



QUARTERLY NARRATIVE PROGRESS REPORT 2020/Q1

Purpose: This report aims at assessing the achievements against the planned results during the quarter as well as risks and issues that could affect project implementation.

Project title:	Strengthening National and Local Disaster Risk Management Capacity, Resilience and Enhancing Preparedness and Early Warning System in Rwanda	
Project number:	00117911 “Strengthening DRM Capacity in Rwanda (METEO)”	
Implementing Partner(s)	Rwanda Meteorology Agency (METEO)	
Project/UNDAP/CPD outcome:	UNDAP Outcome 2; UNDP-CPD Outcome 2; By 2023 Rwandan institutions and communities are more equitably, productively, and sustainably managing natural resources and address climate change	
NST priorities:	NST1 Priority 7: ‘Sustainable Management of Environment and Natural Resources’ under the ‘Economic Transformation’ Pillar	
SDGs:	11, 13	
Project start date:	01/01/2019	
Project end date:	30/06/2023	
Reporting period:	Q1/2020	
Project budget (USD):	TRAC (core):	\$ 2,765,065
	Government of Rwanda (in kind):	\$ 200,000
	Total project budget:	\$ 2,965,065

Prepared by (name & institution):

Munyarugero Jean, Meteo Rwanda

Approved by (name & title):

Gahigi Aimable, Director General

Date: 20/04/2020



Results-based Reporting

Copy the table below and repeat for each project output.

OUTPUT 1: Institutions at national, district and community level have improved technical capacities to reduce risks, manage and respond to natural disasters and limit gender-differentiated impacts
Results achieved and evidence <i>(Explain the achievements at the output level. Make sure to provide evidence, related data and how it was collected):</i>
It is expected that under the output I Meteo Rwanda will automate the meteogram that currently are being produced manually and on paper; and a training in Quality Management System (QMS) in relations to Multi-hazard Early Warning System (MHEWS) will be organised to ensure stakeholders understand the standards and practices on MHEWS. However, the output I was put on hold due to availed budget and basic activities that should first be accomplished in the output 3 related to climate data preparation into appropriate formats usable to demonstrate the hazards and its liklyhood.
Completed activities that contributed to the above achievements <i>(Explain which activities took place and how they contributed to the achievement of the output. Photos or reports can be added as annex):</i>
1.9 Support to developing and customizing Multi Hazard EWS and sharing best practices
Meteo Rwanda resolved not to tender for the development of the meteogram. There is internal capacity to do it, but staff (as of now two staff, one from the weather forecasting team and another from the data management are assigned) who would perform this task were busy organising the basic activities related to data preparation and setting/updating computer software to enable its development. It is envisaged that the first Meteogram prototype output should be out by early June 2020.
Change in plan <i>(what results were not achieved as planned and why):</i>
Meteo Rwanda chose not to outsource the development of the meteogram. With the existing capacity, this task will be assigned to some selected staff, this will rejuvenate their knowledge hence improve their confidence.

OUTPUT 3: Enhanced Multi Hazard Early Warning Systems (MHEWS) to enable effective preparedness, response and recovery
Results achieved and evidence <i>(Explain the achievements at the output level. Make sure to provide evidence, related data and how it was collected):</i>
Installation of weather radar display to MoE Enabling the effective preparedness, response and recovery was achieved through the expansion of the weather radar display to the Ministry of Environment (MoE) where the display is accessible in real-time by the office of Environmental and Climate Change Division for their proper planning in environmental endeavours. The Ministry of Environment is among the principal stakeholders in disaster prevention hence is seen as a long-term responders in disaster reduction.

Meteo Rwanda engineers reported that they successfully installed all the necessary equipment (Network connection accessories, installation of required computer software and produce the visualisation of the radar from this production site.

The stage to follow would be training MoE staff on use and Interpretation radar service and products.

