World Meteorological Organization

Weather • Climate • Water

# DRR-related mandates and relevant activities and projects of RA I (Africa)

2015 Meeting of the Disaster Risk Reduction Focal Points of WMO Regional Associations, Technical Commissions and Programmes (DRR FP RA-TC-TP)

3-5 November 2015, Geneva

***Mr Richard PHILIPPE***

***Direction de la Météorologie Nationale du Cameroun***

# PLAN OF PRESENTATION

- INTRODUCTION
- AFRICA MANDATES AND PRIORITIES IN DRR
- CLIMATIC RISK ASSESSMENT ,THEIR IMPACT *AND REDUCTION THROUGH PREVENTION.*
- PRIORITY PROJECTS & ACTIVITIES RELATED TO DRR IN AFRICA
- GUIDELINES, MANUALS, AND STANDARDS RELATED TO DRR IN AFRICA
- CHALLENGES FACE TO ENSURE HOLISTIC DRR OUTCOMES OF ITS PROJECTS AND ACTIVITIES

# INTRODUCTION

- The number of disasters reported in Africa has increased significantly since the 1970s. Over the last four decades, Sub-Saharan Africa has experienced more than one thousand disasters;
- Drought and floods together account for 80 percent of loss of life and 70 percent of economic losses linked to natural hazards in Sub- Saharan Africa (African Union et al., 2008);
- Disasters are a major threat to development, putting at risk many recent development gains. Africa's disaster profile is characterized by extreme hydro-meteorological events, which will likely increase in frequency and magnitude due to climate change;
- These hasards are predominately hydro-meteorological and climatological, and comprise cyclones and storms, floods, landslides, extreme temperatures, wild fires and droughts. Geological disasters, such as earthquakes and volcanoes, occur to a lesser extent;
- Sub-Saharan Africa's disaster profile is closely linked to the vulnerability of its population and economy and their often-low capacities to cope with natural hazards.

# Vulnerability of Africa to Disaster

- The vulnerability of the African continent to disasters is linked to its poverty and structural issues and is caused and expressed by:
  a) Limited fiscal space and options to access financing to invest in risk reduction and recovery
  b) An economic foundation based on rain-fed agriculture
  c) Weak infrastructure to manage resources and recover from disasters
  d) Weak governance structures and institutional capacities
  e) A limited knowledge base to forecast and respond to natural disasters

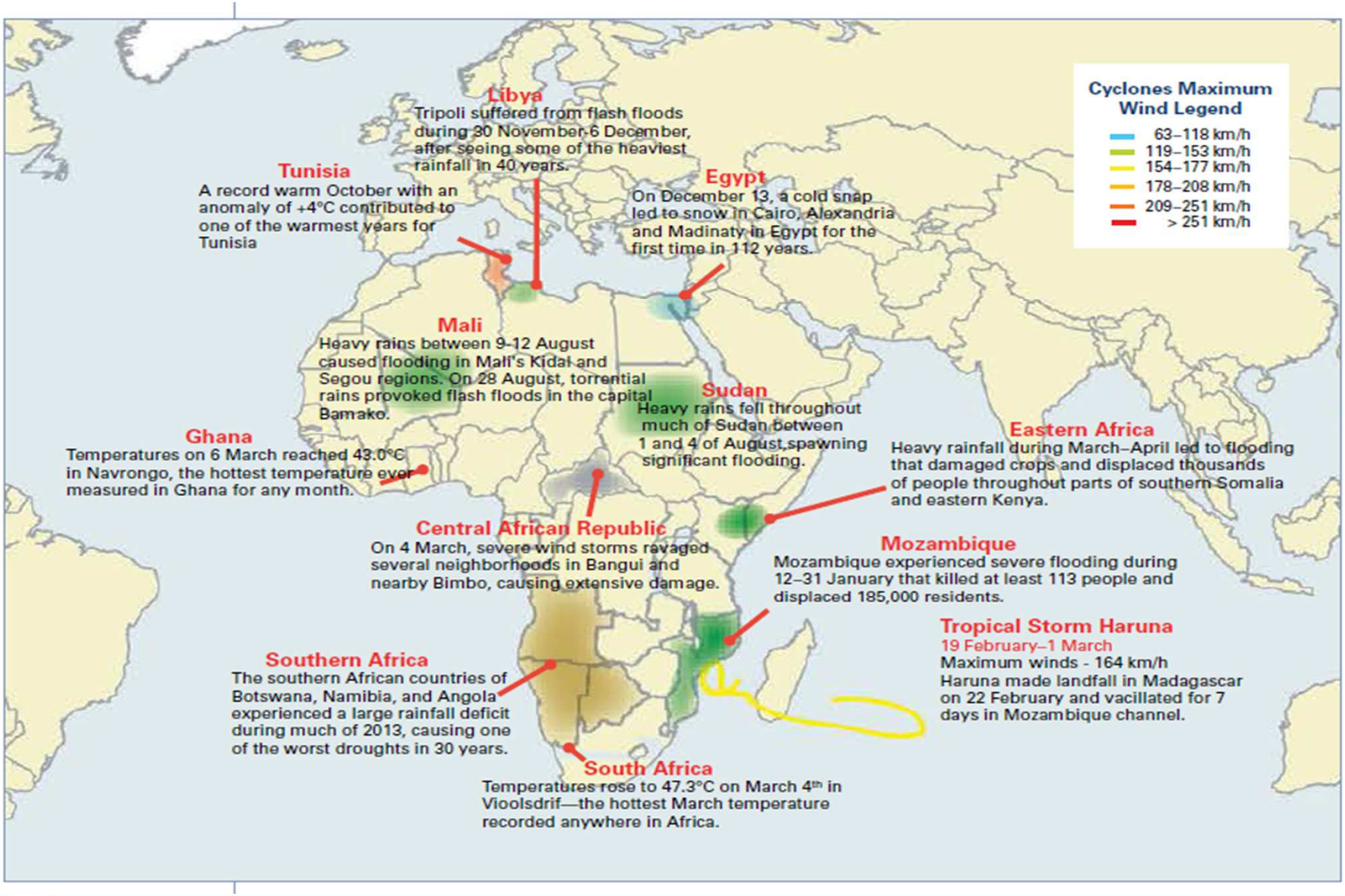
# Mandates and priorities in DRR in Africa

