



Role of NMHSs in Improving Humanitarian Emergency Planning and Response

Haleh Kootval
hkootval@wmo.int

**Chief: Public Weather Services
Programm**

Relationship between NMHSs and the Disaster Community

- Survey on Severe Weather Warning Services by the WMO Public Weather Services Programme (PWSP) in 2006 indicated that NMHSs coordinate with, and deliver services to disaster communities
- The levels of coordination and service delivery differ from country to country
- Most WMO Members indicated that their relationships with disaster communities were positive.

WMO Role in Supporting Humanitarian and Relief Efforts

- During the 12th Session of WMO Congress in 1995, WMO was requested to provide meteorological and hydrological information in support of humanitarian and relief efforts before, during and after natural disasters and other crises
- Mechanisms were set up to provide this information via NMHSs and RSMCs to the DHA to facilitate their operations

Role of NMHSs in Emergency Planning and Response

- NMHSs observe, collect, analyse, exchange and archive weather data 24/7
- They can provide information, data, forecasts, warnings, and advice to government agencies including emergency agencies, NGOs and others on the evolution of weather and climate.
- They are therefore in a position to contribute effectively to emergency planning and response

Role of NMHSs in Emergency Planning and Response-2

- The top priority and mandate of a National Meteorological and Hydrological Service (NMHS) is to provide severe weather warnings and forecasts in support of safety of life and protection of property
- In this role NMHSs aim to preventing hazardous weather from turning into a disaster.

Role of NMHSs in Emergency Planning and Response - 3

- How is this done?
 - By providing warnings and forecasts on different time scales (minutes to decades) to cover weather and climate-related hazards such as tornadoes, heavy rain and snow, floods, strong wind, tropical cyclones, thunderstorms, storm surges, dense fog, freezing rain, extreme cold, drought, etc.
- NMHSs play different roles in a national emergency management system during the periods of ‘normal’ weather; when severe weather is on the way; when severe weather is happening; and after it has happened.

During periods of ‘normal’ weather

- **Planning and Coordination** with relevant government ministries, emergency agencies and other partner organizations on actions to take for both short- and long-term hazards and to put in place detailed plans to save lives and property
- **Coordination** with the media for efficient access to forecasts and warnings and their dissemination
- **Coordination** with humanitarian and relief agencies for both planning and response purposes

During periods of ‘normal’ weather -2

- **Creating communication channels** possessing the following characteristics:
 - Timeliness
 - Reliability
 - Backup
 - Accessibility
 - Feedback
- **Raising public awareness**
- **Participating** in public safety drills together with disaster management agencies.

Severe weather on the way

- Issuing appropriate levels of warnings as follows:
 - **Weather advisory:** Not necessarily life threatening but weather that may cause inconvenience is about to happen
 - e.g. to road transport
 - **Outlook:** hazardous weather may develop
 - **Watch:** Hazardous weather e.g. cyclone is developing
 - **Warning:** severe weather is very likely to happen (or is actually happening)
- lead time of each type of warning may depend on the type of the expected weather phenomenon.

Warnings and Forecasts

- **Warnings:**

- Safety of life and property issued irregularly as the need arises
- Of an urgent nature, given priority

- **Forecasts:**

- Serve socio-economic needs and convenience
- Issued routinely to a schedule

Severe weather on the way

- Plans which have already been agreed upon with emergency agencies are now put into action
- The proper dissemination channels planned for during the period of ‘normal’ weather are now put into action
- NMHSs giving live media interviews to put in perspective the extent of the imminent threat

Severe weather has arrived

- Issuing frequent warning updates to the media
- Issuing information and warnings to emergency agencies for their safety and their operations
- Some NMHSs issue ‘call to action’ while some avoid issuing this information in order to avoid contradicting instructions from occurring.

Dissemination during severe weather

Dissemination channels include:

- **Mass media:**
 - Television (Broadcast, text crawlers, on-screen icons, news breaks)
 - Commercial or public radio (including emergency interruptions)
 - Amateur radio
 - Marine radio
 - Mobile telephones e.t.c.
 - Press*
- **Websites**
- **Sirens and public address systems**
- **Dedicated weather radio**

**All channels above except press are used for dissemination of warnings.*

Severe weather just over

- NMHSs continue to provide forecasts and other information in support of immediate relief operations
- NMHSs carry out post-disaster assessments for improvement of Early Warning systems
- Evaluate effectiveness of NMHS's services to the disaster community and the public
- Apply lessons learned to coordination with disaster community for the future