Weather forecasts and dissemination

The named Lake Kivu Challenge—A drone competition Event happened in February 2020

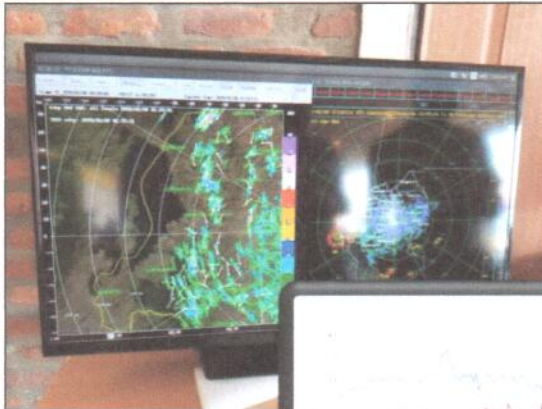
Meteo Rwanda has greatly contributed to the third Africa drone flying challenge dubbed “Lake Kivu Challenge” in Karongi District in February 2020. The competition seeks to bridge the gap between the available technology, the African use cases, and the safety aspects of implementing high frequency services that can make a difference in isolated communities in the region.



Courtesy: Photo internet

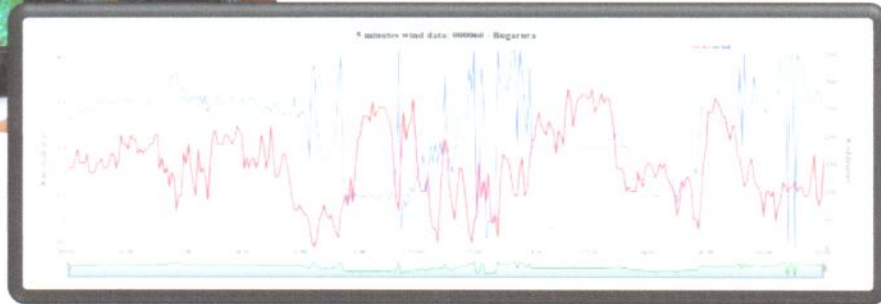
The Lake Kivu Challenge event invites drone companies to help advance the safe implementation of beyond line of sight operations and hard to reach communities also allows provide from around the world to demonstrate their capabilities for 3 initial applications: delivery, sample pick up (i.e., picking up blood samples for lab testing) and search and rescue.

The aim of the flying competitions was to identify companies that are ready to provide delivery and mapping services around Lake Kivu, Specifically in Karongi District.



Meteo Rwanda was there present providing weather conditions, especially winds, rainfall and visibility information. Wind being one of the strongest external factors that challenge drone performance can knock drones, move them out of the line of visibility, and even cause damaging crashes.

Various weather information products availed for the Lake Kivu Challenge event



Further touches on the draft document for Climate Normals

The developed climate normals which is to be validated by different users at central level shall contribute to the enhancement of the multi-hazards early warning system. A team of Meteo Rwanda staff have finalised the computation and documentation of remained climate parameters. As the document was ready, COVID-19 lockdown made it impossible to convene stakeholders to validate it. Given its importance, Meteo Rwanda will identify stakeholders who can read and provide their comments online so that the final validated document can be ready by mid-August 2020.

Completed activities that contributed to the above achievements *(Explain which activities took place and how they contributed to the achievement of the output. Photos or reports can be added as annex):*

3.3. Upgrade national disaster communication system and provide real-time early warnings

This activity requires consultations among relevant institutions, Meteo Rwanda was not able to implement it due to the measurement set to curb the COVID-19 spreading. The video conference means will be used where possible.

