NATIONAL PREPAREDNESS PLAN

FOR

WATER SANITATION AND HYGIENE INTERVENTIONS

IN RWANDA

June 2022

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ACRONYMS AND ABBREVIATIONS

APA:	Advanced Preparedness Actions
DIDIMAC:	District Disaster Management Committee
DRR:	Disaster Risk Reduction
ERT:	Emergency response team
IASC:	Inter-Agency Standing Committee
MIDIMAR:	Ministry of Disaster Management and Refugees
MINALOC:	Ministry of Local Government
MINEMA:	Ministry in charge of Emergency Management
MININFRA:	Ministry of Infrastructure
MoH:	Ministry of Health
MPA:	Minimum Preparedness Actions
NPDM:	National Platform for Disaster Management
NECDP:	National Early Childhood Development Program
NFIs:	Non-Food Items
NGOs:	Non-Government Organizations
NPDM:	National Platform for Disaster Management
RWASHEPP:	Rwanda Water, Sanitation and Hygiene Emergency Preparedness Plan
REMA:	Rwanda Environment Management Authority,
RRCS	Rwanda Red Cross Society
SOP:	Standard Operating Procedure
E-WASH TWG:	Emergency Water, Sanitation and Hygiene Technical Working Group
UN:	United Nations
UNHCR:	United Nations High Commissioner for Refugees
UNICEF:	United Nations Children's Fund
WASAC:	Water and Sanitation Corporation
WASH:	Water, Sanitation and Hygiene

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Version Control

Version	Validation Date	Author	Participating Stakeholders	Page Number	Section	Amendment Summary	Authorized by
1.0	28/6/2022	NICKDADI	MINEMA,MININFRA, WASAC, SAVE THE CHILDREN, UNICEF, UNIHCR, MOH, WVI MINALOC, , RRCS		The whole document	First Edition	Ngoga Aristarque (Advisor to the Minister, MINEMA)

NB: This document should be reviewed every two years to ensure its validity to address real situation related to National Preparedness plans for **Water, Sanitation and Hygiene interventions in Rwanda**.

1. INTRODUCTION

In Rwanda, 80% of households have access to an improved water source, with urban households having much better access (96%) than rural households (77%). The most common sources of drinking water in urban households are water piped into the household's dwelling, yard, plot, or neighbor yard (50%) and public taps or standpipes (26%). Rural households obtain their drinking water mainly from protected wells or springs (36%) and public taps or standpipes (31%). 72% of households have access to improved sanitation. Nearly all households in Rwanda with a toilet/latrine facility use a facility that is not in their dwelling but is either in the yard/plot of the dwelling (60%) or elsewhere (37%)[1].

Water is essential for human life and health. Insufficient clean, drinkable water available in emergencies can lead to major waterborne diseases outbreaks. Therefore, an adequate supply of clean drinking water is one of the first priorities in any disaster situation. Less water for people directly affects their health. According to UNICEF reports, it has shown that in different disaster scenarios, illness and death are often more closely linked to poor sanitation and hygiene and lack of inadequate water supply. Therefore, running hygiene and sanitation activities assures that the disaster response lays the foundation for long term development work. Disaster and emergencies therefore precipitate a situation where water, sanitation and hygiene (WASH) facilities are destroyed, and an appropriate response is required in order to protect affected communities from Unhygienic conditions, Contaminated water and WASH related diseases.

The Rwandan emergency preparedness plan for WASH guides the Government of Rwanda and its partners to prepare for and respond to emergencies which disrupt WASH services.

The Rwanda WASH Emergency Preparedness Plan (RWASHEPP) was developed previously in 2019 by MINEMA with broad stakeholder consultation and validation. The RWASHEPP was a tool for WASH actors in the country to:

- Identify major risks in the country and establish a system to monitor them
- Establish minimum level of preparedness; and
- Establish foundation for advanced preparedness.

[1] Rwanda DHS 2019-2020

The information presented and agreed at the workshop is reflected in this sectoral preparedness plan. The main objective of this sectoral preparedness plan is to give guidance on the WASH sector humanitarian response in a coordinated way. This preparedness plan aims to increase the speed, scale and scope of life saving assistance delivered with immediate effect of an emergency.

1.1 Background

Rwanda faces a wide range of potential emergency management needs in response to natural disasters (landslides, storms and flooding, earthquakes, droughts, volcanic eruptions), mass movement of population (primarily refugees from Democratic Republic of Congo and Burundi), and health emergencies (Ebola Virus Disease and Cholera). While most disasters are on a small to medium scale, cumulatively they have major impacts and require adequate planning.

Nearly 70 percent of Rwanda's population is at risk of exposure to magnitude 6.0 earthquakes, while 30 percent is exposed to magnitude 5.0 earthquakes. The country's hydro-meteorological hazards have been exacerbated by climate change with Rwanda experiencing unusual irregularities in climate patterns including variability in rainfall frequencies and intensity, persistence of extremes like heavy rainfall in the northern parts and drought in the eastern and southern parts[2]. In the last seven years from 2015 up to 2021, different reports from MINEMA show that at least 1184 have lost their live and 1706 were injured due to a series of disasters. In the same period, at least 48,206 houses, 446 toilets, 16 health centers and 59 water supply facilities have been destroyed or damaged leaving thousands of families displaced[3].

