Introduction
Advancing human well-being is at the heart of sustainable development and is about upholding human rights and eradicating deprivations across multiple dimensions, closing opportunity gaps and expanding capabilities – including those needed to cope with the Covid-19 pandemic and its consequences. It is also about safeguarding the natural environment on which everyone depends to ensure the well-being of current and future generations. However, we are falling short on improving all people’s lives due to inequalities in opportunities; inadequate access to quality education; persistent gender inequality; unequal access to quality health care and exposure to disease, the consequences of which are laid bare by Covid-19; and insufficient resilience to recover from shocks. Many of the needed transformations to advance human well-being are demonstrably possible, but pathways forward during the decade of action require cooperation, collaboration and dialogue among multiple stakeholders, and employing many levers to ensure no one is left behind, including the most vulnerable.

Guiding questions
Please consider the 5 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 13 May to astra.bonini@un.org.

1. **Policies, actions and trade-offs**: What are some promising actions to support progress toward advancing human well-being and building capabilities? How could these actions be designed to generate synergies with other Goals and Targets? What are some of the possible trade-offs from these actions and how can they be mitigated (see example below)? What are the most critical interventions that will be needed to strengthen human well-being over next 2 years, 5 years, 10 years? What are the interlinkages we can leverage to advance human well-being in the recovery phase of the COVID-19 pandemic? How can national and local systems be strengthened to provide integrated quality, sustainable health and social services to communities in all settings?

<table>
<thead>
<tr>
<th>Action to strengthen human well-being and capabilities</th>
<th>Synergies with other areas of the 2030 Agenda</th>
<th>Tradeoffs with other areas of the 2030 Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Investing in higher education</td>
<td>Higher incomes and better job opportunities; improved</td>
<td>Potential to increase environmental pressures with</td>
</tr>
<tr>
<td>knowledge base and capabilities for solving critical challenges</td>
<td>higher consumption levels, may not reach the most vulnerable groups</td>
<td></td>
</tr>
</tbody>
</table>

Action guided by the Sendai Framework for Disaster Risk Reduction 2015-2030\(^1\) is imperative to prevent exacerbating vulnerability to disaster, design targeted action to reduce the vulnerability and exposure of persons and assets to disaster, and to build resilience. A risk-lens should be applied in the design phase and throughout implementation of interventions towards advancing human health, well-being and capabilities, informed by national and local disaster risk reduction strategies and plans developed by 2020, in line with the Sendai Framework’s target (e)\(^2\) and complemented by sufficient financing. While adopting these plans by 2020 feeds into the measurement of SDGs 1 (Indicator 1.5), 11 (Indicator 11.b) and 13 (Indicator 13.1), action to address systemic disaster risk underpinning the SDGs must cut across and between all Goals. Similarly, a risk-lens must be applied to trade-offs between action towards this aim and other goals, to avoid shifting risk across the three dimensions of sustainable development by appropriately managing existing and created risks.

Disasters aggravate the depth and breadth of poverty, while poverty exacerbates the way people experience, cope and recover from disasters. Disaster risk reduction is critical to the eradication of extreme poverty; conversely poverty is a key driver of disaster risk as it exacerbates economic and social vulnerability, including by influencing choices surrounding food quality and nutritional outcomes, and can influence decisions made about the exposure of persons and assets, as land available at lower prices for agricultural or housing purposes may have high exposure to hazards. Examples of action to reduce disaster risk towards the attainment of SDG 1 include livelihood advancement programs, the promotion and development of risk-informed early action or forecast-based-financing programs, inclusive policies and social safety nets.