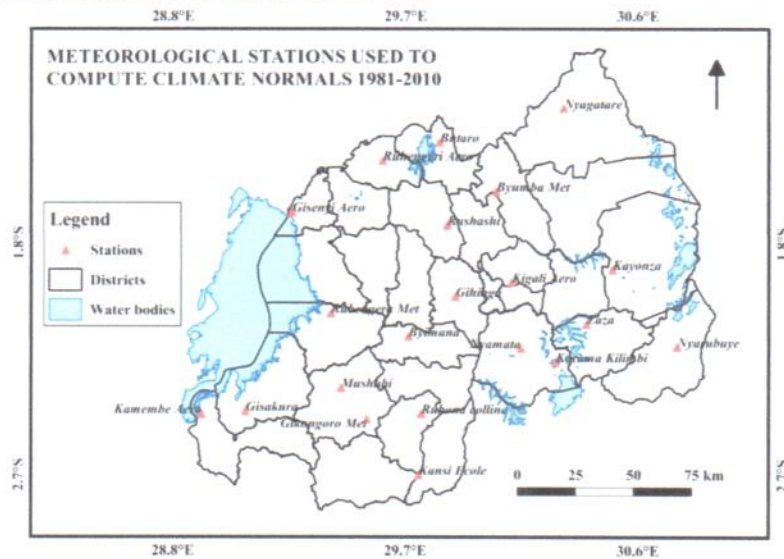
3.4. Support to improve the generation of weather forecasts and dissemination

Continue the development of the Early Warning System (EWS) Impact Tables (Wind parameter)

The weather radar products was being displayed at 4 sites. Under the support to improve the generation of weather forecasts and dissemination, Meteo Rwanda expanded the display at the Ministry of Environment and is being visualised by dedicated staff.

3.5. Support the improvement of a national climate database providing accurate data and information

Final touches on Climate Normals document



Climate database had data which were only kept but lacking analysis resulting into critical information such as climate normals. The computation of normals had attained at a good staff, and currently, we got another opportunity to finalised the remained parts. To date, the final document of Rwanda Climate Normals (1981-2010) has been drafted. The computed climate normals are means of daily; monthly; seasonal and annual for rainfall using the 21 meteorological stations distributed countrywide.

The normals for temperature are means of daily; monthly and annual minimum, maximum and mean temperatures over 18 meteorological stations. In addition, highest and lowest ever recorded rainfall and temperature as well as annual counts of days with rainfall exceeding thresholds are provided to the users. The next stage will that of presenting the results to stakeholders and users at central level during the next quarter.

Pay for the data backup service

Data was regularly backed up at the National Data Centre to ensure they are in a safe place, therefore, assured they will be used by future generations.

Conduct data rescue

Meteo Rwanda keeps records of data collected and written of on paper forms. These are being destroyed over time and are not easily retrievable into digital form.

Meteo Rwanda recruited 10 staff (6 women and 4 men) on fixed term contract to search and sort the records from their current storage, inventory them, scan, do some calculations required and do key entry into the digital system.

These staff started with March 2020 but unfortunately, the COVID-19 pandemic hampered their work as the government decided lockdown. Now their stay at their home until new order. In the event that the lockdown continues, it is envisaged to find an alternative for them to work from their homes.

Maintenance activities

3 Weather Radar terminals were maintained. Meteo Rwanda Headquarters, Kanombe Airport and MINEMA sites.

This is part of required periodic visit of the sites to conduct a number of technical interventions to ensure all the installations and the system is working properly.

During the visit, technicians processed with routine and basic maintenance, repaired the Kanombe terminal which were not receiving data and replaced a damaged cable at Meteo Rwanda Headquarters.

Acquisition of mobile phones for weather and climate data acquisition and transmission

Currently Meteo Rwanda is working with 132 volunteer weather observers who collect and transmit observed data, using their mobile phones, into the recently developed system under this project's funds; and the staff who are involved in the process. Some Volunteer observers' feature mobile phones which are event not well functioning and which could not accommodate the phase two features of the above system. Meteo Rwanda wished to provide appropriate mobile phone to enable the system to work adequately. This activity was planned in the quarter three (3) considering the time required to complete its procurement process. Envisaging handing over these phones to volunteer observers while celebrating the World Meteorological Day on 23rd March 2020 which was cancel due to the COVID-19 Lockdown. Meteo Rwanda was authorised to acquire them (165 mobile phones) in quarter one as there was a government framework, which allows government institutions to directly acquire them from the manufacturer.

Change in plan (what results were not achieved as planned and why):

The corona virus pandemic hampered the implementation of all the activities which require gathering, travels and some office work.

