



COMITE PERMANENT INTER-ETATS DE LUTTE CONTRE LA SECHERESSE DANS LE SAHEL
PERMANENT INTERSTATE COMMITTEE FOR DROUGHT CONTROL IN THE SAHEL
COMITÉ PERMANENTE INTER-ESTADOS DE LUTA CONTRA A SECA NO SAHEL
اللجنة الدائمة المشتركة لمحاربة التصحر في الساحل



Benin, Burkina Faso, Cape Verde, Chad, Côte d'Ivoire, Gambia, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Senegal, Togo

"50 years of commitment to the service of the Sahelian and West African populations" **AGRHYMET Regional Centre**

Seasonal Forecasts of the Agro-hydro-climatic characteristics of the major rainy season in the Gulf of Guinea Countries (PRESAGG - 2024)

March 1, 2024

For the 2024 major rainy season in the southern parts of the Gulf of Guinea countries, overall rainfall deficits are expected on the coastal part of Côte d'Ivoire and surrounding areas in Ghana and Liberia, late to average starting date, early to average ending date, long to average dry spell durations and average to above average flows in the coastal basins of the eastern part and average to below average in the western part.

The PRESAGG 2024 was organized in Accra, Ghana, by the AGRHYMET Regional Climate Centre for West Africa and the Sahel (AGRHYMET RCC-WAS), in collaboration with ACMAD, the National Meteorological and Hydrological Services (NMHS) of the Gulf of Guinea countries and the river basin authorities.

I. Forecast summaries

Seasonal forecasts are based on, among other things, the analysis of the current situation and likely changes in Ocean Surface Temperatures (OST), forecasts from global centers and statistical models from SNMH data and expert knowledge of climate characteristics in the Gulf of Guinea region. Based on the 1991–2020 climatological baseline, the consensus between the different pieces of information analysed made it possible to make the following predictions:

- **Overall below average to average rainfall amounts** are expected in the coastal part of Côte d'Ivoire, southwestern Ghana and southeastern Liberia for the March-April-May and April-May-June 2024 periods. During these periods, however, the amounts of rainfall are expected to be average to above average over southern and central Guinea, northern Liberia, southeastern Ghana, southern parts of Togo, Benin and Nigeria.
- **Late to normal starting dates** for all southern areas of the Gulf of Guinea countries, from south-east Côte d'Ivoire to south-west Nigeria;
- **Early to average** ending of season dates in the bimodal zone of eastern Côte d'Ivoire, of Ghana, Togo, Benin, and western Nigeria;
- Long to average dry spell **durations** are generally expected at the beginning and in the second half of the season over the entire southern strip from southeastern Côte d'Ivoire to southwestern Nigeria. However, over the southwestern part of Nigeria, average to short dry spells are expected at the beginning of the season;
- **Average** to below average flows relatively to the 1991-2020 reference period are expected in the basins of the western part of the Gulf of Guinea countries and average to above average flows are expected in the eastern part. Specifically, flows are estimated to be average to above average in the Mono (in Togo and Benin), Ouémé (in Benin), **Lac-Togo** (in Togo) and in the coastal basins of **Pra** and **Densu** (in Ghana). They are estimated to be below average overall in the coastal basins of **San Pedro, Agneby, Bia** and in the coastal part of the **Comoé** (in Côte d'Ivoire). On the other hand, they are expected to be below average in the coastal basins of **Tano** and **Ankobra** (in Ghana) and in the **Lower Sassandra** (in Côte d'Ivoire).

II. Recommendations

1) With regard to drought

The situations of rainfall deficits in southern Côte d'Ivoire and surrounding areas in Ghana and Liberia, late to average season starting dates, early to average ending dates of season and longer to average dry spell durations point to risks of water deficits in the areas concerned. These water deficits could hinder the establishment and growth of plants and favor the development of insect pests of crops. Considering this situation, and in order to reduce the risk of a decline in agricultural yields, it is recommended to:

- diversify agricultural practices, through the promotion of irrigation, market gardening and the association of crops;
- adopt tillage techniques that conserve soil and water;
- favor short-cycle crop species and varieties that are most tolerant to water deficit;
- increase vigilance against crop pests (armyworm and other insect pests);
- promote and encourage the transfer of risks related in particular to rainfall to protect producers against the effects of crop losses, through the subscription to index-based agricultural insurance;
- promote the establishment of food stocks;
- strengthen monitoring of food and nutrition security in at-risk areas;
- continuously and effectively disseminate and communicate weather and climate information to end-users and decision-makers;
- interact with technicians from the National Meteorological, Agricultural extension and Hydrological agencies for specific information and agro-hydro-meteorological advice on the actions to be taken.

