

Open working group on SDGs - Key messages of Ireland/Denmark/Norway on Climate Change and Disaster Risk Reduction

Framing the issue

The climate change that we experience today is a result of greenhouse gas emissions stemming from development since pre-industrial times, mainly from fossil fuel consumption and land use change. Those hardest hit by the adverse impacts of climate change are the poorest, who have contributed the least to the problem, as well as women and indigenous peoples. These people struggle already, and climate change is an additional burden. There is a risk that economic growth and human and social development gains in Africa, Asia and Latin-America the past decade may be reversed because of climate change related impacts and disasters.

The world community has agreed that we must limit global warming to below two degrees since pre-industrial level. According to the IPCC, the 2 degree scenario requires global emissions to peak by 2020. There is an enormous difference between a 2 and 4 degrees warmer world. Hence, urgent action is needed to reduce greenhouse gases to ensure the 2 degree target in order to safeguard vulnerable people and further the development process. A new agreement under the UNFCCC must put us on the path towards this goal.

Current and coming climate challenges are altering the conditions under which we build a resilient and sustainable future. The adverse effects of changing weather patterns on i.a. food production, water supply and natural resources risk undermining development. Climate change has to be met by transformational changes across sectors and levels. Hence, adaptation, mitigation and disaster risk management are at the core of sustainable development.

Need to address climate change and disaster challenges to ensure sustainable development

Stronger and more frequent storms, floods and droughts; sea level rise, glacial melt and ocean acidification are climate change impacts that represent tremendous challenges for many people in the world. These changes have detrimental impacts on life and livelihoods of poor communities and people that have less capacity to reduce risks, and to cope with events that occur, and may set back development progress and increase the level of poverty - or forcing new groups into poverty.

Climate change is a cross-sectorial challenge, both as a cause and an impact. Among the causes are greenhouse gas emissions from energy production and -consumption, transport, industry, agriculture, forestry and waste. Impacts of climate change and disasters affect all sectors and areas of society; agriculture and food and nutrition security, health, infrastructure, energy production, houses and buildings and water management. Hence climate change considerations must be fully integrated into the SDG framework to achieve sustainable development. The SDGs must be climate-smart goals.

According to the IPCC, unmitigated climate change would, in the long term, be likely to exceed the capacity of natural, managed and human systems to adapt. Therefore, transformational change of livelihoods might be necessary in some cases. In especially vulnerable communities, such as arid areas and small island states, such changes need to be considered in development planning.

Addressing the dual and inter-related challenges connected to climate change and disaster risk is one of the most critical necessities for the sustainable development agenda beyond 2015.

To be sustainable, a new set of goals should contain a climate and environment dimension that would enable the world to cope with the threats caused by climate change. We should develop SDG targets

that inspire action so that climate change and disaster risk is taken into account and integrated across all relevant policies and sectors, and at all levels of decision-making.

Building resilience through climate change adaptation and disaster risk reduction

Making people, communities and countries resilient to the adverse impacts of climate change is a long term objective, and essential to obtain sustainable development. Targets aimed at building resilience could be linked to reducing economic losses, preventing impoverishment, reducing mortality, morbidity and disability, early warning information and services, and improving food and nutrition security, ecosystems and health systems.

Resilience is ultimately achieved if wellbeing is maintained or increased over time and if a community is able to recover quickly after a shock, through deliberate adaptation and risk reduction efforts.

Assessments of climate risks and vulnerabilities are fundamental for national and local planning, including assessments of drivers of risk related to governance, planning processes, urbanization, health, food and nutrition security, education, natural resource management, and ecosystem management.

Building resilience through adaptation and disaster risk management is both a humanitarian issue and a development challenge, as disasters and climate change threaten development. We need to prioritize sustainable development before and during disasters, and in the post-disaster phase. Similarly, in development planning, we need to prepare for disasters.

Local people, indigenous groups and organizations with local knowledge are essential for effective disaster management. Countries and communities must ensure that they are included when plans and priorities are set and called upon when an extreme event has been alerted. Institutions responsible for humanitarian response must be accountable to populations at risk from and affected by natural hazards.

Climate services are important tools for adaptation and disaster risk reduction. These services, such as early warnings, must reach out to all affected groups and vulnerable people, including national and local authorities, city planners, schools, hospitals, farmers, fishermen, coastal populations etc. The WMO Global Framework for Climate Services may serve as a tool for increasing resilience of vulnerable people around the world.