- The UN/ISDR Secretariat established in October 2002 an Africa regional outreach office in Nairobi Kenya; to advance the disaster risk reduction process in Africa in partnership with major stakeholders in the region.
- This Secretariat *Provides Support to National (governments), sub-regional (e.g, ECOWAS, SADC, ECCAS, IGAD), regional (AU & NEPAD) and Thematic (ICPAC, UNDP-DDC) stakeholders in four areas:*
  - *Policy and strategy development;*
  - *Advocacy and public awareness;*
  - *Information sharing knowledge exchange;*
  - *Networking and partnership building*

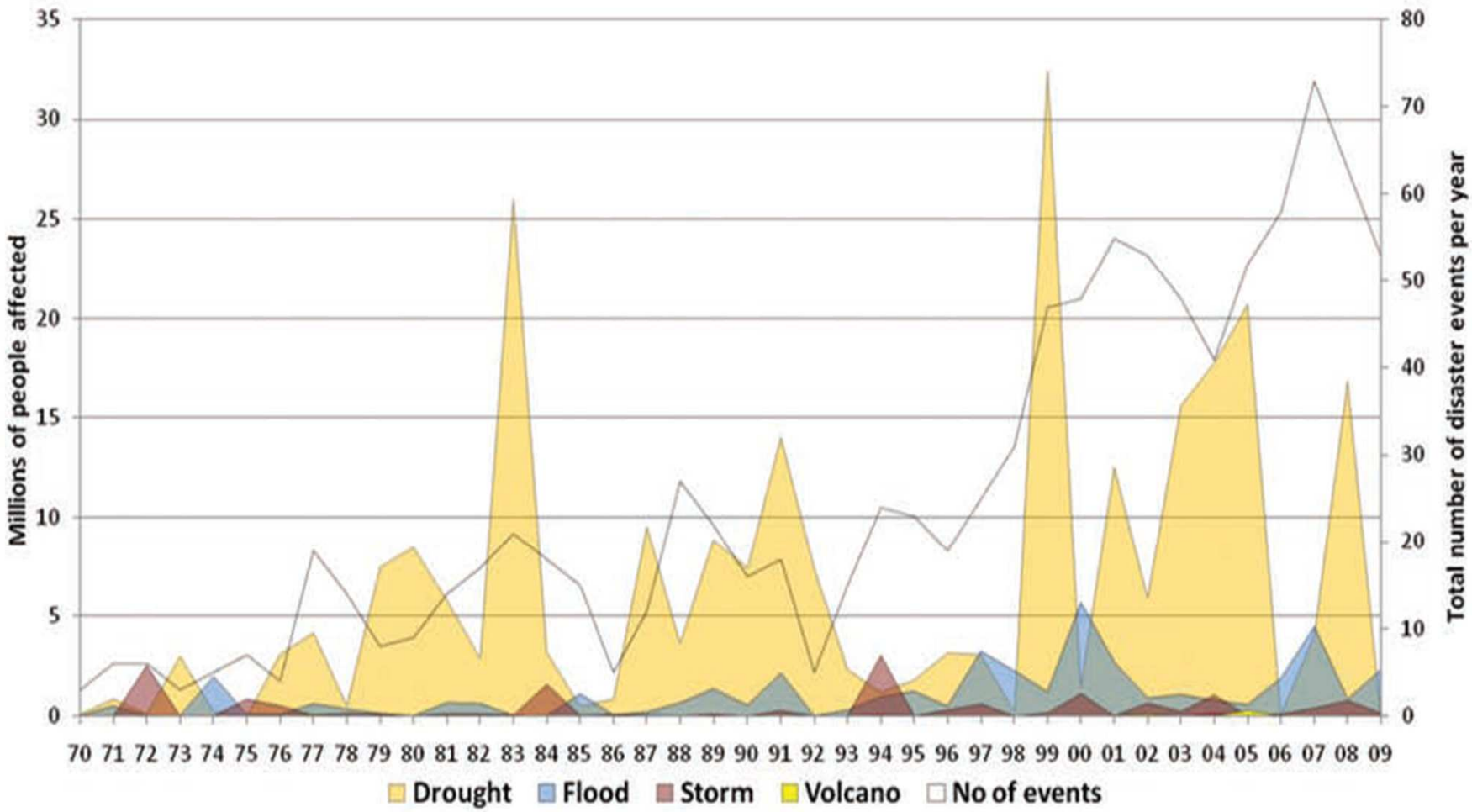
# Hazards distribution in Africa

- Almost all countries  in Africa are exposed to one or multiple natural hazards .
- Floods usually affect large river basins such as the Congo, Niger, Nile, and Zambezi basins, but flash floods can impact any region after extreme rainfall.
- Droughts occur predominately in semi-arid and subhumid areas of the Sahelian countries, the Horn of Africa, and Southern Africa.
- The risk of landslide is high in countries with hilly terrain, high levels of rainfall, soil erosion and deforestation due to unsustainable land management.
- Cyclones and tropical storms affect countries on the southeastern coast of the Indian.. Climate change will likely exacerbate existing climate variability and increase the frequency and magnitude of extreme events (IPCC, 2007c).
- Countries along the Rift Valley, stretching from Eritrea to Mozambique, are particularly vulnerable to earthquakes. Along the Rift Valley and on Indian Ocean islands, several volcanoes are known to be active, including Mount Nyiragongo in the Democratic Republic of Congo, and Mount Karthala on the Comoros.
