



SEASONAL FORECAST FOR SEPTEMBER TO DECEMBER (SOND) 2021, N°59

September-October-November-December (SOND) form one of the main important rainfall season for Rwanda.

The National consensus on climate outlook for the September to December 2021 season indicated higher chances of normal conditions over most parts of the country and near normal to slightly below normal rainfall conditions over southwestern parts, Amayaga, Bugesera, Kirehe and Ngoma districts.

The Key factors expected to influence rainfall patterns during SOND 2021 season are colder than normal Sea Surface Temperature (SST) in the global oceans and negative Indian Ocean Dipole (IOD). These conditions of cold SSTs are expected to persist throughout the season. The negative IOD associated with La Nina episodes are unusually characterized by coldness in sub-surface waters of both Equatorial Pacific and Indian Oceans and they are linked with reduced rainfall over the East Africa including Rwanda due to reduced advection of moisture from the ocean to the land. However, regional circulation systems, topography and large inland water bodies will modulate the influence of the ocean processes in order to produce rainfall in different parts of the region. The selected analogue years for SOND 2021 are 2016, 2010 and 1996.

The amount of seasonal rainfall forecast was categorized according to the districts as follows:

Rainfall less than 300 millimetres

Rainfall less than 300 mm is expected in Eastern Province over eastern parts of Kirehe and Kayanza district, central and southern parts of Gatsibo and Bugesera districts.

Rainfall ranging between 300-400 milimeters

Rainfall ranging between 300 and 400 mm is expected in the remaining parts of Eastern Province, in Kigali City except northern parts of Nyarugenge and Gasabo districts and in Southern Province mainly over Gisagara, Huye, Nyanza, Ruhango districts, eastern parts of Nyaruguru and southern parts of Kamonyi and Muhanga districts.