People in emergency situations are generally much more susceptible to illness and death from disease, often caused by a lack of sanitation, inadequate and contaminated water supplies and poor hygiene. Diarrhea and infectious diseases transmitted through the faecal-oral route are the most significant health problems. Increased risk of disease also arises from overcrowding, exposure to new pathogens and the disruption of routine and safe habits.

In such circumstances inevitably, it is the poorest in society, children, the elderly and people with disabilities who are the most vulnerable in such circumstances and need consideration (UNICEF,

[2] Rwanda state of environment and outlook 2009
[3] MINEMA annual disasters effects reports (2017-2021)

2006). Women and girls' needs must also be taken into consideration in every step of the planning and intervention.

1.2 WASH sector objectives

The overall objective is to enhance the capacities and readiness to rapidly respond to emergency WASH needs in event of disasters.

WASH refers specifically to water supply (for drinking, household and hygiene use), sanitation (fecal waste management, solid waste management and drainage) and hygiene (handwashing with soap, menstrual hygiene and health, personal hygiene).

1.3 Specific Objectives

- Put in place national preparedness plan for WASH interventions to be mainstreamed into disaster-related response activities as well as regular development activities where appropriate,
- Define a coordination mechanism for the efficient and effective implementation of the activities without duplication and gaps
- Map all stakeholders involved in WASH and determine the level of interventions during emergencies
- Assess the capacity gaps and set measures to address them

2. SECTOR STATUS

2.1 Description of the WASH sector in Rwanda

The WASH sector in Rwanda is progressing in a sustainable direction based on sound principles and supported by the National Strategy for Transformation 2017-2024 (NST1) that aim at universal services as laid down in the Sustainable Development Goal 6 (SDG6). The Ministry of Infrastructure (MININFRA) coordinates WASH services while the Ministry of Health (MINISANTE), the Water and Sanitation Corporation (WASAC), local government entities and the Rwanda Utility Regulatory Authority (RURA) play key roles in ensuring the delivery of WASH services. According to UNICEF report 2021, the WASH budget brief focuses on the budget allocated to: (i) WASAC, (ii) MININFRA's Water and Sanitation program, (iii) MINISANTE's hygiene and environmental health program, and (iv) the Districts, under the Water and Sanitation program[4]. Furthermore, the analysis covers four priority areas, (i) drinking water access, (ii) sanitation access, (iii) water infrastructure and sanitation for districts, and (iv) hygiene and environmental health. Rwanda is aiming for 100% access to basic water supply and sanitation and 100% access to safely managed water and sanitation services by 2030[5]. There are nonetheless outstanding challenges, regarding planning and budgeting, monitoring and evaluation, as well as capacity building at lower levels of government and the main challenge is funding gaps for increasing access to WASH services, particularly in scattered settlements and hilly areas with difficult access.

Development partners comprising UN agencies (UNICEF, UNHCR) INGOs (World Vision, TROCAIRE, Water Aid, Water for People, International Rescue Committee) and local organization including the Rwanda Red Cross Society are involved in facilitating and ensuring that WASH services are well delivered effectively to the beneficiaries. Consultations made with various partners have revealed that they still have planning and budgeting challenges.

[4] https://www.unicef.org/rwanda/media/2786/file/WASH-Budget-Brief-2021.pdf visited on February 25, 2022
[5] https://www.mininfra.gov.rw/fileadmin/user_upload/Mininfra/Documents/Water_and_Sanitation_docs/WATSAN_2019-20_FL-JSR_Report.pdf

2.2 Status of the emergency WASH sector in Rwanda

Occurrence of disasters has become a crucial factor affecting economic development and social stability of countries. Rwanda has witnessed several natural and man-induced disasters that have culminated into the loss of lives and property and displacement. Hazards prevailing in Rwanda mainly include droughts, rainstorms and floods, earthquakes, volcanic eruptions, landslides, destructive winds, mass movement of population and epidemics[6]. Each of these hazards has a negative impact on water, sanitation and hygiene services.

Over the last decade, the frequency of climate-induced disasters has significantly increased, with increasing toll of human casualties as well as economic and environmental losses (MIDIMAR, 2016). Further, Rwanda hosts a total refugee population of over than 128,151 individuals registered as per statistical information of 31 March 2021. With about 91.4% of the population living in the established camps and transit centers with assistance on WASH services[7].

Emergency WASH services are designed to address the specific needs of the most vulnerable crisis-affected populations who cannot afford, or physically do not have access to, water or basic hygiene items. It supports particularly vulnerable individuals, such as elderly people, those with disabilities, pregnant women and new mothers with customized interventions and resources. Emergency WASH services also rehabilitates or repairs water supply and sanitation systems, and trains beneficiaries in their use, maintenance and oversight.