- Sea level rise is increasingly a concern for many countries in the coastal regions, particularly those with low-lying urban centers, such as the densely populated Niger delta and low-lying areas along the coasts of West and East Africa and Madagascar.

# Selected extreme events in Africa in 2013



# Number of reported disasters, type, and number of people affected in Africa



# MAJOR CLIMATIC RISKS IN AFRICA

# MAJOR CLIMATIC RISKS IN AFRICA

# Priority activities and project related to DRR

The national governments, their national DRM organizations, and national platforms are key partners for DRR implementation.  Africa DRM Team launched risk and vulnerability assessments as its first set of activities. They initially covered economic impacts, flooding in urban areas, water resources management, drought and food security, marine environments, as well as capacity building initiatives. The following examples provide a snapshot of the conducted risk and vulnerability assessments.

1. A pilot study assessed flood, coastal surge and sea level rise hazards in greater Dakar, Senegal. The study identified high population hotspots in high-risk areas and pinpointed a number of critical institutional aspects related to disaster risk management in a regional context.
2. Severe droughts and related food insecurity have led to major humanitarian crises in Ethiopia. Through a weather-based risk management framework (Livelihood, Early Assessment and Protection, LEAP), costs for interventions can be determined at a very early stage and livelihoods can be protected through contingency operations.
3. The World Bank supported the development of a macro-economic model that assessed the economic impacts of frequent droughts and floods in Malawi. The model assessed average annual losses and impacts on various economic sectors and poverty levels. The results indicated that average annual losses to GDP through droughts and floods could total up to 1.7 percent.

