

WEATHER READY NATIONS (WRNS)

IMPACT-BASED FORECASTING AND EARLY WARNING PROJECT

Each year the impacts of severe hydrometeorological events around the world give rise to multiple casualties and significant damage to property and infrastructure, with adverse economic consequence for communities, which can persist for many years.

All this happens despite good forecasts of many of these severe events, with accurate warning information disseminated in a timely fashion by the responsible National Meteorological and Hydrological Services (NMHSs) and National Disaster Management Agencies (NDMAs).

The Weather Ready Nations (WRNs) program is a multi-hazard impact based forecasting and early warning approach, aiming to produce local scale impact based forecasts and warnings that influence the recipient's response of the hazardous events and understanding of potential impacts that translate into a higher level of protective actions, thus mitigating impacts of severe hydrometeorological events.

The program aims to help countries go beyond producing accurate forecasts and timely warnings, to better understanding and anticipating the likely human and economic impacts due to severe weather and communicating those impacts to various stakeholders in an effective manner, delivering accurate and easily understandable information, data services and products that are easily integrated into the decision-making process.

What has made WRN successful:

Has REACH

Is INTEGRAL and INTEGRATIVE

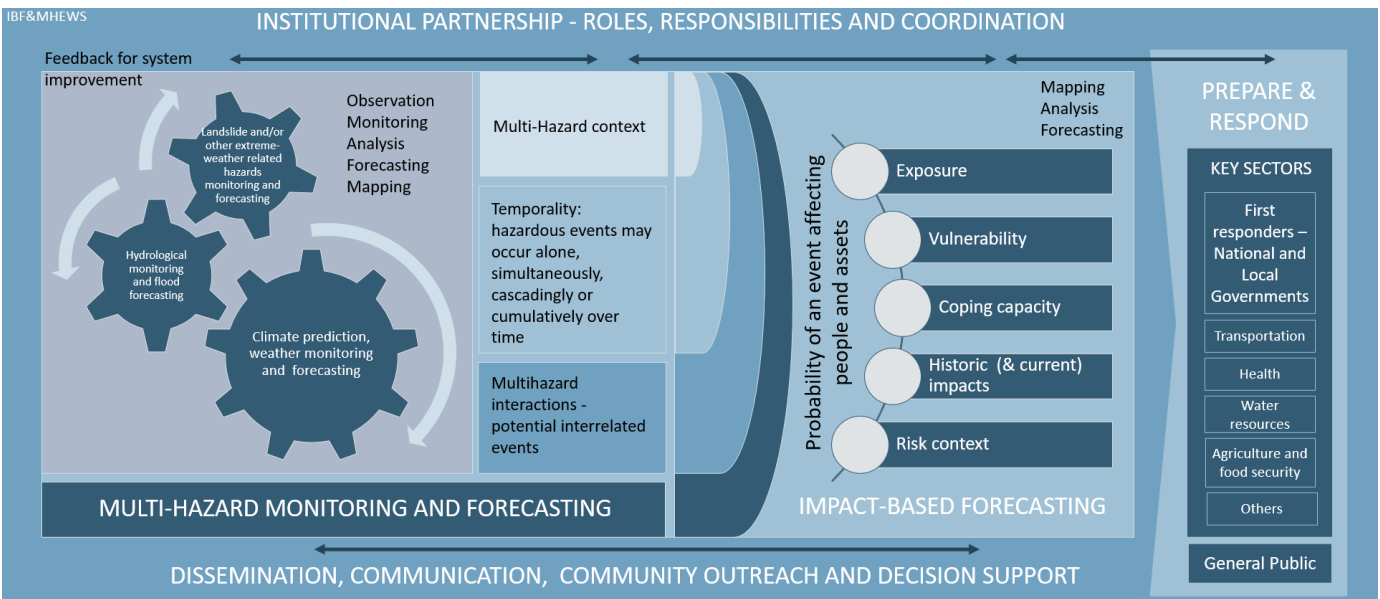
Is TRUSTED (reliability, accuracy)

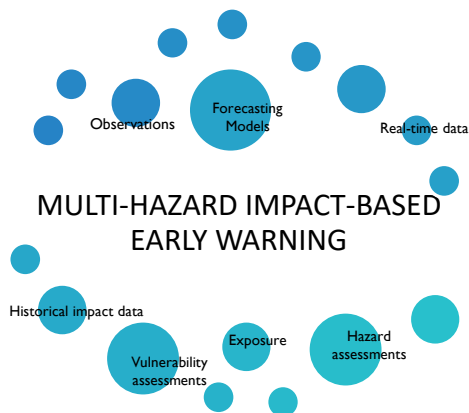
Is USEFUL (relevant, understood, acted upon)

Has BENEFIT (optimises, value for money)

Is SUSTAINABLE (responds, improves)

Is USER DRIVEN (service delivery principles)





EARLY MITIGATION AND EARLY ACTION



Box 1: In El Salvador, the Natural Hazards Observatory (MARN) has implemented the Weather Ready Nations (WRNs) program a multi-hazard impact based forecasting and early warning approach to severe hazards.

MARN is working with community leaders under their “Local Observers Program” to improve and tailor impact based forecasts (IBF) according to their needs. The partners contribute to the dissemination of the impact based forecast information and promote protective actions.

Ana Julia Álvarez, Local Observer from Caserío Barrancones, Pasaquina, La Unión - “The Observatory has contributed greatly to saving lives and protecting our assets. With TS Amanda (2020), they told us that the event was coming a week before it did, and they told me that there were going to be floods in the area where I live, 5 hours before it happened. They called me at 4 am to warn me, and I was able to warn others. My house was flooded, but we had already evacuated, and I was able to put my things in safe places beforehand to minimize damage. In this area there is a lot of agriculture and livestock, with the information they share, farmers are warned when something is going to happen, so they can put their animals in safe places.

Alex Cabrera resident of Caserío Barrancones, Pasaquina, La Unión - “With the colored maps it is easier for us to understand, one only sees the map and already has an idea of what is going to happen. The information they (the Observatory) sent us allowed us to take actions and we were able to put our boats in safe places, since we usually leave them anchored in the river. People in the community were able to build up the riverbanks to reduce the impact of the floods on their crops” commented.



Box 2: Under the WRNs program, INSIVUMEH (Guatemala) has developed strong partnerships with various stakeholders and local partners, civil society and international organizations. WRNs has proven to be a critical process to improve disaster response and emergency relief activities for humanitarian agencies, such as International Federation of Red Cross and Red Crescent Societies (IFRC) and United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

Impact-based forecasts (IBF) have been found to be more useful and meaningful, as they include clear and understandable information that can be easily integrated into the decision-making process. IBF developed by INSIVUMEH were shared with the IFRC and its subnational network of disaster coordinators during hurricane Eta and Iota in 2020. IFRC used the IBF to pre-position resources and call in volunteers to the regions where the more severe impacts were expected. This helped facilitate a more efficient emergency response, saving lives and reducing losses.

During Eta and Iota, INSIVUMEH also partnered with OCHA. OCHA used IBF provided by INSIVUMEH to assess possible needs of vulnerable groups in the areas where high impacts were expected to occur. The information allowed OCHA to identify gaps in access to emergency services and humanitarian assistance and assisted in bringing critical sectors and government closer together to meet the needs of vulnerable and/or marginalized populations. OCHA and IFRC identified the value of IBF as critical information to predefine actions and preposition resources, to better act before, during and after a disaster to meet the needs and improve the lives of vulnerable populations.