Promoting risk-informed and inclusive health systems, in line with the Sendai Framework which places strong emphasis on the importance of integrating DRR into health care at all levels and the resilience of health systems, and the Bangkok Principles for the implementation of the health aspects of the Sendai Framework for Disaster Risk Reduction 2015-2030,\(^3\) is essential to advancing human wellbeing. Health, including mental health, and wellbeing are affected as a result of disasters and other emergencies. Health emergencies can also have cascading impacts across the economic and social dimensions of development, in addition to knock-on effects within the health sector.\(^4\) Integrating disaster risk management into primary, secondary and tertiary health care, especially at the local level, developing the capacity of health workers to understand disaster risk and applying and implementing

\(^1\) [https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf](https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf)
\(^2\) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.

\(^4\) The Ebola virus outbreak in Guinea, Liberia and Sierra Leone in 2014–2015, which killed more than 11,000 people, is estimated to have cost 9.4% of GDP in Guinea, 8.5% in Liberia and 4.8% in Sierra Leone. Liberia lost more than 8% of its healthcare workers. Surveillance, treatment and care of HIV/AIDS, malaria and TB were set back, and the entire region suffered economic effects of the stigma.
disaster risk reduction approaches in health work, risk-proofing facilities from new risks such as the risk of cyber-attacks, and promoting and enhancing training capacity in the field of disaster medicine are examples of necessary interventions. Lastly, it is imperative that settlement planning takes health risks into account, including in water and sanitation management, and other factors that can drive health risks such as lack of education. Robust and sustainable management of water resources will significantly contribute to reducing the impacts of water-related hazards and strengthen efforts to mainstream disaster risk reduction strategies into water management, which has significant co-benefits towards human health and wellbeing.

Households with higher levels of education generally have higher levels of disaster preparedness and are more able to employ non-deteriorating strategies to cope with natural hazards. Schools are critical entry points to build a culture of safety and risk cognizance, and school-based DRR programming can have knock-on effects across communities, creating positive feedback loops for risk reduction and resilience. Eco-literacy can also help empower individuals to make choices that positively impact the functioning of the Earth system, laying the foundation for action through the individual and collective action lever to reduce risks stemming from environmental mismanagement. School disaster management is also critical for safe learning environment, including response skills and provisions for teachers, educational continuity planning, and contingency planning. This is also critical to ensure that educational trajectories, and in the longer-term the labor market, are not disrupted by the effects of disasters. In addition to formal education, targeted public awareness campaigns and education are necessary for disaster risk reduction.

2. **Leaving no-one behind:** Which groups are especially vulnerable to poverty and lack access to capability enhancing services like quality education, health care and clean water and sanitation and what are ways to ensure that actions leave no one behind? How can legal reforms, shifts in social norms, and changes in economic and social policies be applied to produce tangible shifts towards greater equality, particularly by prioritizing the rights of the poorest and most marginalized populations? How do we overcome barriers and allocate resources to unlock the potential of young people and women, and empower marginalized groups, including migrants and refugees? Is there new evidence from the impact of COVID-19 on vulnerable groups that can help inform tailored policy interventions?

---

5 Cyberattacks cascading into health systems and compromising patient lives through attacks on health-care monitoring devices (“medjacking”) emerged in 2015. Security researchers discovered security flaws in the Hospira infusion pump that could remotely force multiple pumps to dose patients with potentially lethal amounts of drugs. In addition to insulin pumps, deadly vulnerabilities were found in dozens of devices, including X-ray systems, computerized tomography scanners, medical refrigerators and implantable defibrillators.

6 For example, in Yemen the spread of the cholera outbreak beginning in April 2017 could be traced to the consequences of two years of conflict and the resulting decimation of the country's health, water and sanitation systems and facilities, coupled with widespread internal displacement and alarmingly high rates of malnutrition. Additionally, the Zika virus outbreaks are an example of how cities are the locus of emerging environmental and health hazards. The larvae of the Aedes mosquito thrive in stagnant water, which is abundant, for example, in slum areas where open containers, tires, barrels and drums are used for gathering rainwater for household and garden use. Improving the human environment can therefore reduce exposure to the vector mosquitoes.
Disaster risk reduction, including the prevention of the creation of new risk, reduction of existing risk, and management of residual risks, is imperative to enable human health and wellbeing. Multi-dimensional inequalities exacerbate underlying vulnerability and can impact exposure to disasters. Persons living at or below the poverty line, those who do not have any form of social protection, persons with a disability, or those facing discrimination based on gender are often more vulnerable to disasters. These vulnerabilities can intersect and overlap, compounding deprivations.

