





# ACP-EUNATURAL DISASTER RISK REDUCTION PROGRAM

Focus Day on Post Disaster Response and Recovery Frameworks

ACP House - Brussels, June 9, 2017

## ACP-EU NDRR Program sharing country experiences and lessons learned



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#### **Burundi Country**

#### General Context

- ☐ Total Population: 11,099,298
  - With 15.4 % urban population
- ☐ Area and Number of islands if applicable (N/A)

#### Country Risk Profile:

Natural Hazards

Burundi's emergency profile includes the following risks: Social conflicts, mass influx of population, food insecurity, consequences of climatic hazards (floods, droughts, hail, violent winds, landslides), epidemic, fires, bush, seismic risks, accidents, ...

- ☐ Major Risk
  - Social conflicts
  - High prices
  - Internal mass movement
  - Infrastructure Fire
  - Floods, Landslides (Food insecurity ...)
  - Drought (Food insecurity ... ..)
  - Storm, Hail, Epidemics
  - Epizootics, Pollution of lakes
  - Accidents
  - Bush fire

#### Major past events the last 20 years and impact

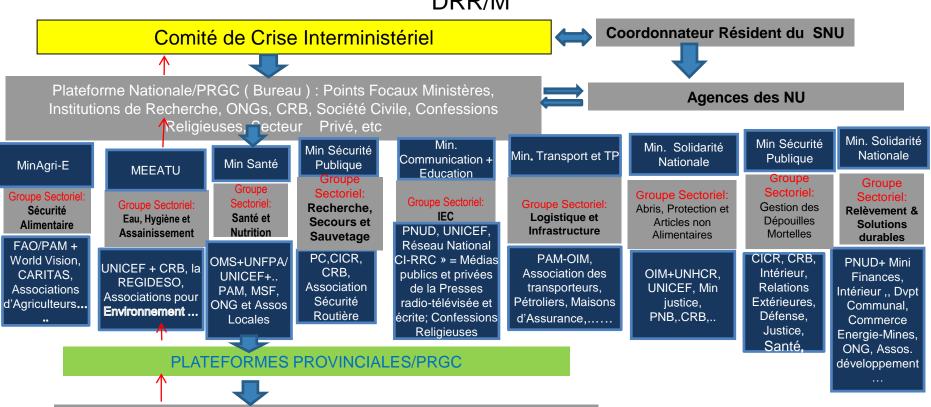
- ➤ Gatunguru flooding event 2014 and Rumonge landslides event 2015 impacted lives and resources.
- Fire of the Central Market of Bujumbura january 2013
- Internal conflicts leading to population movements and deaths

Impacts: High records in deaths of people—children and adults- and damages of houses, vehicle, schools, health centers, communication and water facilities and crops in the fields.

#### DRM institutional organization

- Institutions in charge of DRM and CCA
  - National Platform within different UN Agencies, NGOs and nominated Ministry Frontline Focal Persons
- DRM National Platform ?
  - If yes, please present it (see section below)

### DRM institutional organization (*Continuation*)\_Coordination Mechanism for DRR/M



PLATEFORMES COMMUNALES-COMMUNAUTAIRES / PRGC

#### DRM institutional organization (Continuation)

#### □ specify frequency of meetings

- The DRR/M held a meeting once a month for bureau coordination activities.
- A large meeting including focal points from concerned Ministries, NGOs and UN Agencies held quarterly for damages evaluation and humanitarian actions plan.

#### DRM institutional organization (Continuation)

- ☐ DRM National Strategy in place?
  - Yes, the current National Strategy for DRR aligns with an update of National Strategy of DRR of Sendai Framework 2015-2030 integrating gender, 2016.
- ☐ Are DRR and CCA part of the National Development Strategy?
  - Yes, it focus on early warning and contingency plan in prone disaster areas
- ☐ Existing legislation, building codes etc...
  - Yes, a building code is available and operational stressing restriction on constructible and non constructible areas.

#### The Joint Rapid Assessment\_ Gatunguru Event 2014

- ☐ Brief historic of the event
- In the night of 09 to 10 February 2014, torrential rains mixed with winds fell in Bujumbura resulting in multiple human casualties and material damage in the communes of the north of the capital Bujumbura namely Kamenge, Kinama and Buterere in Bujumbura mairie, As well as in Isale and Mutimbuzi communes located in the province of Bujumbura.
- The Joint Rapid Assessment was carried out by three teams made up of members of the National Platform for Disaster Management and Prevention and the United Nations System Agencies (UNDP, UNICEF, WHO, WFP, UNHCR, IOM, UNFPA) More affected.