Adequate preparedness to respond to disruptions in emergency WASH services is required in order to maintain the health and dignity of people.

The following table shows the effects of different hazards on WASH services, their likelihood and impact the communities.

[6] National Disaster Risk Management Plan, September 2013, MIDIMAR p11-22

[7] https://reliefweb.int/report/rwanda/unhcr-rwanda-water-sanitation-and-hygiene-wash-dashboard-period-january-march-2021

Table 1: Effects of hazards on WASH services

Hazard	likelihood	impact	Effects
Storms, heavy rains, flooding, wind damage, landslide, mudslides	High	High	Destruction of water supply infrastructure (especially damage to transmission and distribution networks and also water treatment plants and other), underground water contamination, demolition and/or damage to sanitation facilities including wash out of latrine pits.
Volcanic activity	Low	High	Impact on existing WASH facilities is low; however, affected populations will be displaced to areas without adequate WASH services where the risk of disease outbreaks due to poor WASH conditions is high.
Drought	Low	high	Significant reduction or lack of water quantity as well as reduced water quality for drinking, cooking, handwashing and other household/hygiene needs.
Earthquake	low,	high	Destruction of water infrastructure – intake, water treatment plants, distribution networks, underground water contamination; demolition or damage to sanitation facilities including latrines pits and structures.
refugee influx/internal displaced people	Low	high	Impact water and sanitation sector. It requires very strong preparedness to avail the basic water, sanitation and hygiene services
Epidemics/health emergencies (Dysentery cholera, COVID 19)	Low	high	The focus of WASH in health emergencies is less on disruptions to service caused by the hazard. Rather adequate WASH is required for infection prevention and control. Water services may be disrupted if water quality is compromised and contaminated, for example by cholera.

2.3 Stakeholders mapping

Stakeholders relevant to emergency WASH is a broad set of government institutions and partners. It includes those directly responsible for the policy, planning and implementation of WASH services as well as those who rely on emergency WASH interventions. The lists below will be updated bi-annually.

Table 2: Stakeholders mapping

	Stakeholders	Area of emergency preparedness and response
1	**MINEMA**	It is the leading institution, that coordinates all activities in emergency WASH interventions to affected people by different disasters in Rwanda? MINEMA is in charge of the development of SOPs for Early warning systems for different hazards, and preparedness and response plans for WASH. In addition, it mobilizes partners in WASH interventions, and collaborate with districts to heck if the interventions are tackling the needs of beneficiaries. The types of WASH interventions are drinking water supply, sanitation facilities and hygiene promotion.
	MININFRA	It formulates the national policies and strategies; are responsible for sector oversight, budgeting and resource mobilization and overall sector performance monitoring. MININFRA also focuses on infrastructure related aspects of sanitation; prepares and monitors water quality and hygiene standards.
	WASAC	It implements the policies and strategies of water supply and sanitation (both urban and rural); operational sector planning, monitoring & evaluation; coordination of sector stakeholders; support to districts (including rural infrastructure development and PPP arrangements); management of the harmonized financing mechanism; preparation of guidelines and standards; capacity building; applied research and knowledge management.
	MOH	Through the Environmental Health unit and Rwanda Biomedical Center (Public Health Surveillance and Emergency Preparedness response) is focusing on strengthening and promoting hygiene and sanitation practices to reduce water borne disease and other infectious diseases. is focusing strengthening and promoting hygiene and sanitation practices to reduce water borne disease and other infectious diseases. The Ministry of Health outbreak preparedness and response committee

		has a subcommittee responsible for WASH activities including the Review existing policies and guidelines on hygiene and sanitation; Sourcing and distribution of water quality supply materials; Monitoring of emergency water supply to affected populations; Promotion of hygiene education in collaboration with the social mobilization.
	MINALOC	It ensures the coordination of services delivery for social welfare interventions. As WASH is a priority in Rwanda's strategic plans and vision, the government has set and reinforced the target of universal access to WASH services in all planning documents through districts.
	Districts	They are responsible for the provision of access to basic services, including water, sanitation and solid waste management. Local governments have financial autonomy; own the water infrastructure; are in charge of implementing WASH projects; are encouraged to contract private operators for infrastructure (Operation and Maintenance), prepare and implement consolidated district development plans.
	UNICEF	UNICEF is the co-leading institution for the emergency WASH cluster in Rwanda. UNICEF's approach to WASH in emergencies focuses on preparedness in conflict and natural disaster risks. It saves lives in fragile contexts by trucking water, treating piped water, repairing broken water supply and sanitation systems, drilling wells, building temporary latrines, providing essential hygiene items and delivering hygiene messages. Its WASH programme in Rwanda aims to ensure that more households and communities use safe and sustainable water and sanitation services, and that children and families practice good hygiene.
	UNHCR	It responds to refugees and asylum seekers fleeing their homeland as a result of war or natural disaster. In line with emergency response, UNHCR provides lifesaving services including emergency WASH services. UNHCR has developed tools for emergency preparedness and response at a global level that could be adopted to a given context. Furthermore, UNHCR maintains a global ERT (trained in emergency response) and works closely with UNICEF in sharing of information and resources.
	Rwanda Red Cross Society	It is mandated with providing response during the disaster situations, assisting the affected people by providing immediate assistance to the affected people, with the