As recognized in the Sendai Framework for Disaster Risk Reduction 2015-2030, “while States have the overall responsibility for reducing disaster risk, it is a shared responsibility between Governments and relevant stakeholders.” It is especially critical to involve vulnerable groups in the design and implementation of normative frameworks, standards and plans for disaster risk reduction to ensure that their needs are addressed towards an inclusive culture of disaster prevention.

3. **Knowledge gaps:** Where are the science, knowledge and data gaps that need to be filled for better understanding of the interlinkages among SDGs in strengthening human well-being? Where are the knowledge gaps around identifying those who are most at risk of being left behind? What knowledge is lacking to identify and remove structural barriers to building human capabilities, including for the most vulnerable and marginalized? How can these be filled? How can we fully leverage and exploit existing knowledge and science to advance human well-being?

Action through the science and technology lever can promote enhanced understanding of how vulnerabilities intersect and compound, towards providing targeted recommendations to reduce the vulnerability and exposure of people and assets to hazards. Knowledge gaps surrounding barriers to the inclusion of vulnerable groups in the design and implementation of DRR programming must be addressed, in addition to further research in how messaging on disaster risk reduction including measures to reduce exposure to disaster and tailoring early warning systems to the needs of vulnerable groups. Longitudinal research including on how disaster risk reduction education influences behaviors, and how disruptions to education or livelihoods influence outcomes across generations and what structural barriers must be addressed to reduce their vulnerability and exposure to hazards are necessary.

4. **Relevant means of implementation and the global partnership for development (SDG 17):**

   Achieving the 2030 Agenda relies on applying the means of implementation to harness synergies and/or reduce trade-offs. Are there examples of how the various means of implementation, including finance, partnerships, capacity building, and science and technology (also see below), are being brought together to accelerate and achieve these objectives at scale? Can these be replicated or adjusted to fit other contexts? How can multi-stakeholder partnerships that support integrated responses to the needs of marginalized populations be adopted for greatest impact? What are the most important partnerships that will be needed to enhance human wellbeing over the next 2 years, 5 years, 10 years?
National development financing plans and development cooperation strategies must be in line with national and local disaster risk reduction strategies and plans to enable the achievement of the 2030 Agenda. It is critical to invest in capabilities, and to increase public-private partnerships to address intersectional underlying vulnerabilities to disaster. An all-of-society approach is critical for disaster risk reduction to enable human health and wellbeing.

5. **Science, technology and innovation**: The ways we eat, live and work are defined to various extents by science, technology and innovation, and achieving sustainability in all these areas will require STI-based solutions, which are applied in an ethical manner and respect human rights. How can we create and scale up STI solutions to strengthen human well-being in sustainable ways, and to promote improved capabilities and build resilience?
   
a. What role will STI play in this transformation to a sustainable system of building human well-being? What are the most promising technological solutions? What are potential trade-offs and synergies to keep in mind in this context, including in terms of ensuring that technological applications, such as Artificial Intelligence, adhere to human rights and ethical standards?

b. How can STI help improve capabilities and build resilience, in both developing and developed countries?

For STI to improve capabilities and build resilience, it must be risk-informed including to the risk of cyber attacks, and it must be accessible throughout society, including to vulnerable groups. It is critical to direct attention to the prevention of the creation of new risk and reduction of existing risk through the use of STI, in addition to the management of residual risk including through enhanced early warning systems.

c. How can (homegrown) community innovations be leveraged and shared to inspire and accelerate local creative solutions and action?

Community innovation for disaster risk reduction, including community risk mapping and monitoring, is essential to enable human health and wellbeing.