Among others, these are the activities which were not implemented:

- 1) Weather stations maintenance
- 2) Meetings to validate developed documents
- 3) The follow up and continuation of the CAP
- 4) The celebration of the World Meteorological Day and the distribution of mobile phones to Weather volunteer observers
- 5) Development of the impact tables
- 6) The data rescue exercise, etc

Overall Challenges, Recommendations and Lessons learnt

Raise any challenges that require attention, and lessons learnt / best practices that can be shared within the project and with other projects.

Key challenges and risks, recommendations (Identify challenges and risks and recommended solutions):

1. COVID-19 jeopardising office work and meeting	Exploit and set up alternatives such as using software to enable working online
2. Recruitment of a Program Manager which is taking time	Nominate a staff to act an Interim while waiting for the restrictions to be removed

Lessons learned and/or good practices

New risks such as COVID-19 which was not thought of can affect the project implementation. There should be envisaged alternatives to immediately implement to avert project delays.

Leave No One Behind, Gender, Knowledge & Innovation, Environment: *(Share any achievements or lessons learnt, good practices on Leave None Behind, gender equality and women's empowerment, Innovation and Environment (Reports that will include a section on "Environment" are only those for projects focusing on socio-economic development)*

Climate Normals which waits for validation will provide information to men, women without distinction to inform their decision making.

Among the recruited team to conduct data rescue is gender sensitive, it is made of 60% women and 40% men.

The COVID-19 lockdown and the stay home measures inspired us to develop a platform to use in data rescue whereby at most 2 people work from office while allocating tasks 10 people who work from their homes.

Results Framework Summary

Monitor the indicators by quarter and record relevant progress. Make sure to add the source of data.

Outcome / Output	Indicator	Baseline	Project Achievement (Y1/2019)	Project target (Q2/2020)	Q1 Achievement	Q2 Achievement	Q3 Achievement	Q4 Achievement
Outcome: Increasing resilience to climate and natural disaster through evidence-based disaster preparedness and effective early warning system								
Project output 1: Institutions at national, district and community level have improved technical capacities to reduce risks, manage and respond to natural disasters and limit gender-differentiated impacts	Automation process of forecast preparation	Manual system	N/A	Automated Meteorogram	This activity was not done, the team assigned was busy conducting data preparation. It is expected to be ready by August 2020			
	New Channel for weather warning dissemination	Broadcast (TV and Newspapers), Social media	4 MINEMA staff trained on	Common Alerting Protocol operational in Rwanda	This required to consult various institutions but unfortunately COVID-19 lockdown			

		and Text messages	CAP operations		measures jeopardised its implementation.			
	Percentage of disasters from extreme weathers warned 24 hours before occurring	N/A	Climate data compilation and thresholds for extremes computed for rainfall	Impact tables relevant to Disaster, Agriculture and Health validated	This activity required a group work. It was not implemented due to the lockdown to curb COVID-19. It is envisaged to organise online collaboration to ensure this is delivered			
Output 3: Enhanced multihazard early warning systems to enable effective preparedness, response and recovery	Percentage of disasters from extreme weathers warned 24 hours before occurring	No existing baseline Disaster Communication system data (2018)	90% Extreme weather events warned before 24 hours	90% Extreme weather events warned before 24 hours	Meteo Rwanda provided seasonal forecast with above normal rainfall, 2 warnings in January and 6 th March 2020 with which local administration used to make decisions, https://twitter.com/MeteoRwanda/status/1236246117987254273 ; https://twitter.com/Radioty10rwanda/status/1236954117563723779			
					Analysis of the performance of the warnings will be			

	Updates of the National Climate data bank	Back up on portable hard drivers	Subscription to Cloud storage for climate data backup	Safe and Updated data bank	Climate data are backed up twice a day on cloud, now February if fully done while March 2020 is ongoing and this service is being paid after verifying that the backup is up to date			
Performance of volunteer weather stations	Manual data transmission system	The system phase I was tested and is being used by volunteer observes	Daily data from All volunteer manned stations transmitted via the system	The phase one is operational_ https://data.meteorwanda.gov.rw/web/login.php , though there are few features to adjust which delayed the acceptance stage and the next phase.				