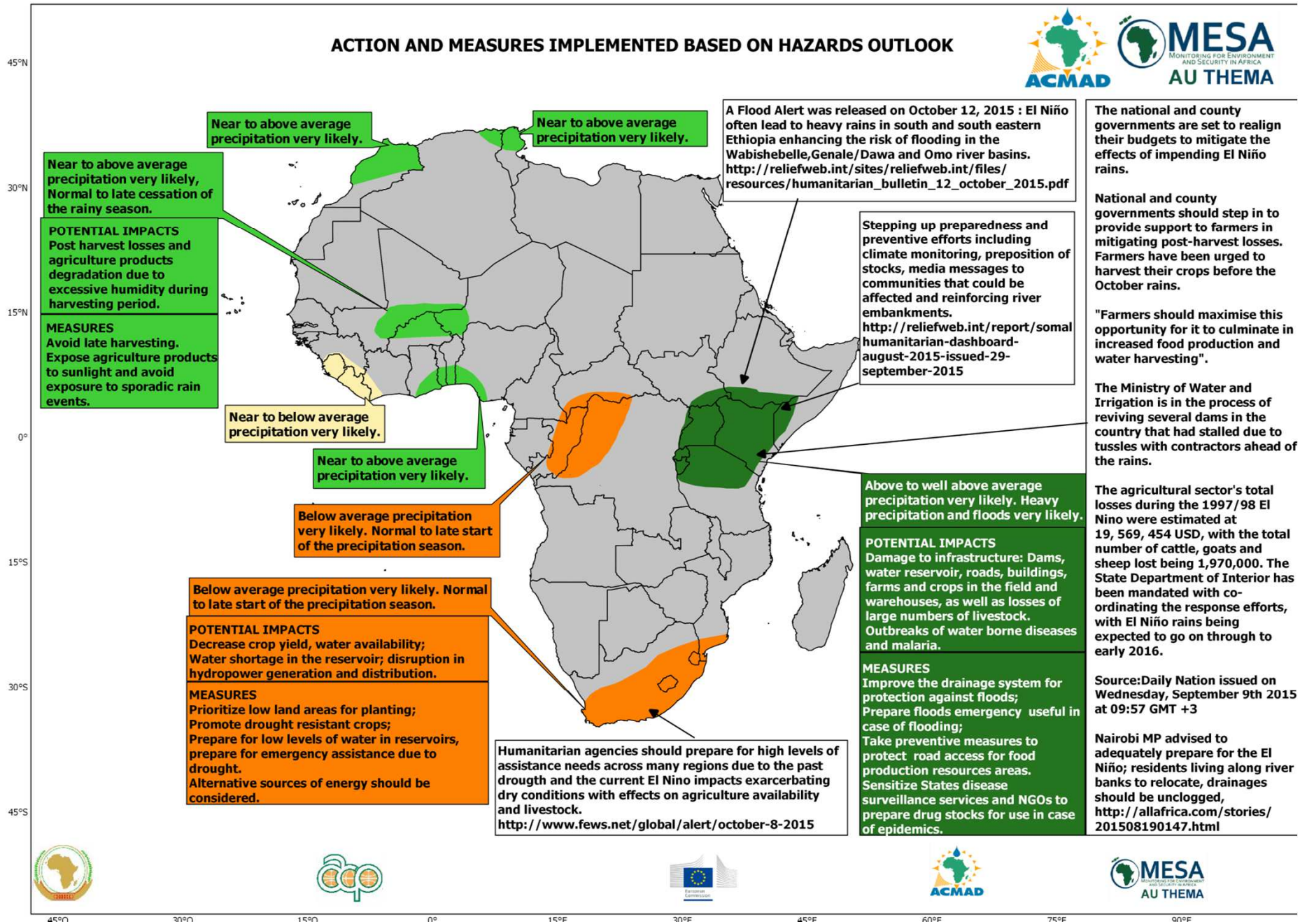
# Priority activities and projet related to DRR

