

Cross cutting themes	<p>Climate services, incl early warning systems</p> <p>Early warning systems (EWS) are defined as integrated systems of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems to enable individuals, communities, governments and businesses to take timely action to reduce disaster risks in advance of hazardous events (UNISDR, 2021). Early warning systems have proven to be an effective way to adapt to climate change by providing a cost-effective and reliable way of protecting lives and livelihoods from natural hazards such as floods, heatwaves, storms, and tsunamis.</p> <p>Every person on Earth to be protected by Early Warning Systems by 2027 [UN Secretary-General's Early Warnings for All Initiative] Target 6: Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030 [Source: Sendai Target 6]. Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks [SDG Target 3.6]. Additional related Sendai Framework Targets: 1) Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2020; 2) Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2020; 3) Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030; 4) Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030; 5) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2025; 6) Substantially enhance international cooperation to complement their national actions for implementation of this Framework by 2030; 7) Substantially increase the availability of and</p>	<p>SDG target 10.7: Proportion of countries with migration policies that facilitate orderly, safe, regular, and responsible migration and mobility of people (positive trends since 2019 for all regions except Latin America and the Caribbean, Central and Southern Asia)</p> <p>SDG target 10.7: Promote responsible and well-managed migration policies. 8.7 (eradication of forced labor, modern slavery, human trafficking and child labor), 8.8 (protection of safe and secure environments for all workers) and 10.4 (reduction of transaction costs for migrant remittances), among others.</p>	<p>International organizations: UNDRR / WHO (co-leading in Early Warnings for All Initiative), national governments including meteorological offices. Private: Tech companies.</p> <p>International: UNDRR/WMO promotes multi-hazard early warning systems to strengthen disaster preparedness. UNEP contributes through its Climate Information / Early Warning Systems (CIWS) Portfolio. National governments: to report progress internationally, through Sendai Framework. Private parties and weather services can provide necessary technical infrastructure. Aside from the infrastructure, capacity development, and communication at all scales is needed, from national weather services to local leaders and individuals.</p>	<p>Whole-of-government approach, whole-of-society approach, child sensitive, gender-responsive, respect human rights, people-centered, development, and livelihoods-based approach. Inclusion of individuals, households, and communities prone to climate change as well as migrants, displaced, relocated, and immobile individuals, households, and communities need to be included since this does not only increase the fitness of policies but also the implementation. Approaches need to ensure realistic time frames and adequate consultation, need to recognize, affirm and protect customary, traditional and place-based knowledge and practices, and be transparent and accountable, flexible and adaptive.</p>	<p>Mobility is most adaptive when safe, orderly and regular which is most often the case during slow-onset climatic processes (e.g. drought) and more difficult after rapid-onset events. It is generally accepted that the people forcibly displaced by sudden-onset natural hazards are not improving their adaptive capacities by moving, but are removing themselves spatially from potentially deadly risks.</p>	<p>Planning should cover different stages of migration trajectories: 1) pre-mobility, 2) during mobility, 3) during reception and integration into receiving community, and 4) during and after potential return to sending community.</p>	<p>1. Support interdisciplinary approaches in vulnerable countries to enable migration, relocation and resettlement that could be a basis for evidence-based policies. 2. Ensure that migrants have proof of legal identity and adequate documentation. 3. Save lives and establish coordinated international efforts on missing migrants. 4. Strengthen the transnational response to smuggling of migrants. 5. Manage borders in an integrated, secure and coordinated manner (GCM).</p>	<p>1. Collect and utilize accurate and disaggregated data on internal & international migration, relocation or resettlement in the context of climate change as a basis for evidence-based policies. 2. Ensure that migrants have proof of legal identity and adequate documentation. 3. Save lives and establish coordinated international efforts on missing migrants. 4. Strengthen the transnational response to smuggling of migrants. 5. Manage borders in an integrated, secure and coordinated manner (GCM).</p>	<p>1. Provide accurate and timely information at all stages of migration. 2. Empower migrants and societies to realize full inclusion and social cohesion. 3. Invest in skills development (vocational training, pre-departure training) and facilitate mutual recognition of skills, qualifications and competences discourse to shape perceptions of migration. 4. Create conditions for migrants and diasporas to fully contribute to sustainable development in all countries. 5. Strengthen international cooperation and global partnerships for safe, orderly and regular migration (GCM).</p>	<p>1) Ensure that the most vulnerable to climate change and socially disadvantaged members of communities (poor, less educated, differently abled, or elderly, and women) who are least able to migrate develop the capacity to migrate if needed. 2) Limited capacity of receiving communities. 3) Climate risk in receiving communities. 4) Altered identities of sending communities. 5) Unintended consequences of remittances ("remittance trap"). 6) Barriers to action in the development sector due to historical view of migration (GCM).</p>	<p>1) National governments can improve legal pathways for international migration of people (e.g. additional quotas and capacity for issuing humanitarian visas for climate-displaced people or a climate passport for people whose homeland has become uninhabitable). 2) Governments, NGOs, and partners can strengthen work to build adaptive capacities in local areas to support origin areas and people who are unable or unwilling to migrate. 3) Governments and partners can better integrate climate migration and displacement into urban planning (fostering polycentric urbanization to improve the capacities of cities to respond to incoming groups of migrants and labor market development and investments into medium-sized regional centers to reduce pressures on capital cities with large informal settlements)(GCM).</p>	<p>Voluntary and proactive migration can benefit migrants, their households, sending communities, and receiving communities. Benefits include increased income and remittances, and knowledge and skills transfer. Receiving communities can benefit from an increased labor pool and an influx of migrant spending and support services (USAID, Sendai framework).</p>	<p>Difficult to monitor due to limited data on migration in the context of climate change and whether it can be identified as adaptation. Use case-study results which assess migration as adaptation or assess how MAP and NCC view human mobility (Mombauer et al., 2023). SDG Indicators: Proportion of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people (SDG 10.7.2), migrant recruitment cost (amount that migrant workers pay to find, qualify for, secure and reach their first job abroad, divided by their average monthly salary; SDG 10.7.1).</p>	<p>Monitored under the Sendai framework by UNDRR-WMO. As per the WMO survey, only about a third of WMO Members globally report having evaluated the performance of early warning systems [Targets, UNDRR-WMO, 2022].</p>
Human migration, relocation and resettlement	<p>Migration, relocation, and resettlement may or may not be considered to be adaptation. Migration, when voluntary, safe, and orderly, allows the reduction of risks to climatic and non-climatic stresses (A6). The concept of migration as adaptation to climate change emerged over a decade ago, related with the landmark Foresight report in 2011. Prior debates on climate change-related population movements often assumed migration as an outcome or "last resort" for impoverished and vulnerable peoples in climate-prone areas. The focus had therefore been on developing policy solutions that sought to build ecological resilience and reduce migration pressures. Increasing adaptive capacity minimizes the risk associated with involuntary migration and immobility. It improves the degree of choice under which migration decisions are made. At the same time, policy interventions can remove barriers and expand the alternatives for safe, orderly, and regular migration that allows vulnerable people to adapt to climate change. Reducing future risks of involuntary migration and displacement due to climate change is possible through cooperative, international efforts to enhance institutional adaptive capacity and sustainable development (IPCC WGI).</p>													