		kind of the assistance depending on the needs assessment done by Red Cross and its partners. Rwanda Red Cross supports as well the affected people to recovery from the emergency crisis to the normal life through long term development projects. Rwanda Red Cross works closely with others institutions that are active in the humanitarian activities. For WASH interventions, RRCS apply different approaches like distribution of WASH items (drinking water supply, Hygiene promotion kit, waste disposal…), provision of cash to cover WASH needs and avail WASH manpower.
	NGOs/Civil society	Through the National Platform for Disaster Management, NGOs and Civil Societies contribute to the implementation of WASH projects; participate in the coordination mechanisms at the district and national level.
	Affected communities	They are involved in project identification, planning and commissioning, as a matter of policy; form user committees to represent consumer interests; are in charge of the operation and maintenance of WASH infrastructures and services. They are consulted and actively participate in all stages of emergency WASH interventions.

2.4. SWOT Analysis

Based on the result of consultations with stakeholders, the SWOT (strengths, weaknesses, opportunities, and threats) analysis was conducted to illustrate raised gaps and challenges in emergency WASH sector preparedness plan. Results are presented in the table below.

Table 3:SWOT analysis for emergency WASH sector

Strengths	Weakness
- The coordination body through NPDM in place - Availability of a strong legal and policy framework - Skilled and committed personnel in WASH services - GoR commitments for DRM and existing capacity (national) - Existence of Disaster management organs - Disaster information management system in place - Country disaster risk profile developed - Existence of contingency plans and response plans	- Limited coordination and capacity at district and community level - Fragmented data sources with diverse ministries and not regularly updated. - No clear strategy dedicated to Emergency WASH interventions in many institutions. - Limited staff in numbers - Limited special training and simulations
Opportunities	**Threats**
- Various stakeholders in the WASH sector with humanitarian fund and support - Past experience and lesson learned - Receptive and participative communities - Community engagement - The strong existing sector-based intervention and disaster management organs - Opportunity to introduce more formalized trainings on DRM in community-based volunteers training tools	- Effects of climate change and weather patterns, - Inaccessibility roads at rural areas - Inadequate integrated EWS for WASH - No regular budget allocated - Prepositioning of enough materials, equipment and other infrastructure.

3. EMERGENCY WASH PREPAREDNESS

The aim of emergency WASH preparedness is to build resilience, to reach a reasonable level of preparation and to reinforce the coping capacity of local WASH actors (Government institutions UN agencies, NGOs and/or communities) in order to reduce vulnerability and ensure a timely and appropriate response to a disaster event in order to avoid preventable loss of life and decrease suffering. Emergency preparedness within the scope of WASH programming reduces or removes the negative impact of sudden shocks or stresses on access to adequate WASH services.

This in turn reduces the likelihood of an increased incidence of WASH related diseases and/or undernutrition, both during and following the disaster itself. Where the vulnerability of local communities is extremely high, and where environmental health risks are clearly life-threatening to local communities, it may be justified to integrate WASH activities in Disaster Risk Reduction programming.

Emergency preparedness activities may also be directed at (inter-agency) WASH contingency planning, such as response simulation exercises and WASH capacity mapping; training of emergency WASH personnel and/or the pre-positioning of WASH emergency stocks (such as hygiene kits, water reservoirs, and latrine slabs). Emergency preparedness in WASH has been recognized as often being a more cost effective way of working, particularly in situations where there are frequent natural disaster events.

In Rwanda, Emergency WASH services can be improved in the different areas:

- **Coordination and Structure Development**

Developing an emergency WASH coordination structure is required so that the contingency strategy can be made operational. An emergency WASH coordination of Rwanda can work in this respect. Depending on the type, size and coordination of the emergency WASH service and the context, the coordination structure may entirely consist of community members, staff working in WASH related agencies which include the authorities and the private sector.

- **Building Capacity**

People who would be part of the emergency WASH activities will need to have adequate knowledge and skills. These tasks may ask for new skills: coordination or supervision skills, damage and needs assessment, and use of communication equipment, first aid, use of related

machines and equipment and dealing with plumbing, water quality, waste management. Equipment must be familiar, and procedures and personal safety measures should be taken into consideration. Besides individual skills, people will need to become familiar with working in the team and with the new rules that may apply. Building the technical capacity of policymakers and implementers and maintaining it will need regular training and simulation exercises.

