

MEETING OF THE SOUTHERN AFRICA REGION FLASH FLOOD GUIDANCE SYSTEM (SARFFGS)



**Operational FFG Forecasting and Early
Warning Capabilities in Malawi
Mbabane, Swaziland
23-25th January, 2015.**

Outline

2

- Introduction
- DRM Institutional Structure
- Disasters and development in Malawi
- Prioritising SARFFG and DRM in Malawi
- Challenges and Potentials

Introduction

3

- Malawi is prone to different hazards and most common are weather related
- Frequency & magnitude of disasters has increased since the early 1990s.
- The increased trend is attributed to **climate change, population growth and urbanization.**
- Disasters have a direct negative impact on poverty and food security in the country.
- These disasters undermine Government's efforts in achieving the SDGs through the MGDS

Introduction

4

- Common hazards include:
 - ✓ **Floods;**
 - ✓ Heavy storms;
 - ✓ Flash floods
 - ✓ **Drought;**
 - ✓ Landslides;
 - ✓ Pest infestations;
 - ✓ **Disease epidemics** and
 - ✓ Earthquakes.



Flash flood affecting a local market



Drought leading to crop failure



Fire gutting a free market

EW information flow

5

- The DCCMS – under the Ministry of Natural Resources, Energy and Mining– is responsible for
- establishing and maintaining observation network
- data collection, analysis and production of weather and climate information and products (including early warnings) to support social and economic development
- DWR developed Flood monitoring tool and Operating decision tool which compliments SARFFG

EW information flow.....

6

- Weather and climate information are provided to user, including the Department of Water Resources(DWR) and DoDMA
- Flash floods information and relevant forecasts and severe weather are given to users through DoDMA established communication channels
- Rainfall data over 30mm is given to DWR
- River gauges are done by DWR who also issue flood warning

Flood Information to DoDMA

7

- A Flood warning message is also sent from the DCCMS to both the Technical Committee of the Department of Disaster Management Affairs (DoDMA TC)
- To DoDMA officers at district level in the areas of concern
- From District offices the message is then sent to local media (i.e. primarily radio stations) and the chairperson of the Civil Protection Committees (CPCs) in flood-prone communities.
- At Community level early warning messages are then broadcasted via radio, by the CPC members using whistles, drums and megaphones.

Current Status of Operational FFG in Malawi

8

- Until Dec 2017, DCCMS was not able to issue flash flood warning in Malawi because of undefined mandates
- Operationally, DCCMS was only providing advisories regarding Flash Flood
- Now plans are underway to develop Standard Operating procedures (SOPs) that would include DCCMS, DWR and DoDMA
- So far in-country training on flash flood guidance was conducted for users facilitated by HRC
- And for forecasters using country trained forecasters

