

Community-based Flood Early Warning System

# A Case of District Kech

National Disaster Management Authority (NDMA)

## Background

- In 2007 The Yemyin, packing winds of up to 80 miles per hour (130 kmph) roared over the Arabian Sea and hit the coast of the South-Western province of Balochistan,
- The torrential rains and flash floods have played havoc in these areas by damaging lives, destroying infrastructure and property in a great numbers.
- Monsoon that starts from July to September cause cut-offs and isolate people from the district center.
- Environmental degradation has increased the risk of hazards becoming disasters.
- There is a clear indication as disaster events increasing in number, frequency and intensity.
- In this context, Strengthening Participatory Organization (SPO) in collaboration with United Nation Development Program (UNDP) initiated a program; to set-up Community-based Flood Early Warning System

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## Project Area

- Six selected UCs which the most vulnerable in the district.
- In year 2007 badly affected by flood. these UCs.
- These UCs were still vulnerable due to lack of rehabilitation and mitigation strategies.
- The union councils where the project implemented include Koshkalat, Gokdan, Kunchiti, Zarrain Bug, Kalatuk and Ginna.



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## Project Objectives

- **Community Based Flood Early warning system established and functional**
- **Developed and enhanced the role of Kech Disaster and Response Forum (KDRF) in effective coordination mechanism as per underlined objectives**
- **Capacity of district government, volunteers, media person, teachers and students were built through Training on disaster mitigation**

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## What is Early Warning System

EWS;

provides an effective solution by giving people sufficient time to evacuate and protect their property from an impending hazard

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## Why pursue a CBFEWS?

- **It empowers local government system and communities to protect themselves against floods**
- **The community and LGS are in the best position to undertake preparedness measures against floods.**
- **It promotes a sense of ownership on the part of the local government and communities , hence it is easier to sustain.**

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## Identification of Volunteers

- Identification of volunteers in six disaster prone UCs
- Conduct orientation workshop
- Selection of 20 volunteers group in 6 disaster prone UCs
- Conduct a three-day residential (for some far falling UCs) and non-residential (near UCs) preparedness, first aid and rescue training
- Volunteers would support coordinator in developing database and disaster assessment in the disaster prone areas/UCs
- Volunteers will be updated by SPO and KDRF in the time of disaster in the coordination mechanism

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## Criteria for Volunteers in EWS

- Have time to devote to monitor water level in the river
- Could attend the training sessions and replicate
- Could regularly attend the refreshers sessions
- Could pass on information to community and other stakeholders
- Literate
- Healthy and physically strong enough
- Could use and handle Search and Rescue Kits (SRK) and First Aid equipment, in case of disaster

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## Role of Volunteers in Revoking EWS

- The volunteers were asked to replicate the training with the representative of partner organization and EWCs. The volunteers had meetings at community level with the CO's representatives.
- The volunteers are working at the following levels:
  - Focal Persons (COs) at Water Measurement Points/River
  - Part of Early Warning Cell established at 6 UCs level
- The initial information about Early Warning is to be communicated by the volunteers on regular basis, on scales v.i.z normal, medium and dangerous, to the EWCs, partner organizations, relevant line agencies and local government authorities.

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## Contd....

- A communication mechanism has also been developed for EWS. In case of flood the focal persons from the places of water measuring rods would measure the water level after necessary calculation.
- Then they are the responsible to convey the message on gradual basis (Normal, Medium and Dangerous) to the focal persons (Volunteers) at selected UCs level of disaster prone areas through cellular/phone, Radio, cable operators and also by police wireless sets at various locations.
- Besides that District Disaster Management Authority and other relevant agencies would further be informed for necessary action.

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## Role of Volunteers in Disaster Prone UCs

- The volunteers have set-up an Early Warning Cell (EWC) which works to disseminate information to all the stakeholders
- Volunteers and EWC have been equipped with Rescue Kits, Radio sets, personal mobile and Mega Phones to issue the information regarding disaster
- Upon receiving information on water measurement level a team of four volunteers prepare themselves for early response and action required
- Volunteers and EWC will use mega phones and other sources and the volunteers' team as messenger to remote area would announce / intimation of the warning on through loud speakers of Mosques. Further, volunteers will communicate through local radio and cable networks on water level update of the warning as well.
- In case of disaster, the volunteer team members provide their supports/assistance as per the available First Aid Medicines and Rescue Kits.

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## Design of EWS

- Manual flood EWS [E:\MPEGAV](#)
- Instrumentations
  - Reengages
  - Water Level gauges
  - Tide gauges
  - Communication facilities

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## Essential Components of Effective EWS

- Effective system to detect and monitor hazard
- Communication system to alert the public
- A Response protocols....such as evacuation plan etc.
- Awareness among public

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