- **Prepositioning of materials, equipment and infrastructure**

Specific materials are needed for emergency response. What is needed depends on the service, context and type of disaster. Some examples of materials and infrastructure that may be needed are emergency water tanks, containers for household water storage, water distribution materials, mobile water treatment plants, water disinfection chemicals, pumps, generators, means of transport, fuel, spare parts, communication equipment, security materials, construction materials, medical supplies, and places to dispose waste. The exact needs in infrastructure and materials should be identified in the contingency plan.

- **Regular Budget Allocation**

A yearly budget must be allocated regularly for preparedness and contingency planning. In contexts where disasters are unusual, they are not a political priority, or if resources are scarce, it will be difficult to obtain funds for preparedness actions. It needs a political and/or collective will to make this investment, and efforts will be needed to obtain and keep the interest. Advocacy activities may be needed to raise the attention for this.

- **Setting up an Early Warning System for emergency WASH**

The Early Warning System (EWS) will give advance warning of imminent threats and it should trigger measures that will reduce the potential impact of an event. The value of a good EWS for society as a whole is large, and where possible such an EWS should be set up. On a more limited scale, small range EWS may be adequate for WASH systems. A basic system that warns an operator of an impending risk/crisis and triggers mitigative action might suffice e.g., if there is an imminent threat of flooding of a water intake or people can be brought in shelters).

The following table provides the set targets and indicators for effective emergency WASH interventions:

Table 4:Minimum Standards and Indicators for WASH Interventions[8] (Annex 2)

Area of interventions	Objectives	Minimum Standards	Indicator
Water supply	Provide equitable to an adequate quantity of water for drinking, cooking and personal hygiene Extend and upgrade water supply and quality networks in identified areas.	Accessibility to water: at least 3.5 to 7.5 liters per day per person for basic water needs at first phase (1-3 days). And this quantity can increase with the situation Household storage capacity: 15 liters per person per day Prepositioning of water treatment materials (e.g. tanks and treatment, purification tablets for household use)	Number/proportion of people having access to basic water source Number/proportion of people having access to enough quantity of water clean for drinking
Sanitation services	Mobilize community to build sanitation facility to the affected communities with technical and financial/material support from humanitarian agencies Effectively raise awareness to the decision	All excreta are safely contained on-site to avoid contamination of the natural, living, learning, working and communal environments Ratio of shared toilets - Maximum 1 per 20 people which are: - located to minimize security threats to users, especially to women and girls and people	Number/proportion of women, men, girls and boys enabled access to improved, secured and gender appropriate sanitation facilities Number/proportion of household members with

[8] The Sphere handbook 2018 Edition

	makers at the district level to budget Increase strategic supplies, either in stock or in country with suppliers Regular inventory of the existing strategic stocks for expiry items removal Refresher WASH training for large disaster events To ensure inclusive sanitation facilities during responses Avail land for waste management disposal (fecal and solid waste management)	with other specific protection concerns; - easy to use and keep clean (generally, clean toilets are used more frequently); - allow for the dignified cleaning, drying and disposal of women's menstrual hygiene materials, and child and adult incontinence materials; - Waste disposal (excreta, solid waste…) - Minimize fly and mosquito breeding; and smell. If fecal waste is moved off-site, land allocated and managed to receive waste and emptying, transport, disposal and treatment are safely managed.	access to functioning sanitation facilities Number/Proportion of households with children under-5 who dispose of children faeces in a safe manner
Hygiene promotion	To ensure availability of personal hygiene and safe water storage materials (soap, buckets, jerry can, water purification tablets, wash	Handwashing with soap is promoted and supported with supplies (soap, water) and facilities (household basin or public tap)	Number/proportion of families with access to sufficient soap for handwashing,

	basin, cooking tools, toothpaste, potties, etc) To raise awareness on personal hygiene (safe water, safe disposal of feces including from children, handwashing with soap, menstrual hygiene management,) To raise awareness on household and public hygiene (vector control, waste management, mosquito control, parasite control, etc.)	Safe drinking water and adequate food hygiene is promoted and supported with supplies (jerry cans, bucket, cooking utensils) and facilities (kitchen) Menstrual hygiene management is promoted and supported with supplies (sanitary products, underwear) and appropriate facilities (sex-separated toilets with waste management) Personal and household hygiene is promoted and supported with supplies and facilities (bath shelter, toilets, potties/nappies, waste management)	personal hygiene and laundry Number/proportion of women/girls of menstruating age have access to appropriate menstrual materials, supportive facilities and MHM information Number/proportion of HW station with soap and water

The following are the best practices when conducting a need assessment or developing a preparedness plan for response to emergency WASH interventions.

- **Effective data collection and sharing**: Any interventions should base on accurate data and information about the impact and the needs. For the data collection, partners should agree on the type of data to be collected, the format to be used and the means of verification of the quality of data.
- **Timely and harmonized interventions**: Assistance of WASH services/activities is always required. It is also a community and or household stabilizer after a huge impact since water and sanitation are among the basic needs for well-being. It is therefore crucial to ensure timely provision of the assistance. It is equally important to harmonize the aided. The agreed upon interventions should ensure provision of required quality and quantities considering special needs of special vulnerable groups. Interventions should be planned and implemented in a way that no one (eligible) is left behind.