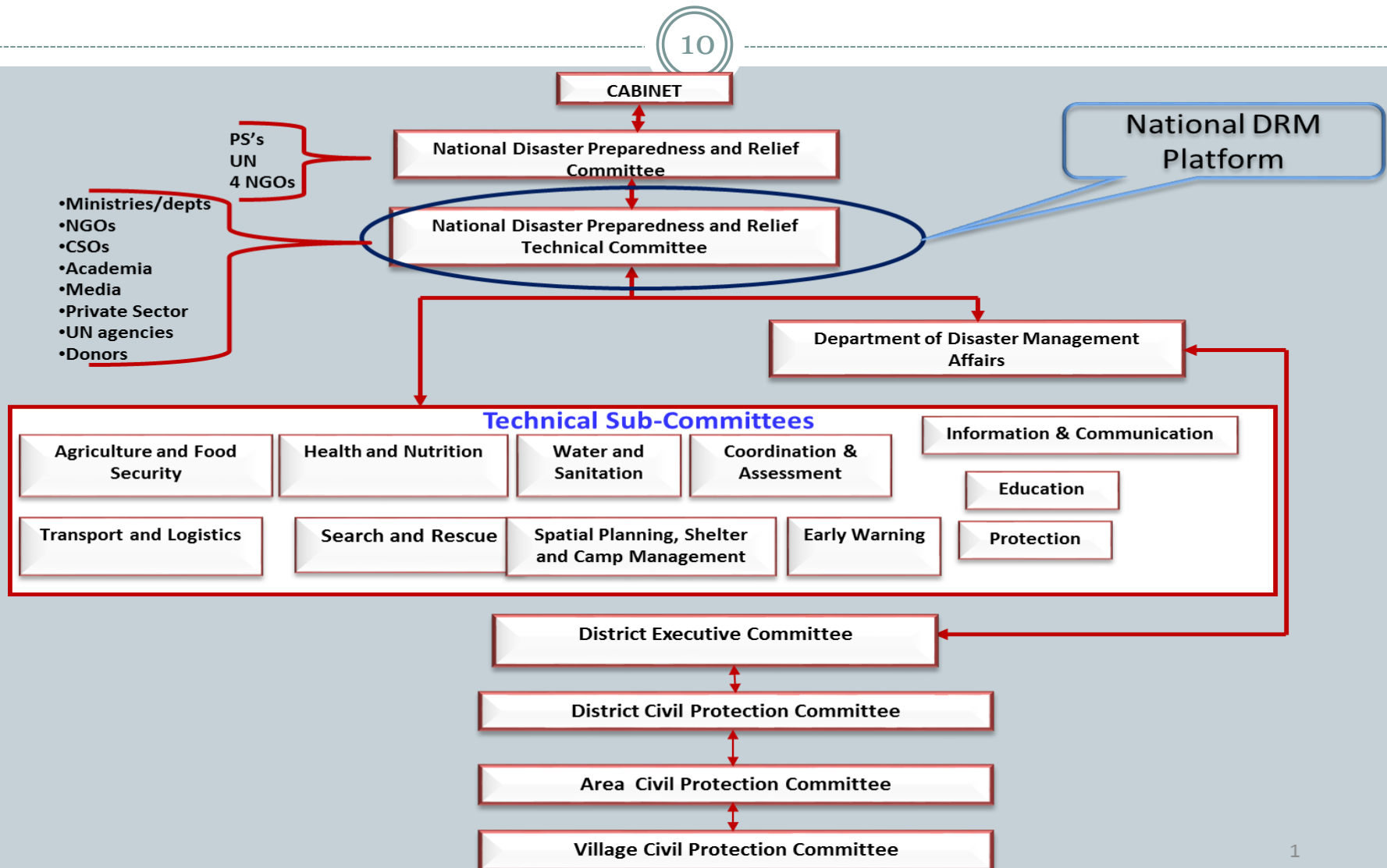
Flash flood Information flow to DoDMA

9

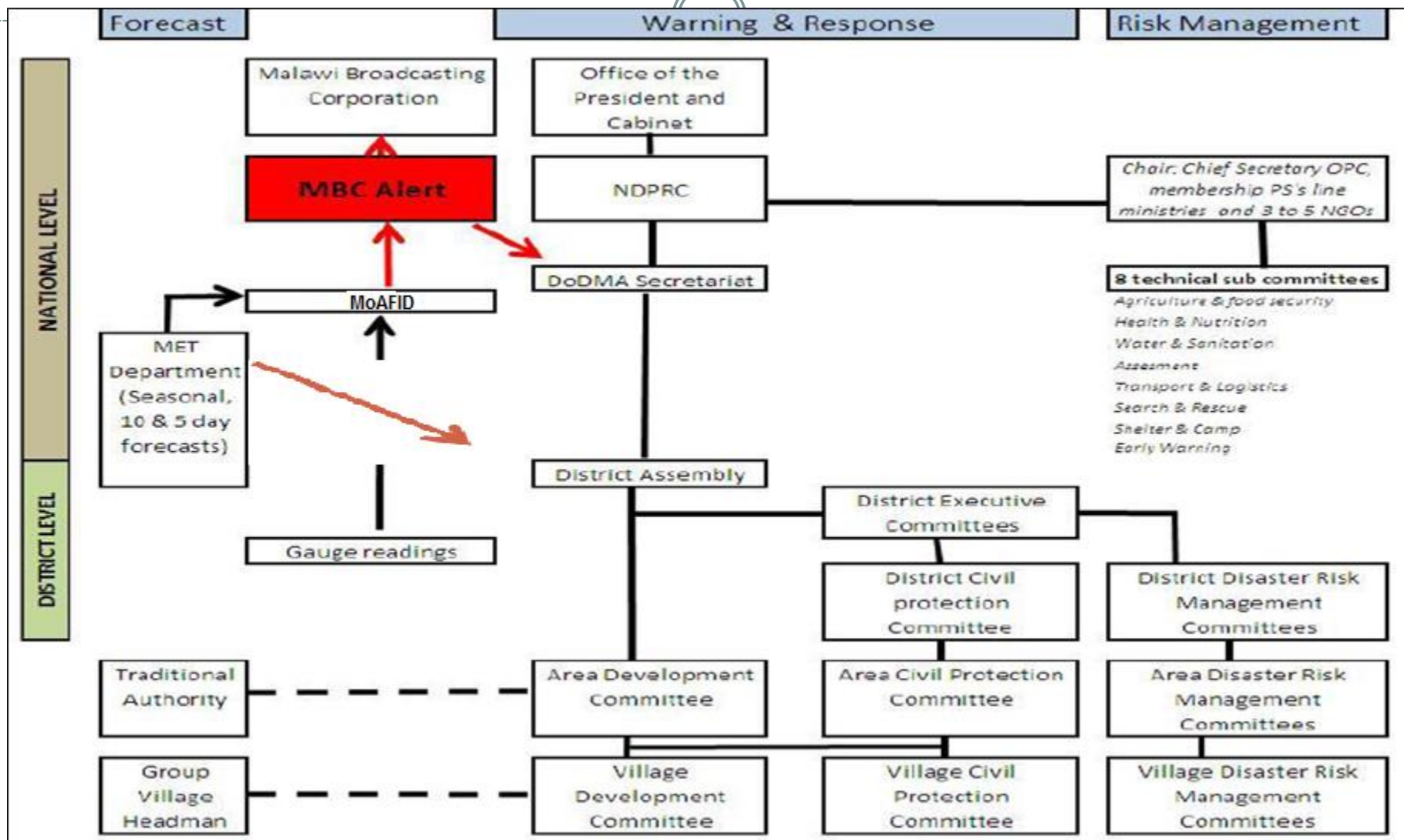
- DCCMS inform the public through different medias such as radio, television and newspapers, and inform the Department of Disaster Management Affairs (DoDMA).
- A warning message is then sent to Technical Committee of the Department of Disaster Management Affairs (DoDMA TC) by DoDMA
- DCCMS send the warning direct to DoDMA and district commissioner in the respective district(s)
- From District offices the message is sent to local media (i.e. primarily radio stations) and the chairperson of the Civil Protection Committees (CPCs) in flood-prone communities.
- Early warning messages are then broadcasted via radio and by the CPC members using whistles and megaphones.