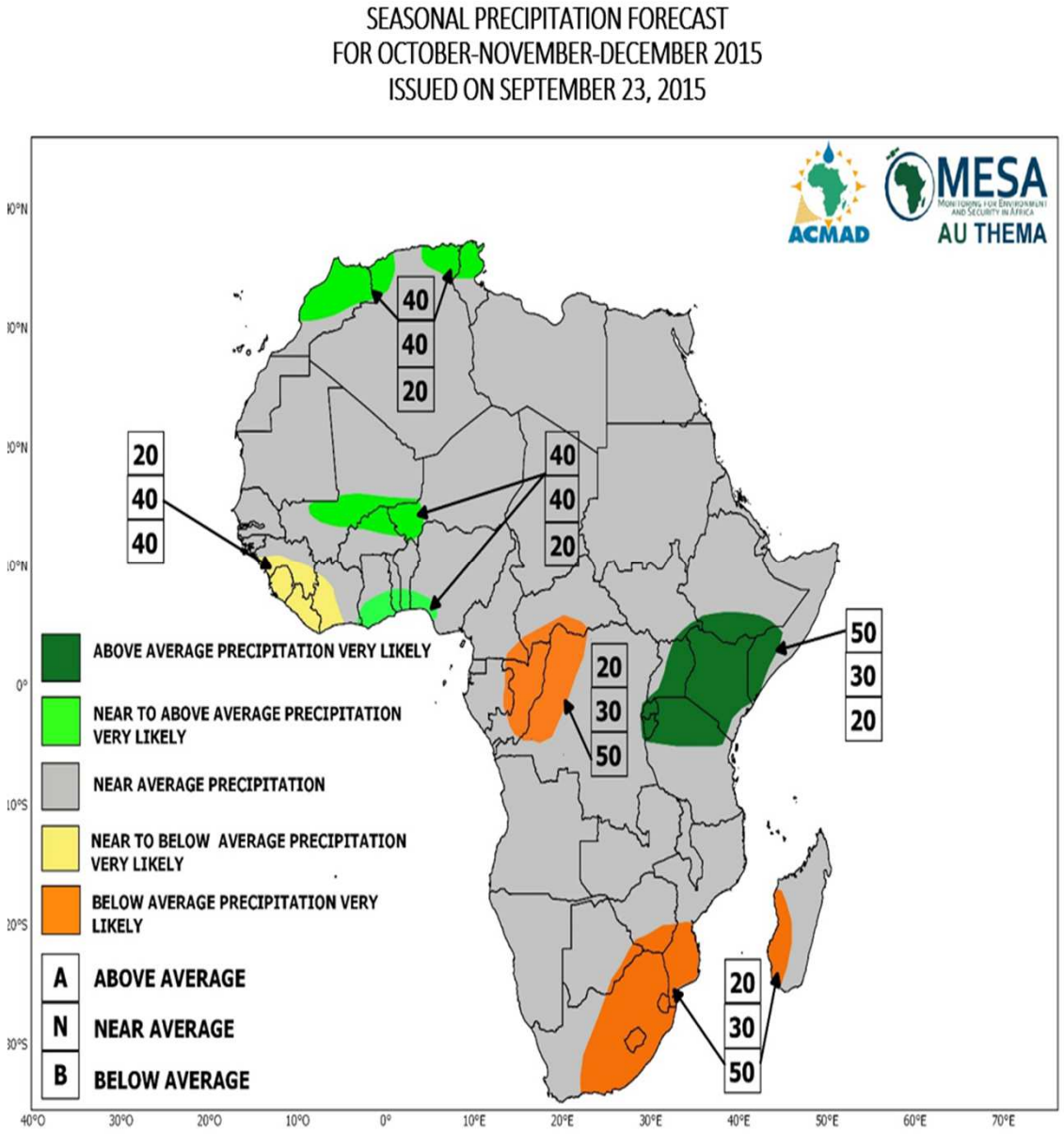
- **YAOUNDE, 23 July 2015 –** Representatives of 37 African governments today agreed to work together to achieve substantial reductions in disaster losses over the next 15 years, including reductions in mortality, the numbers of people affected and the economic damage caused by natural and human-induced hazards. The 4th High Level Meeting on Disaster Risk Reduction issued the Yaoundé Declaration requesting the Africa Union to lead on aligning Africa's strategies with the targets outlined in the Sendai Framework for Disaster Risk Reduction, endorsed last month by the UN General Assembly.
- **KAMPALA, 26 June 2015 –** Like much of the continent, East Africa is frequently exposed to natural threats such as floods, droughts and landslides, as well as epidemics and man-made hazards, of all which affect livelihoods and development across the region. The East African Disaster Risk Reduction Parliamentarian Platform was established at that meeting organised by the Government of Uganda with the support of the World Bank and in collaboration with the Uganda Parliamentarian Forum for Disaster Risk Reduction.
- **NAIROBI, 20 August 2015 –** The Government of Kenya and its partners are engaging to create an enabling environment for implementation of the Sendai Framework for Disaster Risk Reduction, a 15-year global plan to curb deaths and economic losses caused by natural and man-made hazards. Kenya's Ministry of Interior and Coordination of National Government hosted a meeting to sensitize top civil servants from across the country's administration about the importance of disaster risk management policy at the highest level.
- **HARARE, 29 July 2015 –** Zimbabwe is working to build its communities' capacity to understand and reduce disaster risk, in a country often confronted by floods or droughts, but poverty and unemployment can make action a challenge.