- **Beneficiaries' involvement**: Any interventions planned and implemented without the beneficiaries' involvement may not be fully beneficial and effective for them.

- **Clear roles and responsibilities:** Roles related to the interventions have to be clear for everyone to avoid duplication, overlaps and prevent misuse of available resources. The main roles to be specified are related to the following:
    - Who validates the data?
    - Who shares the data?
    - Who coordinate the assessment and how partners can get involved?
    - What triggers an intervention by one or more partners?
    - Who assigns roles during a joint intervention?

3.1 Preparedness Actions in Emergencies

The minimum Preparedness Actions (MPA) are set of core preparedness activities which need to be undertaken to establish a minimum level of emergency preparedness in a country to achieve positive outcome in the initial emergency response phase.

These measures serve as the basic building blocks of emergency preparedness. They are relevant for all country contexts and usually do not require significant additional resources to implement. MPAs focus on practical actions to improve emergency response, accountability and predictability. MPAs are not designed for specific risks rather they are based on a multi-hazard approach.[9]

The MPAs has the following components:

- Early Warning Systems
- Establishment of coordination, roles and responsibilities of WASH partners/responders, and management arrangements
- Capacity gap analysis of the WASH partners and capacity building plan
- Preparing for joint needs assessment
- Supplies: prepositioned by partners and available on the market (market assessment)
- Response monitoring
- Information management

[9] https://emergency.unhcr.org/entry/54256/erp-minimum-preparedness-actions-mpas-iasc-idp-situations-and-natural-disasters

Table 5: Minimum preparedness Actions

Component	Minimum Preparedness Actions	Responsible Institution	Stakeholders
EWS	Strengthen DIDIMAC capacity to monitor hazard risks to WASH services	MINEMA	MINALOC, MININFRA, MOH Districts, NGOs
	Dissemination of timely early warning systems information	MINEMA	Ministry of Environment Meteo Rwanda
Coordination and operations	Consider "water supply in emergency" and "sanitation and hygiene in emergency" in annual budget	MINEMA through MINICOFIN	WASAC, MINALOC, MINECOFIN, MININFRA, MOH Districts, NGOs
	Develop SOPs for both WASH sector coordination and technical WASH response interventions and monitoring in emergency	MINEMA	Humanitarian Partners WASH technical Working Groups
	Awareness on effects of protecting of water sources catchment area in disaster prone areas	MINEMA	Ministry of Environment, REMA, WASAC, RWB District, Private sector
	Mapping and define and harmonize responsibilities of all stakeholders involved in the emergency WASH	MINEMA	MoH, Districts, Partners, NGOs
	Set up a humanitarian WASH technical working group and its coordination mechanisms	MINEMA	Partners

	Develop guidelines for risk-informed planning, siting, and minimum construction standards for water supply and sanitation facilities in risk prone areas	MININFRA, MOH	MINEMA, MINALOC, Districts, Partners
	Set up and support district disaster management focal point at district level	MINEMA	District
	Regular update on status of water supply systems and sanitation at district level	MININFRA, districts, MINEMA	Partners
	Assign focal points from ministries to the E-WASH TWG, including all related sector ministries	MINEMA	All relevant Ministries
	Enhance operationalization of DIDIMACs and SEDIMACs	MINEMA	MINALOC, Districts
	Strengthen community ownership of existing WASH infrastructure and increase community engagement on mitigation of hazard impacts on WASH	MININFRA, MOH	MINEMA, MINALOC, Districts, WASAC, Partners
	Integration of hygiene in the information management of the emergency situation	MINEMA, MOH	MINIFRA, MINALOC, Partners, Private Sectors
Capacities	Resources mobilization and advocacy for budget allocation for WASH response interventions	MINEMA, District, Partners	Partners

	Conduct a regular mapping of stakeholders 'capacities for WASH emergency preparedness and response	MINEMA	Private sector, Partners, WASAC
	Strengthen hygiene promotion through training for District and Community health promotion staff and partners	MOH	MINEMA, MINALOC, WASAC, Districts, Water Service Providers, Partners
	Strengthen training of masons and artisans on sustainable latrine construction	MININFRA	MOH, MINALOC, WASAC, Districts, Partners
	Develop and implement guidelines for resilient infrastructure	MININFRA	MOH, MINALOC, WASAC, Districts, Partners
	Increase community knowledge on domestic water treatment	MoH, MININFRA	Districts, MINALOC, MINEMA, , Partners WASAC
Joint Assessment	Develop harmonized assessment tools, clear roles and responsibilities, and reporting procedures for DIDIMAC, District staff, WASAC, MINEMA and partners	MINEMA	MININFRA, MINALOC, MOH, WASAC, Districts, Partners
Supplies and contractors	Define household and community hygiene kits. Define essential pre-positioned material, supplies and equipment for community water supply and sanitation (including critical water	MINEMA	Partners Humanitarian WASH technical WG