Financial Summary

Quarterly financial report						Annual financial summary		
	Q1 Budget allocation (USD)	Q1 Expenditure (USD)	Balance for Q1 (US\$)	Delivery rate for Q1 (%)	Notes <i>(Explain reason if there are differences between budget and expenditure)</i>	Annual Budget allocation (USD)	Annual expenditure by end of Q4 (USD)	Delivery rate at end of Q4 (%)
Output 1	-	-	-	-				
Output 3	45,628	15,389	30,239	34%	Meetings which were to be convened were cancelled due to COVID-19			
Project Management Support	4,372	2,306	2,067	53%	The Program Manager is not on board yet, he balance is due to his salary budgeted for			
TOTAL	50,000	17,695	32,306	35%				

Next Quarter Work Plan (QWP)

Please provide Q2 work plan.

List of Annexes

Below are potential contents that can be annexed to the report (optional but recommended to have at least one annex).

a) Success Stories

N/A

b) Key studies

N/A

c) Other reports / documentation (e.g. field reports)

Report on climate normals document finalization:

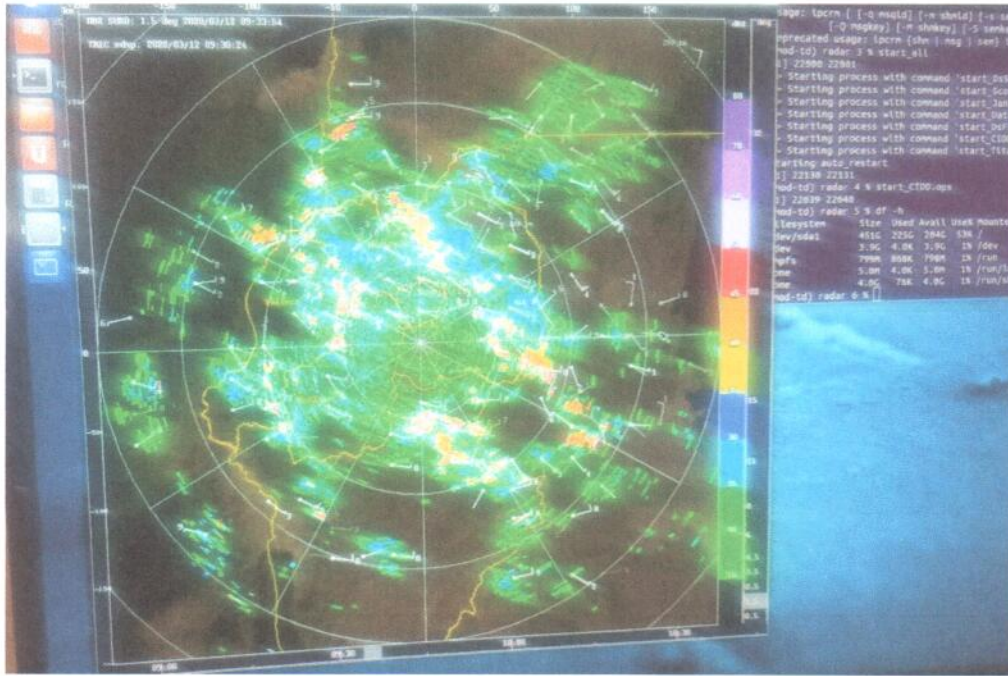
<http://mis.meteorwanda.gov.rw/sites/default/files/2020-04/Report%20normals.pdf> Installation of a radar terminal at the Ministry of Environment (MoE)

<http://mis.meteorwanda.gov.rw/sites/default/files/202004/Report%20Moe%20radar%20display.pdf>

d) Photos



HDMI cable at is almost damaged at Meteo Rwanda Radar terminal site



RadarCIDD display after maintenance



Kigeme relocated weather station

e) Links to articles etc.

Drones Competition_Lake Kivu Challenge” event: <https://www.youtube.com/watch?v=SBGyfsO5fOk>

Local authorities meeting to prevent disaster subsequent to released weather warning by:

<https://twitter.com/MeteoRwanda/status/1236246117987254273>

<https://twitter.com/Radiotv10rwanda/status/1236954117563723779>