The assessment of damage to infrastructure was conducted by the working groups listed above and strongly supported by implementing units of the Road Sector and Public Works and Urban Management projects. In addition to damages to infrastructure, about crops in value of US\$1.6 million were lost (provisional estimate by the Ministry in charge of Agriculture and FAO). Moreover, over 3,000 homes were destroyed.

• 1,217 households have settled in four humanitarian sites namely Buterere Kamenge, Kinama I and Kinama II, while over 2,000 other households have moved with host families (registration and profiling of victims in host families). In addition, the closing of the main road RN1 to heavy trucks traffic did endanger the secondary roads (RN 5, 7 and 10) toward which traffic has been diverted.

- ☐ Governmental response and process
- Urgent actions have been taken for the next 24 hours to make arrangements as the weather forecasts predict a difficult rainy season until April 2014. Follow-ups followed by meetings coordinated by the national disaster management and prevention platform were organized to assess the state of play and identify emergency needs:
- Disinfect areas where latrines have been destroyed, and provide emergency latrines;
- identify and accommodate shelter sites to house about 3784 households whose homes are destroyed, food assistance and other necessities such as medicines, mosquito nets, blankets, mattresses, soaps, drinking water bladers, cans, utensils Kitchen, plates, etc.)

- Three health facilities (CHU Kamenge, Kamenge Military Hospital and the Kamenge Health Center have been identified to care for the wounded with the support of the Government, certain UN partners and NGOs such as the Burundi Red Cross and MSF Belgium.
- Burial of corpses;

#### Impacts





#### Impacts





#### Recovery Phase

- Recovery Strategy
- The plan was in favor of a multisectoral response, bringing together all actors (state, UN agencies, international organizations and national and international emergency and development nongovernmental organizations) working in each emergency sector. The response strategy was multisectoral and integrated aspects of early recovery, sustainable solutions and community resilience to enable communities to have resilience to shocks and to develop community-based prevention and protection mechanisms any risk of natural disaster. As resources were limited, the response was based on vulnerabilities.

#### Recovery Strategy (Continuation)

- During a flood, the priority sectors were generally: water, sanitation and hygiene; Food security, health, shelter and non-food items. As each crisis was a special case, it was not impossible that this classification may change. In order to better coordinate the response, sectoral working groups were in place as proposed in the coordination structures of the national platform to develop response plans for their respective sectors. The main sectors concerned were:
  - ✓ Health;
  - ✓ Water, Hygiene and Sanitation;
  - ✓ Nutrition;

#### Recovery Strategy (Continuation)

- ✓ Food Safety;
- ✓ Education;
- ✓ Protection;
- ✓ Non-Food Items and Emergency Shelter;
- ✓ Logistics and Infrastructure;
- ✓ Durable solutions and community resilience;
- Coordination and Camp Management of IDP sites (CCM).
- Each of the sectoral groups contributed to this response plan targeting the chosen hazard linked to the El Nino phenomenon. In their contributions to the response plan the different sectoral groups:

#### Recovery Strategy (Continuation)

- ✓ Set the objectives to be achieved within the framework of interventions in their sectors;
- ✓ Identify the key players to be involved in the response, as well as the resources available and / or mobilizable at the national or regional level;
- ✓ Define the number of people affected by the crisis;
- ✓ Identify deficiencies in the existing response mechanism;
- ✓ Stated the agreed standards between the actors of the sector as those to guide the various interventions within the framework of this contingency plan;
- ✓ Focusing on the distribution of roles and responsibilities among the actors;
- ✓ Determined the necessary arrangements for possible assessments to be carried out.

#### ☐ Recovery and Leverage

	EMERGENCY	MEDIUM TERM	LONG TERM
Road Transportation	(i) rehabilitate RN1 in order to restore truck traffic and relieve RN5, N7 and N10 which are not designed for heavy vehicle and may collapse, (ii) rehabilitate RN1 bridges and RN4 Nyabagere bridge (extension of structure is unhooked).	(i) rehabilitate critical points on RN1, 3, 5, 7 and 10; (ii) resize structures to ensure resilience to 10-y return period events; (iii) rehabilitate local roads in Gatunguru; (iv) enhance the RN9-Mutimbuzi road-dike	Develop an alternative for heavy traffic: strengthen50 km on RN7 between Bujumbura and the meeting point with the RN18 (under AfDB project) or asphalting 44 km of RP 101
	US\$3.8 million	US\$5.5 million	US\$52 million

