SEVERE WEATHER FORECASTING DEMONSTRATION PROJECT

SADC FORECASTERS TRAINING SESSION

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PRESENTATION OUTLINE

- **1. LOCALISED FLOODING IN EKURHULENI**
- 2. WHO AND WHAT DOES IT AFFECT?
- **3. BASIC STEPS TO PREPARE FOR A STORM**
- 4. WHAT HAPPENED WHEN THE FLOODS OCCURRED?
- 5. DISASTER MANAGEMENT ACTIONS WITH TIME LINES
- 6. FUNCTIONING OF THE JOINT OPERATIONS CENTRE
- 7. ROLE OF WEATHER FORECASTERS
- 8. CONCERNS
- 9. WHAT DOES DISASTER MANAGEMENT OFFICIALS EXPECT FROM FORECASTERS?
- **10. CONCLUSION**

Weather is a Great Metaphor for Life Sometimes it's good, Sometimes it's bad And there is nothing much you can do about But carry an umbrella

LOCALISED FLOODING IN EKURHULENI

- More often between November and March annual
- Summer rainfall region

- Localised flooding
- Depressed areas
- Low lying areas



WHO AND WHAT DOES IT AFFECT?

- People especially in informal settlements
- Poor and marginalized people
- Affects their homes and possessions
 - Blankets
 - Clothing
 - Food stuffs
- People living in luxury homes in high risk areas along rivers and streams



BASIC STEPS TO PREPARE FOR A STORM

- Contact the local planning department to find out if your home is located in a flash-flood-prone area.
- Learn about your community's emergency plans, warning signals, evacuation routes, and emergency shelters.
- Plan and practice a flood evacuation route with your family.
- Post emergency phone numbers at every phone ensure that each cell phone has an emergency number.
- Inform local authorities about any special needs, i.e., elderly or bedridden people, or anyone with a disability.



"Tut, Tut, looks like rain" **BASIC STEPS TO PREPARE FOR A STORM**

- Identify potential home hazards and know how to secure or protect them before the flood strikes.
 Be prepared to turn off electrical power when there is standing water, fallen power lines, or before you evacuate.
- Secure structurally unstable building materials.
- Buy a fire extinguisher and make sure your family knows where it is and how to use it.
- For drains, toilets, and other sewer connections, install backflow valves or plugs to prevent floodwaters from entering.



WHAT HAPPENED WHEN THE FLOODS OCCURRED?

- Heavy rains
- Hail
 - Damaged homes
 - Damaged vehicles
- Road flooding
- Home flooding
- Storm water drains
 - Blockages
 - Not large enough for water volume



WHAT HAPPENED WHEN THE FLOODS OCCURRED?

- Early warning by the SAWS
- Not accurate
- Weather warning over a large area
- Cannot plan for flooding in a specific location
- Waiting for additional information from SAWS
- Sent out pre-warnings via media, emails and sms
- Loud hailing systems activated



WHAT HAPPENED WHEN THE FLOODS OCCURRED?

- Obtained real time data from service personnel on the ground and people living in areas experiencing a flooding event
- Responded to areas reporting flooding for rescue purposes
- Performed disaster assessments to determine extent of flood, who is affected, what is affected, if any other hazardous situations have been created by the floods, i.e. dams threatening to overflow, flood waters affecting hazardous stores;

DISASTER MANAGEMENT ACTIONS WITH TIME LINES CONTI NUOU S CONTI NUOU CONTINUED S WARNINGS CONTI THROUGHOU CONTI NUOU ADDITIONAL T EVENT NUOU **2 HRS** S WARNINGS 24 TO S ťΟ 2 HR SMS RESPONSE **MESSAGES TO** PERSONNEL COUNCILLORS ADDITIONAL AND KEY WARNING BY PERSONNEL SAWS **MEDIA** RELEASE BY ÉMM EARLY INTERNET, WARNING INTRANET, BY SAWS EMAIL Ekurhuleni

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FUNCTIONING OF THE JOINT OPERATIONS CENTRE

- JOC is activated based on size of expected flood event
- OR, if event becomes a large scale event
- Key personnel activated
- Assemble at Disaster Management Centre
- Coordination of disaster response according to disaster response plan
- Operations on 24 / 7 basis response decreas

ROLE OF WEATHER FORECASTERS

- Provide accurate information where possible:
 - Where
 - When
 - Expected intensity
 - Hail (size)
 - Strong winds (tornado alerts)
- Continued updates



CONCERNS

- Weather information that is sent 5 minutes before the weather event occurs.
 - Is this valuable?
 - To whom?
 - What actions do you think a Disaster Management official needs to take?
 - Is the action you suggest practical?



WHAT DOES DISASTER MANAGEMENT OFFICIALS EXPECT FROM FORECASTERS?

• Products

- Local Automatic Weather Stations

- Information availability
 - Up to date information
 - Intensity of rainfall
 - Hail
 - Storm winds
 - Expected location



CONCLUSION

"When all is said and done, the weather and love are the two elements about which one can never be sure." Alice Hoffman, *Here on Earth*

THANK YOU



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