therefore it is crucial to acknowledge and invest in Nature-based Solutions for transforming our agrifood systems. We must urgently reduce the destruction and encroachment of the natural environment, ecosystems and biodiversity so that these are not drivers of zoonotic diseases, such as COVID-19. But also in order to maintain and protect critical life support ecosystem services such as fertile soil, freshwater, clean air, pollination, risk reduction and buffer, etc...

In addition to NbS, other risk management measures highlighted above (see question #2) are also applied for shifting to inclusive, resilient and sustainable agrifood systems. These include: disaster risk management governance sensitive to epidemics and pandemics; risk-transfer mechanisms, such as shock-responsive social protection, insurance schemes and cash-transfers; the implementation of early warning systems to take early action and be better prepared and respond to future shocks; risk-proofing of infrastructure to both disease transmission, but also climate risks; creating awareness and building capacity on risk reduction measures and low-carbon good practices on farm level, such as agroecology, crop diversity and more localized production, that should also reduce risks of disease transmission, be cleaner and overall more sustainable.

The current COVID-19 crisis gives us an insight of the impacts of a temporary crisis at global level, and serves as a wake-up call for the urgency of taking climate and environmental action. This is because the increasing climate crisis will have more devastating and long-term impacts if no action is taken now. Our response to the COVID19 crisis should be used as an opportunity to inject and drive climate and green action as the engine for resilient and transformative recovery of our agrifood systems and beyond. Stimulating socio-economic recovery with inclusive, cleaner, greener and safer packages will help to mitigate the multiple risks made visible from the current crisis and help building back better with transformation across locations and scales.

We must rethink and act at scale on how we manage our forests, soils, water, oceans, climate, and biodiversity for transitioning to inclusive, regenerative and resilient agriculture and food systems, so that we deliver on reducing hunger and poverty and climate change sustainable development goals, to name only a few. The COVID-19 pandemic clearly illustrates the importance of safeguarding planetary health for overall human health, with agriculture and food systems offering opportunities to achieve a low carbon, resilient and sustainable future and leave no one behind.