The 'Single Official Voice' Principle

- WMO, through the Public Weather Services Programme (PWSP) promotes the **Single Official Voice** principle for issuing of warnings
- To ensure that when severe weather happens, the public receive warnings from a single authoritative source
- This helps to avoid giving the public contradicting warnings and instructions
- This principle has been adopted by most NMHSs

The Severe Weather Information Service (SWIC)

- This is a WMO Website based on advisories issued by Regional Specialized Meteorological Centres (RSMCs) and Tropical Cyclone Warning Centres (TCWCs), and official warnings issued by NMHSs
- Its purpose is to avail the media with official and authoritative information for broadcasting to the public
- Carries warnings on Tropical Cyclones, Heavy Rain/Snow, Thunderstorms, official Observations, Cloudiness & Rain

<http://severe.worldweather.wmo.int>



World Meteorological Organization

Weather • Climate • Water

Official Observations

- * Cloudiness & Rain

Official Forecasts

Select WMO Region

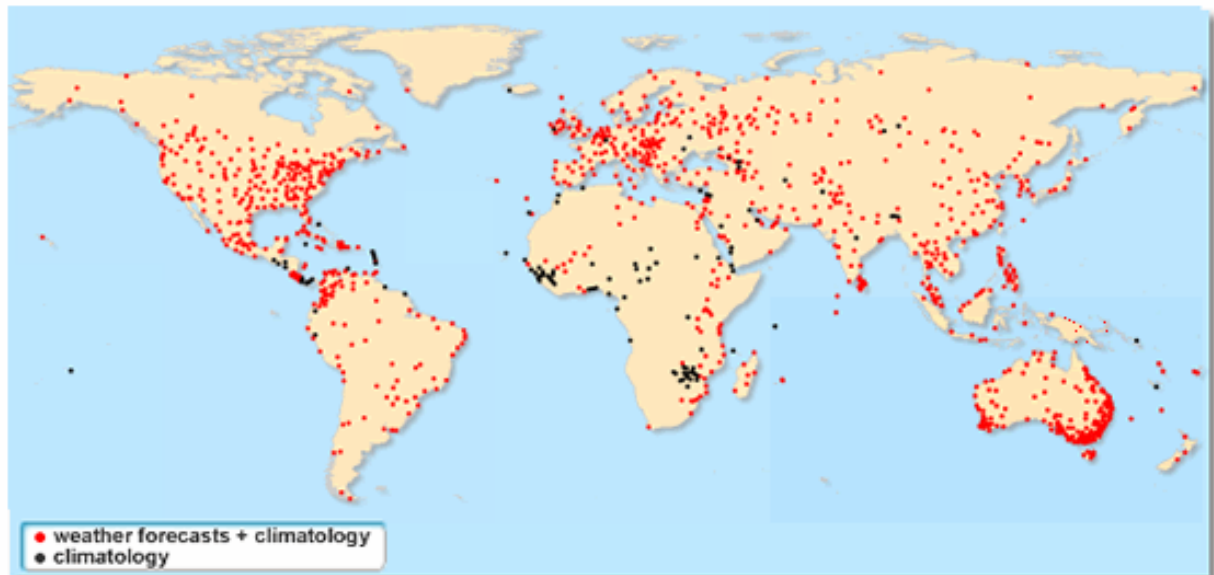
- * **Africa**
- * **Asia**
- * **Europe**
- * **N. & Central America**
- * **S. America**
- * **S.W. Pacific**

What's New

- * France launched French version
- * Spain launched Spanish version
- * New domain name for WWIS

World Weather Information Service

Official Observations. Official Forecasts.



▶ ENGLISH

▶ عربي

▶ 中文

▶ PORTUGUÉS

▶ ESPAÑOL

▶ FRANÇAIS

This global web site presents OFFICIAL weather observations, weather forecasts and climatological information for selected cities supplied by National Meteorological & Hydrological Services (NMHSs) worldwide. The NMHSs make official weather observations in their respective countries. Links to their official weather service web sites and tourism board/organization are also provided whenever available. Weather icons are shown alongside worded forecasts in this version to facilitate visual inspection.

The media are welcome to make information presented in this web site available to the public. When doing so, credit to the respective NMHSs should be given.

By 1 Mar 2008, 118 Members supply official weather forecasts for 1263 cities. 1265 cities from 161 WMO Members also have their climatological data presented in this web site. Suggestions to enrich the contents of this web site are welcome.



Thank you