	supply equipment, spare parts and consumables) Preposition emergency WASH materials at national and local levels (Districts) Compile partners' capacity to enable rapid provision and/or procurement of WASH supplies Compile national and district databases of contractors and suppliers for specialized WASH equipment/supplies ((tanks, pipes, water treatment, etc) and services (water trucking, water supply and sanitation facility construction, desludging, etc) – including capacities, locations and contact information.		
Response Monitoring	Develop harmonized response monitoring tools, clear roles and responsibilities, and reporting procedures for DIDIMAC, District staff, WASAC, MINEMA and partners	MINEMA	MININFRA, MINALOC, MOH, WASAC, Districts, Partners
Information Management	Establish system to compile, track, analyze and share data collected during risk monitoring, assessment	MINEMA	MININFRA, MINALOC, MOH, WASAC, Districts, Partners

	and response phases as well as to manage coordination.		
	Include WASH components into existing disaster management committees	MINEMA	MINALOC
	Use existing communication systems from local authorities to higher authorities	MINEMA	
	Ensure joint reporting systems in the emergencies	MINEMA	

Advanced Preparedness Actions (APAs) and Contingency Planning are activities that complement each other and complement MPAs. APAs and Contingency Planning are initiated together to plan for specific risks when risk analysis and monitoring indicate the risk level of moderate or high risk. Unlike the MPAs the advanced preparedness actions are designed for specific risk like for earth quick or for flooding. The APAs includes actions that support and complement the contingency planning process.

A contingency plan sets out what could happen and what actions should be done with in the first three to four weeks. In addition, the process identifies what resources are required and the gaps to be bridged. Wherever possible, these actions should be implemented at the same time as strategies to mitigate risk and prevent an escalation of needs. However, when crisis does strike, having the MPAs in place will make a fundamental difference in an eventual response to a range of different types of emergencies.

4. COORDINATION STRUCTURE FOR WASH IN EMERGENCY IN RWANDA

Rwanda established the Ministry of Disaster Management and Refugee Affairs in 2010 by the Prime Minister's order[10] with the overall mission of developing a highly proficient mechanism for preventing, mitigating, preparing, responding, recovering and monitoring in a timely manner to promote management of natural and man-made disasters.

The coordination of WASH sector response falls under the overall emergency coordination system of the government of Rwanda, particularly under the Ministry in charge of Emergency Management (MINEMA). Rwanda National Disaster Management framework has been designed to ensure coherence between all documents in the Ministry in charge of Emergency Management and directly related to Disaster Management[11] .

It also links with other clusters – primarily WASH and also Education, Health, Nutrition and Protection – where there are relevant programming connections. In the event of a major disaster where there has been a request for international assistance, the MINEMA coordination system could also link with the global cluster system under the Inter-Agency Standing Committee (IASC) of the UN General Assembly.[12]

4.1 Coordination

Emergency WASH sector Technical Working Group (E-WASH TWG) is to support the Government of Rwanda in the management of humanitarian WASH interventions and will coordinate with the National Platform for Disaster Management (NPDM) under MINEMA in collaboration with MININFRA and other line Ministries.

The E-WASH TWG is an emergency coordination platform that supports MINEMA through the NPDM to meet the immediate WASH needs of people affected by disaster.

[10] Renamed as the Ministry in charge of Emergency Management (MINEMA) in 2018
[11] The National Disaster Management policy. Version 2012
[12] IASC (2015) *Reference Module for Cluster Coordination at Country Level*: https://www.shelltercluster.org/sites/default/files/docs/cluster_coordination_reference_module_2015_final.pdf

Its composition will be limited to agencies with relevant expertise in humanitarian actions and interest in WASH sector. The Emergency-WASH TWG provides coordination support in three key areas:

- The development of an overall **strategic direction** for humanitarian WASH response;
- The development of agreed **technical guidelines** to ensure consistency of response across agencies and geographical areas; and
- Analysis of humanitarian needs and gaps through **shared information management**.

The Lead, Co-leads and partners are respectively the following:

- E-WASH TWG Lead: The Government of Rwanda represented by MINEMA with support of MININFRA and MOH
- Co-lead: UNICEF Rwanda with the support of other international organizations, especially the United Nations High Commission for Refugees (UNHCR) in matters related to refugees.
- Agencies, organizations and individuals providing WASH assistance during humanitarian emergencies that have informed MINEMA and joined E-WASH TWG.

