MINISTRY OF NATURAL RESSOURCES RWANDA METEOROLOGY AGENCY

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SEASONAL FORECAST FOR SEPTEMBER TO DECEMBER (SOND) 2017, N°47

September to December (SOND) constitutes an important rainfall season over the equatorial sector of the Greater Horn of Africa (GHA) region as well as over Rwanda. The National consensus climate outlook for the September to December 2017 season indicates increased chance for normal to above normal rainfall over western, south western and north western parts of Rwanda. There is also a likelihood of normal to below normal rainfall over eastern, Kigali city, north eastern and south eastern parts of the country.

The Key factors expected to influence the regional climate during the SOND2017 season include the evolution of Sea Surface Temperature (SST) anomalies over the tropical Oceans and anomalies in monsoonal wind circulation. The influence of the ocean processes will be modulated by regional circulation systems, topography and large inland water bodies.

The Forty Seventh Greater Horn of Africa Climate Outlook Forum (GHACOF47) was convened from 21-22 August 2017 at the Zanzibar Beach Resort, Zanzibar, United Republic of Tanzania by the IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with WMO, AfDB, UNDP, USAID, DFID and other partners to formulate a consensus regional climate outlook for the September to December 2017 rainfall season over the region. The GHA region comprises Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda. GHACOF47 was preceded by a training workshop for the National climate scientist that was held from 14 to 19 August 2017 in Zanzibar, United Republic of Tanzania to develop national and regional climate outlooks for the season.

Guidance and valuable forecast inputs were drawn from a wide range of sources including the World Meteorological Organisation's Global Producing Centres (WMO-GPCs), Met Office, the International Research Institute for Climate and Society (IRI), African Centre of Meteorological Applications (ACMAD), the US Geological Survey (USGS) and the National Meteorological and Hydrological Services (NMHSs) of the Greater Horn of Africa.

The implications of the factors expected to influence the evolution of the regional climate during the SOND 2017 rainfall season, including Sea Surface Temperature (SST) anomalies over the tropical oceans, and the predicted near neutral phase of the Indian Ocean Dipole (IOD)mode, and neutral ENSO conditions over the equatorial Pacific Ocean. The influence of these large-scale processes could be modulated by regional circulation systems, topography and large inland water bodies. The historical rainfall and temperatures data of 34 years from 13 representative stations across the country were used.

From the Statistical and Dynamical analysis done for each zone, the seasonal forecast is as follows:

The Eastern Province (Ngoma, Gatsibo, Bugesera, Kirehe, Rwamagana, Kayonza and Nyagatare), Kigali City (Nyarugenge, Kicukiro and Gasabo), Northern Province (Rulindo, Gicumbi and Gakenke) and Southern Province (Kamonyi, Muhanga, Ruhango, Nyanza, Huye, Gisagara) are expected to have a normal to below normal rainfall during season.

The Western Province (Rusizi, Nyamasheke, Karongi, Rutsiro, Rubavu, Nyabihu and Ngororero), southern province (Nyamagabe and Nyaruguru) and Northern Province (Musanze and Burera,) are expected to have normal to above normal rainfall.

The Onset is expected to start between second week of September to first week of October 2017 ranging from western to eastern part of Rwanda respectively.

The cessation is expected to be ranging from third week of December 2017 to first week of January 2018 from eastern to western part of the country respectively.

The Rainfall distribution according to the outlook forecast map below is divided into two categories namely: normal to below normal shaded in yellow colour and normal to above normal rainfall shaded in green colour.

OUTLOOK FOR SEPTEMBER TO DECEMBER 2017



Normal= 350-450 mm

Below Normal = < 350mm

Above Normal=>450mm

N.B This outlook is supplimented by forecast updates given at different timescales (6-hours, 24-hours, 5-days and 10-days forecasts and regular monthly updates) and advisories issued by Rwanda Meteorology Agency.

Done on 7th September, 2017.

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