# Priority projects and activity related to DRR

- MESA (Monitoring for Environment and Security in africa) projet consolidates and widens the operational environmental services developed in the AMESD (African Monitoring of the Environment for Sustainable Development) programme, and is a contribution to the GMES-Africa initiative of the EU-Africa Joint Strategy.
- The purpose of the MESA programme is to increase the capacity in information management, decision making and planning of African continental, regional and national institutions mandated for environment, climate and food security. This is being achieved by enhancing access to reliable, timely and accurate land, marine and climate data and information for Africa.
- MESA is exploiting Earth Observation (EO) data and technologies to promote socio-economic progress towards achieving the Millennium Development Goals.
- Beneficiary Countries of MESA program are 48 ACP countries of five African Regions, namely CEMAC, ECOWAS, IGAD, IOC and SADC. The contracting authority of MESA is the African Union Commission. The project implementation is supported by a Consortium led by Hulla & Co Human Dynamics KG.

# EXPECTED HAZARDS, IMPACTS AND RESPONSE MEASURES FOR OCTOBER 2015 to JANUARY 2016






Hydro-meteorological services play an important role in disaster risk reduction and managing climate change adaptation. Without weather observation networks, early warning for hydro-meteorological events such as floods and cyclones would be impossible. Long-time series and accurate data are crucial for planning and design of interventions such as dikes and inundation zones. Assessments of the inter-annual and intra-annual variability of climate are important for forward-looking interventions and assessments of climate change.

# Guidelines & standards related to DRR

- The AU's *New Partnership for Africa's Development (NEPAD), an* economic development program adopted in 2001,recognizes that natural and human induced disasters put development at large at risk.
- The AU has recognized that institutional frameworks, risk identification, knowledge management, governance, and emergency response are critical to the DRR agenda (African Union, 2004). The AU established an overarching *Africa Regional Strategy for Disaster Risk Reduction to address these issues. The objectives of* the strategy are guided towards facilitating dialogues and fostering political commitment to DRR. The strategy has the following core objectives for DRR:

  1. Increase political commitment to DRR
  2. Improve identification and assessment of disaster risks
  3. Enhance knowledge management
  4. Increase public awareness
  5. Improve governance of DRR institutions
  6. Integrate DRR into emergency response management.

  The strategy recognizes that interventions can best be conducted at national level. It therefore predominantly facilitates initiatives at the country and regional level and provides strategic options for countries to select based on their national context.

# Challenges when ensuring holistic DRR outcomes

1. Lack of understanding and capacity to reduce disaster risks, especially at national level.
2. Governments have not allocated adequate human and financial resources for reducing existing disaster risks in order to protect development gains.
3. Development sectors have not yet made disaster risk assessment as part of their development plans and programmes at all levels.
4. Mainstreaming Gender concerns and needs in DRR still remains unsatisfactory.
5. Disaster risk reduction has not been fully recognized as a tool for climate change adaptation, especially at national level.
6. Lack of adequate communication policy in case of disaster occurrence.
7. Lack of a good and applicable contengency plan at both national and regional level.

# CONCLUSION

- ✓ Disaster risk reduction activities and projects in Africa are yielding some fruits though efforts still need to be doubled for positive results to be achieved. This requires enormous resources on the part of Governments, stakeholders and the civil societies.
- ✓ The climatic risks are on an increase in the continent partly due to climate change and this is likely to increase for many reasons some of which are cited below.
- ✓ Many NHMS in Africa have the potential to provide information and services to decision makers, users, and the general public, communication with these targeted groups is insufficient. Some products NHMS provide are not easily understood and acted upon
- ✓ Despite the fact that scientific progress has been realised in the understanding and modelling of meteorological phenomena, in terms of improved forecast, Africa still lag behind in the trend of this evolution.

*Source:Report on the status of Disaster Risk Reduction in Sub-Saharan Africa November 2010*