4.2 Roles and responsibilities of the Emergency-WASH TWG

Specifically, the Emergency-WASH TWG seeks to ensure coordination around each element of the humanitarian programme by:

- Identification of areas of Emergency WASH interventions in districts.
- Supporting service delivery that is driven by the agreed strategic priorities and avoids duplication.
- Informing strategic decision-making through coordinated needs assessment and analysis.
- Planning and strategy development for the sector, in accordance with existing standards and guidelines and including clarifying funding requirements, prioritization and the cluster's contribution to overall humanitarian funding considerations.
- Advocacy, both identifying concerns and undertaking advocacy activities.
- Monitoring and reporting on the implementation of the cluster strategy.
- Contingency planning/preparedness/capacity building in situations where there is a high risk of recurring or significant new disasters (and where there is capacity to do this).

- Periodically review and update the preparedness plan for WASH interventions in Rwanda.
- APAs and Contingency Planning for WASH response in emergencies will be developed by the Emergency-WASH TWG outside of this document.
- Ensure the implementation of this preparedness plan during the response and recovery

ANNEXES

Risk Scenarios

Scenario 1: Earthquake, Landslides and mass movements

A three days repeating earthquake between 6.2-7.5 of magnitude on the Richter scale and centered on the Lake Kivu coast hits one part of the city of Goma and Western region of Rwanda, causing loss of lives and damage in Goma city and some sectors of Rubavu, Rustiro and Karongi district, affecting 500,000 people. The magnitude of the damage will require a regional response that will delay and complicate assistance. In hilly and mountainous areas, most roads and many bridges will be blocked by landslides and unusable for many days. In the affected region, 150 deaths would occur, 1000 injured and a planning figure of 100,000 would be displaced to safe areas and need relief assistance. Government capacity would be severely limited and restricted.

Key Impacts: 150 people killed; 200 people severely injured, 800 moderately injured; 100,000 people severely affected or displaced; airport severely affected (requiring several hours to restore Air Traffic Control); major bridges on the main rivers rendered unsafe; administrative buildings severely damaged; more than half the government employees not reporting to work for nearly a week; communications network in the region interrupted for three weeks; water supply for nearly two-thirds of the population affected.

Scenario 2: Floods and storms

Flooding in Rwanda is becoming an annual episode and is likely to occur particularly in the mostly rainy season in the North-Western region of Rwanda. The number of displaced households will exceed 6,000. Immediate destruction of infrastructure and of water and sanitation facilities is anticipated with likely outbreaks of water-borne diseases, affecting some 3,500 people. Internal displacement will exceed more than 2-5km and last more than 4 weeks and thus require camp management support. The floods will disrupt learning activities for some 10,000 school children.

Key impacts: 50 people killed; 350 injured, 6,000 households displaced, 3500 people affected, 10,000 school children not able to attend school; major bridges on the main rivers destroyed; roads in the affected districts rendered dysfunctional; road links to other parts of the country destroyed; the local government offices severely damaged and dysfunctional; local communication network down for a week.

Scenario 3: Drought

The climate change has resulted in Rwanda experiencing recurrent droughts and poor rainfall as never before. In the last two years, with the effects of COVID-19, the communities in Bugesera districts have been more vulnerable to lack of water and food insecurity. As conditions deteriorate, affected communities require interventions that address not only access to WASH programs but also malnutrition, threats to longer-term food security, and the depletion of household assets.

Suppose that drought will last for a period of additional six months. This will cause a minimal hunger and famine to an estimated 5,000 number of people; this will further affect the performance of school going children at an estimated drop out of 1,000 students. Due to hunger and famine that will hit the district and some people will migrate to safe places, subsequently this will increase the informal settlement areas in neighboring districts which increase many problems such as unhygienic conditions due to increased pressure on existing sanitation facilities. Food insecurity will be observed and spread to affected communities. About 800 people are expected to migrate to neighboring districts. As the period increases to one year or more, the number of affected communities and the consequences increase respectively.

Annex 2: Proposed assessment tool to be used in emergency WASH

S/N	Data aspects	Checklist
	Means of verification	Physical assessment Contacts of local leaders Media on the ground
1	Effects	Causes of the effects (what has triggered the needs: Drought, floods, landslides, etc) What was the magnitude of the triggering event (High, medium, small)?
2	Affected people	- Number of affected families - Number of people - Number of Children under 5 - Number of unaccompanied and separated children - Number of pregnant women - Number of people with chronic illness - Number of elderlies above 65 - Number of people with disabilities (Reduced mobility, vision, mental illness) - Affected area: District, Sector, Cell, villages - Number of affected people by category and per area - Number of men and women:
3	WASH services affected	**Water supply** - What percentage of the affected people has access to clean drinking water? (7.5 to 15 liters/person/day) (in %). - Primary source of water (Piped water system/tap water, pond, spring, stream/river, supplied by tanker, Hand pump…) - Condition of the water source (working, Damaged/repair required for minimum, contaminated, Destroyed or turbid) - Alternative water source available (If yes; distance from affected communities, water quality, additional facilities required to supply)

		- Do affected families have water container at household level used for drinking water storage? **Sanitary and Hygiene facilities** - What percentage of affected population has access to functioning sanitary facilities (e.g. Latrines) in percentage (%) - Number of family needing hygiene supplies (eg. hygiene kit required):……