Preservation and rehabilitation of ecosystems are vitally important. Ecosystems are our first line defense against extreme events and slow onset climatic events.

To avoid extreme events turning into disasters, we must reduce longer-term vulnerabilities through strengthened preparedness, including warning, response strategies and local knowledge. There are other risks of natural disasters than a changing climate, with underlying risk factors such as poverty and urbanization. Hence, building resilience requires that we prepare for earthquakes in megacities along with climate change adaptation.

As a result of the implementation of the Hyogo Framework for Action 2005-2015 (HFA), many countries have made significant advances in terms of strengthening national institutions and there is a growing focus on building resilience and taking climate variability and change into account in national planning processes. HFA 2 is being formulated and will be launched in 2015.

Sea level rise poses a future challenge in particular for small island states and low lying coastal zones, but also for many of the world's megacities. More and more people live in cities; this creates challenges related to water and sanitation, food and nutrition security, infrastructure, etc. Sea level rise

represents an additional challenge related to urbanization, which also accentuates existing challenges. Building resilient cities is important. And possible, through forward-looking urban planning. People living in poverty are often the most exposed in disaster prone areas such as flood plains and steep slopes. Reducing poverty will make people less exposed to disasters. And not addressing climate change will lead to increased poverty.

Forests play an important role in climate change mitigation and adaptation, as well as in disaster risk reduction. Forests provide food, products and ecosystem services; they maintain local fresh water production and increase resilience, by contributing to the prevention of floods, droughts, erosion and avalanches. Sustainable forest management is therefore crucial, including reducing deforestation and forest degradation while preserving biodiversity and enhancing sustainable livelihoods.

Integrating climate change and disaster resilience into sustainable development goals

Climate change and disaster risk are multi-dimensional challenges, and difficult to capture in any one sustainable development goal. We need a **multi-sector approach**. And we need **multi-stakeholder action**. The private sector has a key role.

We need win-win solutions that address the challenges related to climate change and disasters in a way that also address key development priorities like access to energy, food and nutrition security, water, health and education.

The following are some examples to illustrate how this can be done:

- **Energy**: Increased production and use of renewable energy is at the heart of solutions to both climate change and poverty. Energy accounts for about 60 per cent of global emissions of greenhouse gases. We need to change the way we produce and use energy. The use of clean cook stoves contribute to reduced black carbon, hence cleaner air and reduced climate impact. Climate change should be taken into account when planning large scale energy production installations, including power grids.
- **Health**: What people eat, drink and breathe is key to their health. Indoor air pollution from traditional cook stoves is a major cause of lung disease, causing over 3 million deaths every year, in particular women and children under five. Providing access to clean energy could hence be an important step towards improved health. Effects of extreme weather events and climate related diseases (meningitis, malaria, dengue fever) are examples of how climate change and health issues interlinks. Climate services, such as early warning systems, are crucial in order for health systems to prepare for extreme weather events, disasters and impacts of climate change. Reducing emissions of short-lived climate-forcing pollutants (SLCPs) contribute to a better climate and better health conditions.
- **Food and nutrition security**: Climate smart agriculture contributes to climate change mitigation, adaptation and increased resilience. Sustainable agriculture techniques such as watershed management, terracing and no-till agriculture can contribute to land restoration. Climate services are important, e.g. seasonal weather forecasts which makes climate robust planning possible, such as what and when to plant. Research, preservation and use of climate robust seeds and plants are crucial, related to expected climate change in different areas. Ecosystem based adaptation and local knowledge is key.
- **Gender**: We must ensure that women are targeted in disaster risk reduction and adaptation efforts, including related to early warnings and other climate services. Better access to sustainable energy in households and in communities may for example both reduce the need for firewood collection and open new opportunities for women. It is important to empower women to take the best and most robust choices when the extreme event or drought hits, preparedness is key.

- **Education:** Climate change and disasters affect children in many ways, since they are among the most vulnerable groups. For example, disasters may destroy schools and disrupt education. In addition, affected households have the tendency to withdraw children from school. Building resilience can be done e.g. through the building of safe schools, including climate change and DRR in schools' curriculum, establishing school early warning systems and maintaining education also during crisis.

In conclusion:

We need to develop **climate-smart goals**.

We need goals that aim at building resilience.

And we need **targets that inspire action** across all relevant policies and sectors, and at all levels of decision-making; actions that promote sustainable development and enable us to cope with the threats caused by climate change and natural hazards.