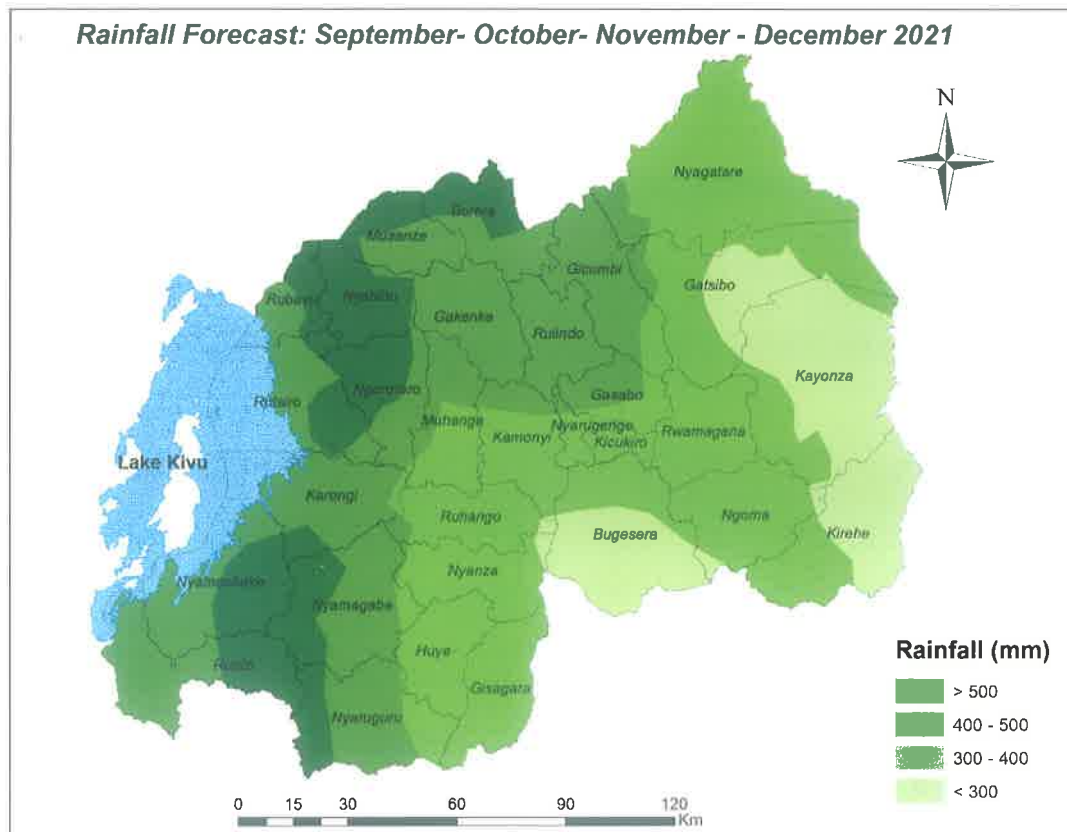


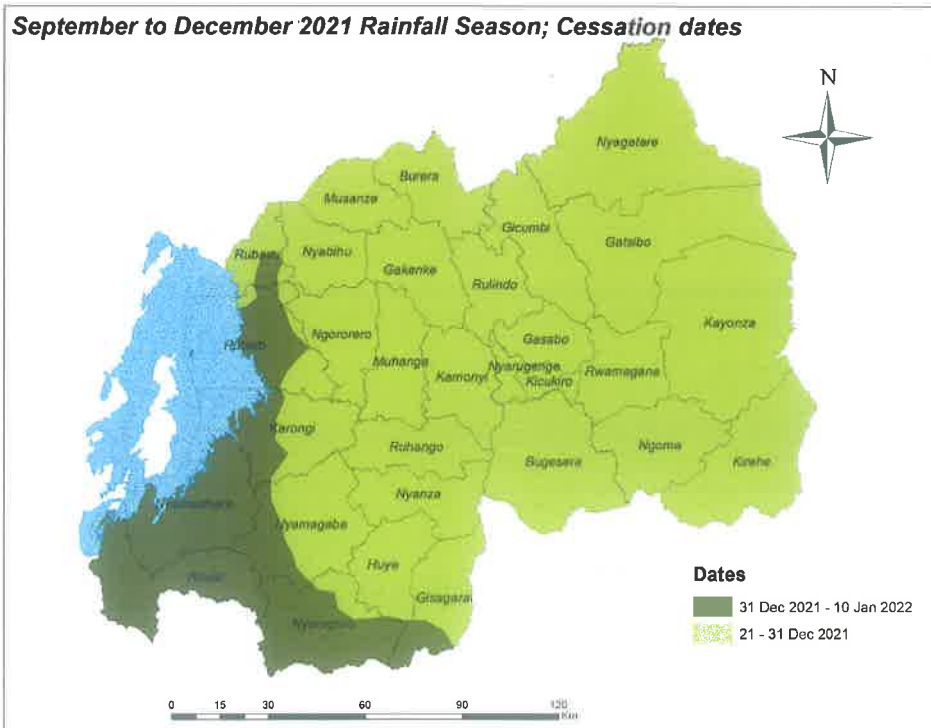
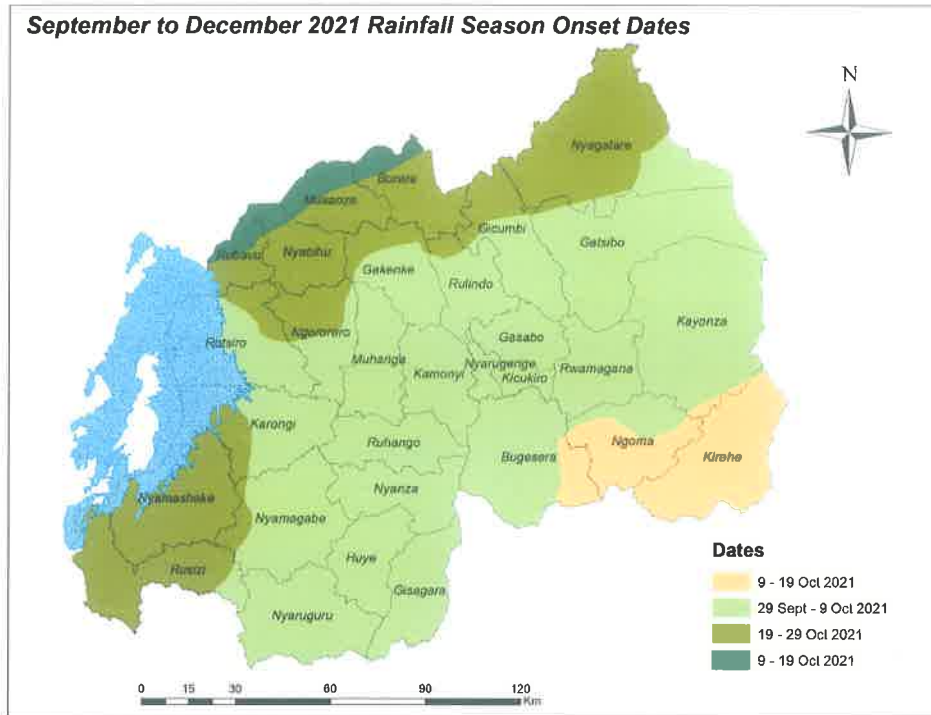
Rainfall ranging between 400-500 millimeters

The rainfall ranging between 400 and 500 mm is expected over Northern Province except in northern parts of Burera and Musanze districts where both districts are expected to receive enhanced rainfall above this range. The same range of rainfall is expected over northern parts of Gasabo and Nyarugenge districts of Kigali City. In Southern Province, this range of rainfall is expected over northern parts of Kamonyi and Muhanga districts and in eastern parts of Nyamagabe and Nyaruguru districts while in the Western Province, the same amount of rainfall is expected over Karongi, western parts of Rubavu, Rutsiro, Nyamasheke and Rusizi districts and over eastern parts of Ngororero districts.

Rainfall above 500 millimetres

Rainfall above 500 mm is expected in Western Province over Nyabihu district, eastern parts of Rusizi, Nyamasheke, Rutsiro and Rubavu districts and over northern and western parts of Ngororero district. It is also expected in Northern Province over northern parts of Musanze and Burera districts.







