

## Abstract

Climate change is becoming the main driver of forced migration and human mobility. Several recent large-scale migratory movements around the world have been caused and forced by climate change, which is causing extreme flooding around the world. An increasing number of people, both on the coasts and inland, are forced to live with this increased and permanent threat that exacerbates the situations of vulnerability and displacement of local populations within their country or abroad. In this context, we target floods as a major climate-related hazard, as they are the main culprits of the most recent global losses in natural disasters and the first actor to blame for population displacement in flood-prone areas around the world.

The prediction and prevention of climate migrants due to natural disasters such as floods is growing due to rapid climate change, and Early Warning Systems (EWS) are one of the most effective tools for flood risk disaster reduction and one of the most urgent measures to be implemented to attenuate floods impact on vulnerable populations.

Flood risk reduction technologies such as early warning systems (EWS) are being implemented on a large scale, from local to global areas, to manage, monitor and reduce the impact on vulnerable populations at risk of flooding. This could include preparedness plans, evacuation plans and emergency response measures in areas where they are most needed, saving lives and minimizing property damage. With the help of early warning systems technology (EWS), humanitarian organizations and governments can develop more effective strategies to respond to floods and help flood-affected populations before it's too late as recently expressed by the Secretary-General of the United Nations during the celebration of World Meteorological Day.

*New York, 23 March 2022 the UN Secretary General said:*

*Today, one-third of the world's people, mainly in least developed countries and small island developing states, are still not covered by early warning systems. In Africa, it is even worse: 60 per cent of people lack coverage. This is unacceptable, particularly with climate impacts sure to get even worse. Early warnings and action save lives. To that end, today I announce the United Nations will spearhead new action to ensure every person on Earth is protected by early warning systems within five years.*

As the demand for early warning system solutions grows and so do the solutions offered, many barriers remain poorly understood in the world's most vulnerable places (social, organizational, and scientific). Identifying specific problems as early as possible and providing solutions before they become "roadblocks" to successful implementation is a vital step that is easy to say, but surprisingly often not achieved.