	EMERGENCY	MEDIUM TERM	LONG TERM
Urban drainage	Perform a cleaning upstream of the waste water treatment plant at the junction of the rivers and Nyabagere and Kinyankonge to protect the retaining wall of the treatment plant.	(i) strengthen the embankment along the wastewater treatment plant; (ii) strengthen Nyabagere and Kinyankonge river channels; (iii) build a channel along Carama neiborhood.	(i) build a channel from Gasenyi River towards Gikoma River; (ii) drain and channel Gikoma river around the urban area of Buterere.
	US\$3k	US\$3.1 million	US\$5 million
Drinking water supply	(i) bring Ntahangwa water plant back to service (6,000 m3/d); (ii) repair the Gatunguru spring uptake and aerator (1,400 m3/d); (iii) readjust DN700 and DN300 pipes at the Chaussée du peuple Murundi / rivière Ntahangwa bridge.	Secure the DN200 cast iron pipe over Nyabagere River at Kamenge market	A project to build a second water factory on Lake Tanganyika (40,000 m3/d) is under negotiation. 80% of the funding is pledged by the Dutch Government, while the Government of Burundi is seeking about 10 million euros.
	US\$500k	US\$22k	US\$13 million

	EMERGENCY	MEDIUM TERM	LONG TERM
Markets	Rehabilitate Kamenge market.	Rebuild Gatunguru market.	
	0 (damages are insured)	US\$550k	
Electricity	(i) replace the 30 KV "Gasenyi" power line poles on 2.5 km, (ii) purchase and install a new 150 kVA transformer US\$68k		
Agriculture	Rehabilitate the dam and the metal aqueduct in the Murago irrigated scheme	Enlarge drains in Mubone irrigated scheme	
	US\$420k	US\$1.4 million	

	EMERGENCY	MEDIUM TERM	LONG TERM
Education	<ul><li>(i) clean latrines in 10 schools,</li><li>(ii) build 11 temporary</li><li>classrooms</li><li>(iii) purchase education and</li><li>hygiene kits.</li></ul>	(i) rehabilitate 14 classrooms, (ii) acquire 649 bench-desks, and (iii) construct 6 blocks of 6 latrines each.	
	US\$210k	US\$236k	
Health	Clean latrines.		
	US\$3k		
Sustainable land and water management		Preliminary slope stabilization works in watersheds upstream of Bujumbura (Gasenyi Gikoma, Kidumbugwe, Muzazi, Nyabagere, Ntahangwa :25 000 ha)	Advanced slope stabilization works upstream of Bujumbura (25,000 ha)
		US\$10 million	US\$10 million

	EMERGENCY	MEDIUM TERM	LONG TERM
Disaster risk management	Develop and test operationally an early warning system for runoff and landslide in 5 hazard-prone areas8 (Gatunguru, Buterere, Isaiah, Gitega, Muhuta).	(i) develop a disaster risk map and information system, (ii) establish and equip brigades of volunteers to monitor critical hotspots (particularly for monitoring drainage capacity).	(i) propose and evaluate sectoral disaster risk management activities (transportation, urban development, drainage, sanitation, industrial activities, natural resources management); (ii) operationalize the civil protection school.
	US\$320k	\$975k	\$325k
TOTAL	US\$5.4 million	US\$21.5 million	US\$80 million

#### Assessment follow up (Continuation)

- □ Achievements to date
- Some infrastructure weakened by the disaster, for preventing further damage or collapse, which was imminent in some cases with erosion due to the rainy season have been rehabilitated. Flooded latrines in education and health infrastructures have been pumped. The traffic on the RN1 was restored in a sustainable manner to protect roads against premature degradation.
- Provision in NFI/shelters for some victims affected.

#### Lessons learned and challenges

☐ The ACP-EU NDRR Program value added

The added value of ACP-EU Program are among others:

- Determine underlying risk factors;
- Quantify damages and to identify activities contributing to sustainable rehabilitation and reconstruction of infrastructure;
- Display proposal for priority activities related to rehabilitation, reconstruction, disaster risk management, in order to reduce impacts on the occurrence of similar events in the future.

#### Lessons learned and challenges (Continuation)

- ☐ Lessons learned and main challenges
- Knowledge management capacity of National DRR/M still need be strengthened, and sharing of responsibilities among ministries and government agencies operational procedures would be updated.
- Non appropriation of DRR activities at community level
- Insufficient resources and qualified staff death evacuation for rapid intervention

#### Lessons learned and challenges (Continuation)

- The challenges related to urban development, drainage, sustainable land management including river shore protection require an urgent action.
- Crosscutting disaster risk management activities, like landslide hotspot mapping, riverbed surveillance and drainage management teams would need to be implemented as soon as possible to quickly reduce risks related to natural disasters.
- Non availability of funds for DRRM operational activities

Thank you for your attention

Murakoze