SOND 2021 Onset and Cessation

The onset (start of the seasonal rainfall) is expected towards the second (2nd) week of September 2021 in extreme north western parts of the country, third and fourth week between (19th-29th September) is expected in most parts of the North and south western parts of the country, most parts of the country the onset is expected between 29th September to 9th October and small parts of the south eastern part of the country the onset is expected between 9th to 19th October 2021.

The early cessation (end of seasonal rainfall) is expected between 21st and 31th December in most parts of the country whereas the late cessation is expected from 31th December to 10th January 2021 in most of Western parts of the country including southern parts of Nyaruguru, Nyamagabe and Gisagara districts.

Expected rainfall amount in millimeters, onset and cessation dates of SOND 2021

Province	District	Expected rainfall (mm)	Seasonal onset dates	Seasonal cessation dates
City of Kigali	Nyarugenge	300 - 400 and 400-500 (northern)	29 Sept - 9 Oct.	21-31 Dec.
	Gasabo	300 - 400 and 400-500 (northern)	29 Sept - 9 Oct.	21-31 Dec.
	Kicukiro	300 - 400	29 Sept - 9 Oct.	21-31 Dec.
North	Musanze	400 -500 and >500 (northern)	9-29 Sept.	21-31 Dec.
	Gicumbi	400 - 500	19 Sept - 9 Oct.	21-31 Dec.
	Rulindo	400 - 500	19 Sept - 9 Oct.	21-31 Dec.
	Burera	400 -500 and >500 (northern)	9-29 Sept.	21-31 Dec.
	Gakenke	400 - 500	29 Sept - 9 Oct.	21-31 Dec.
South	Kamonyi	300-400 and 400-500 (northern)	29 Sept - 9 Oct.	21-31 Dec.
	Muhanga	300-400 and 400-500 (northern)	29 Sept - 9 Oct.	21-31 Dec.
	Ruhango	300 - 400	29 Sept - 9 Oct.	21-31 Dec.
	Nyanza	300 - 400	29 Sept - 9 Oct.	21-31 Dec.
	Huye	300 - 400	29 Sept - 9 Oct.	21-31 Dec.
	Gisagara	300 - 400	29 Sept - 9 Oct.	21 Dec-10 Jan.
	Nyamagabe	400-500 and >500 (western)	19 Sept - 9 Oct.	21 Dec-10 Jan.





	Nyaruguru	400-500 and >500 (western)	29 Sept - 9 Oct.	21 Dec-10 Jan.
East	Bugesera	<300 (eastern, central) 300- 400 (remaining parts)	29 Sept - 9 Oct.	21-31 Dec.
	Kirehe	<300 (eastern, central) 300- 400 (remaining parts)	9-19 Oct.	21-31 Dec.
	Gatsibo	<300 (southern, central) 300- 400 (remaining parts)	29 Sept - 9 Oct.	21-31 Dec.
	Kayonza	<300 (eastern, central, northern) 300- 400 (remaining parts)	29 Sept - 9 Oct.	21-31 Dec.
	Rwamagana	300 - 400	29 Sept - 9 Oct.	21-31 Dec.
	Ngoma	300 - 400	29 Sept - 9 Oct.	21-31 Dec.
	Nyagatare	300 – 400 and 400 - 500 (southwestern)	29 Sept - 9 Oct.	21-31 Dec.
West	Nyabihu	>500	9-29 Sept.	21-31 Dec.
	Rubavu	400 -500 and <500 (eastern)	9-29 Sept.	21 Dec-10 Jan.
	Rutsiro	400 -500 and <500 (eastern)	19 Sept -9 Oct.	21 Dec-10 Jan.
	Karongi	300-400	19 Sept -9 Oct.	21 Dec.-10 Jan.
	Ngororero	400 -500 and <500 (northern)	19 Sept -9 Oct.	21-31 Dec.
	Nyamasheke	400 – 500 and < 500 (eastern)	19-29 Sept.	31 Dec-10 Jan.
	Rusizi	400 – 500 and <500 (eastern)	19 Sept -9 Oct.	31 Dec-10 Jan.

THE EXPECTED IMPACTS IN VARIOUS SECTORS

The expected near normal rainfall during September to December 2021 rainfall season may lead to extreme weather phenomena such as dry spells, localized flooding, landslides, strong winds and other related weather extremes events in some parts of the country.

Based on the seasonal prediction of September-October-November-December (SOND) 2021 (2022A Agricultural season), stakeholders in Agricultural sector are advised to fast track land preparation activities, seed and fertilizers delivery to the farmers, timely planting according to the suggested dates in the table above and encourage agricultural practices that increase soil water holding capacity.





N.B This outlook is supplemented by daily updates of different timescales (24-hours, 3- days 5- days), 10-days forecasts, regular monthly forecast updates and advisories issued by Rwanda Meteorology Agency. For more information contact Rwanda Meteorology Agency (Meteo Rwanda) on toll free number **6080**.

Done on 27th August, 2021

Aimable GAHIGI
Director General