Early Warning System Structure in Malawi

National DRM Institutional Structure



Summary of information flow from DCCMS to users

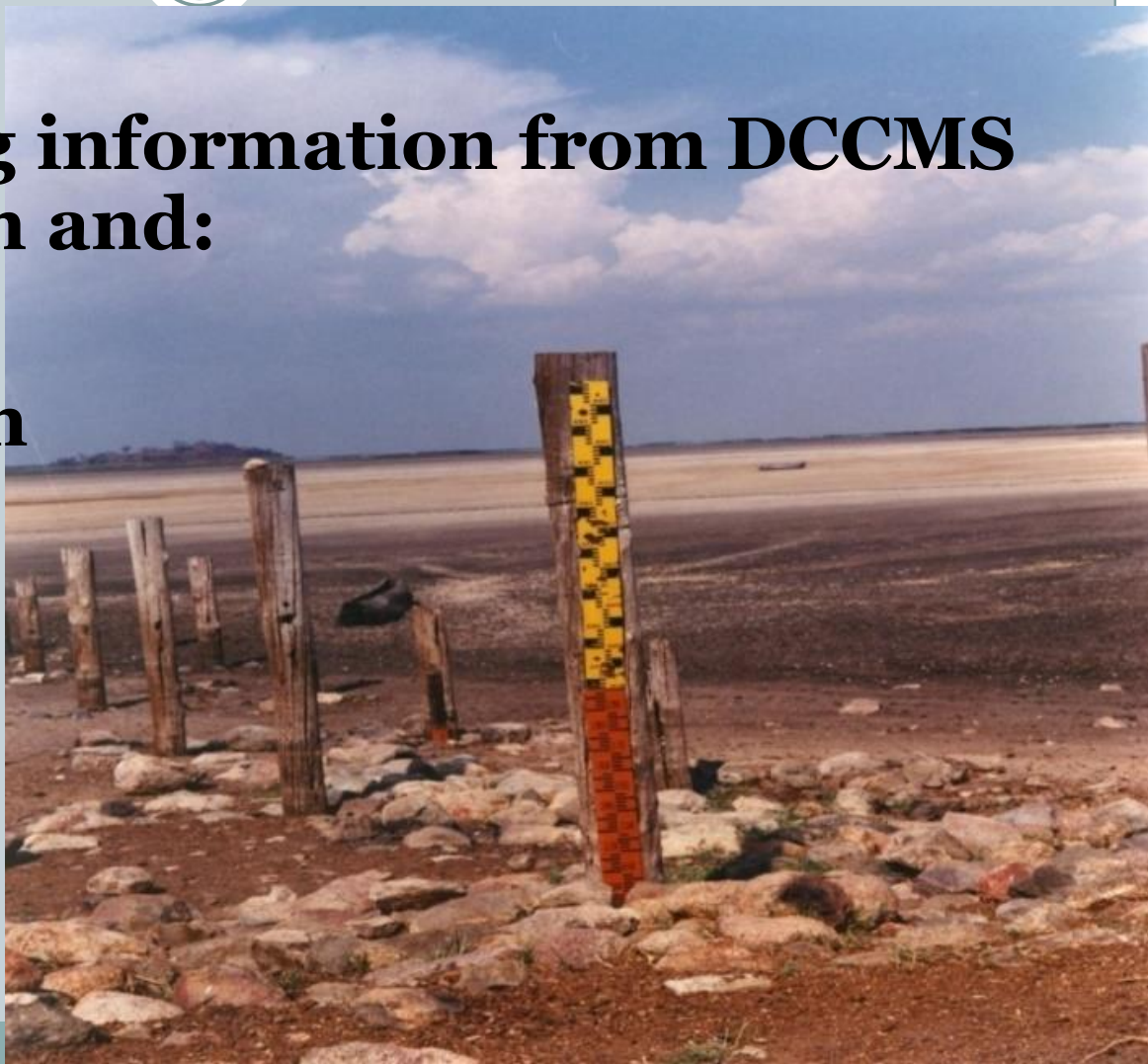


Use of the information



The early warning information from DCCMS is used to inform and:

- I. Risk Reduction**
- II. Preparedness**
- III. Response and**
- IV. Recovery**



Risk Reduction



- Assess the relevance, appropriateness and effectiveness of disaster prevention and mitigation measures being undertaken by government ministries/departments, CSOs and communities
- Facilitate the review of district multi-hazard contingency and disaster risk management plans
- Initiate community action with regards to the foreseen danger

Preparedness



- Facilitate the periodical review of disaster and hazard assessment and communication tools
- Facilitate capacity building exercises for stakeholders at the national, district and community level on DRM and risk assessments
- Mobilize financial and material resources in preparation for disasters
- Facilitate regular coordination meetings
- Ensure that district level disaster risk management structures have the capacity to respond effectively and efficiently to the disaster

Response



- Coordinate disaster assessments, ensuring that all sectors are represented during an assessment mission
- Consolidate disaster assessment reports from different clusters and sub committees and present to DEC/ DCPC
- Conduct an assessment of disaster response interventions being carried out by different clusters/stakeholders

Recovery



- Conduct a post-disaster needs assessment to inform the recovery process
- coordinate implementation of recovery activities
- Assist in the production of the consolidated post disaster report by the district and/or city councils

Information from DCCMS serves the following functions:

17

- Reduction of loss of life and property due to early warnings of natural hazards helps to minimize recovery costs hence resources can be redirected to other areas of development
- Information provided to the Agricultural and Natural Resources sectors helps the sectors to prepare in advance as well as improve productivity
- The public is made aware of impending hazards and they are advised to take appropriate action to ascertain their well being
- Provide data and information for planning and implementation of various programmes

Challenges and potentials

18

- Illiteracy levels as evidenced by targeted communities not utilizing the forecasted information
- The data/ information format requires technical interpretation, making it difficult for the targeted audience to capture the meaning
- Motivation of political will to support project which if lacked could pose potential to limit sustainability
- Poor coordination among government agencies and may cause delay in implementation of DRR issues

Noted SARFFG Benefits

19

- **Environmental Benefits** - Mitigates damage to ecosystems (e.g. forests, high biodiversity value areas).
- **Socioeconomic Benefits**
 - - Increases lead-time and preparedness.
 - - Promotes response measures to mitigate flash flood impacts, and issue warning messages.
- Making DCCMS visible to users and political support

THANK YOU!!

Zikomo Kwambiri!!