2) With regard to flooding

Coastal basins are areas with a high risk of flooding, due in particular to high levels of human activity, degradation of vegetation cover, rapid soil saturation, non-compliance with buffer zones and lack of maintenance of sewerage networks.

As a result, and despite the late season starting dates, early season ending dates, long dry spell durations expected in the southern parts of the Gulf of Guinea countries, it is not excluded to observe heavy rainfall events that could lead to localized flooding, especially in areas where average to above average runoff is expected. To reduce the risk of flood-related disasters (loss of property and human lives, loss of arable land and crops, water-borne diseases, pollution of water supply systems, etc.), it is recommended to:

- to maintain vigilance and follow the updates of these seasonal forecasts and the short- and medium-term forecasts produced and disseminated by the national meteorological and hydrological services,
- strengthen the monitoring and response capacities of agencies in charge of flood monitoring, disaster risk reduction and humanitarian aid;
- avoid the occupation of flood-prone areas, for homes and crops;
- ensure the cleaning of gutters and the sanitation of built-up areas
- Strengthen safety stocks of food and pharmaceutical products
- Avoid contact with sewage

3) Recommendations to make better use of the rainy season

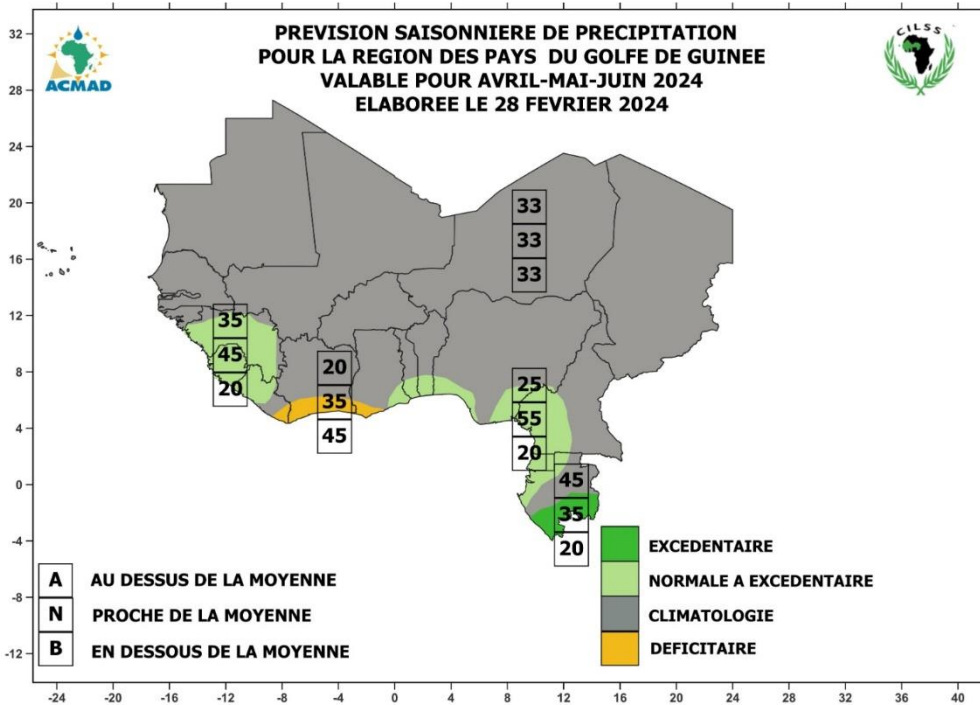
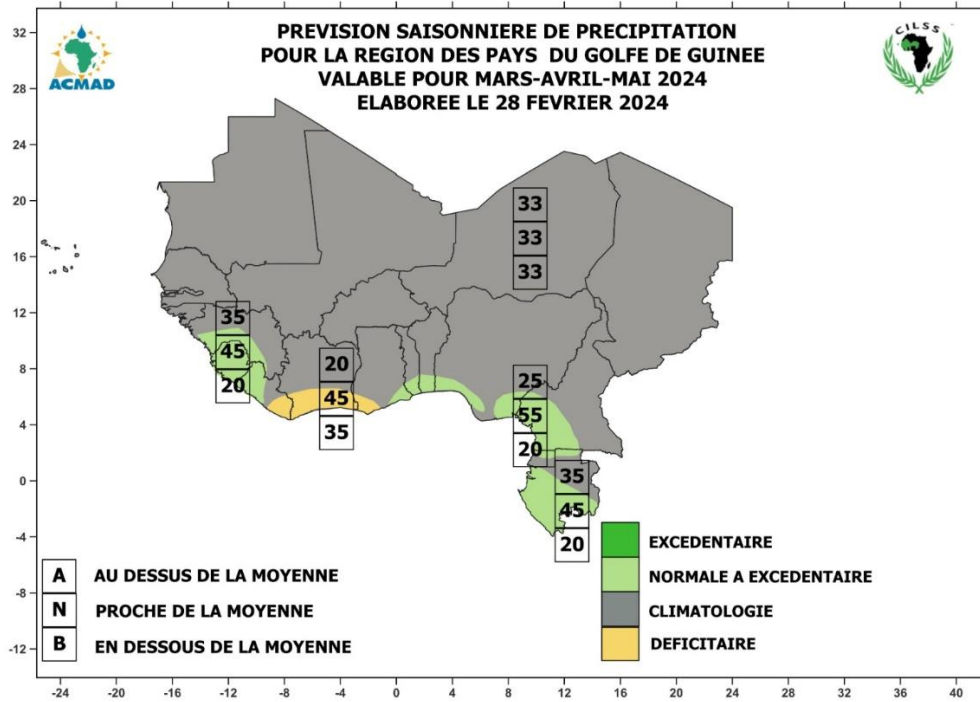
In view of the generally average to below average nature of the major rainy season in the southern parts of the Gulf of Guinea countries in 2024, it is recommended *that agricultural organizations, authorities, water resources managers, projects and NGOs*, support producers, including women and youth, to make better use of the rainy season by:

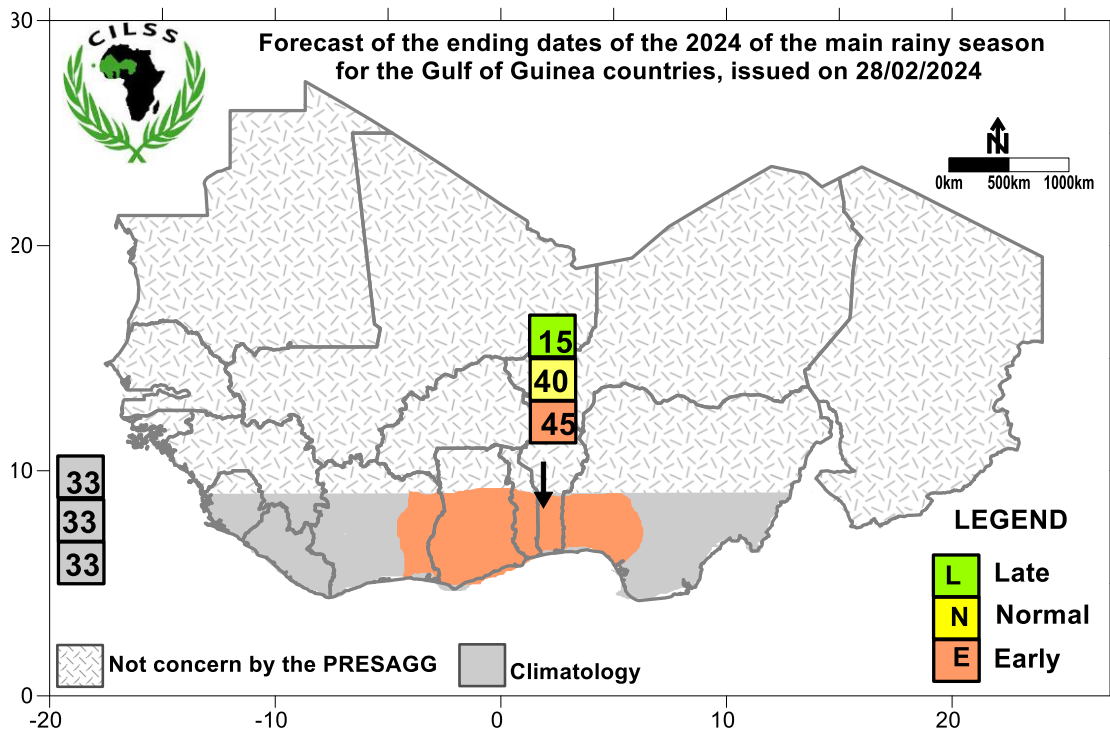
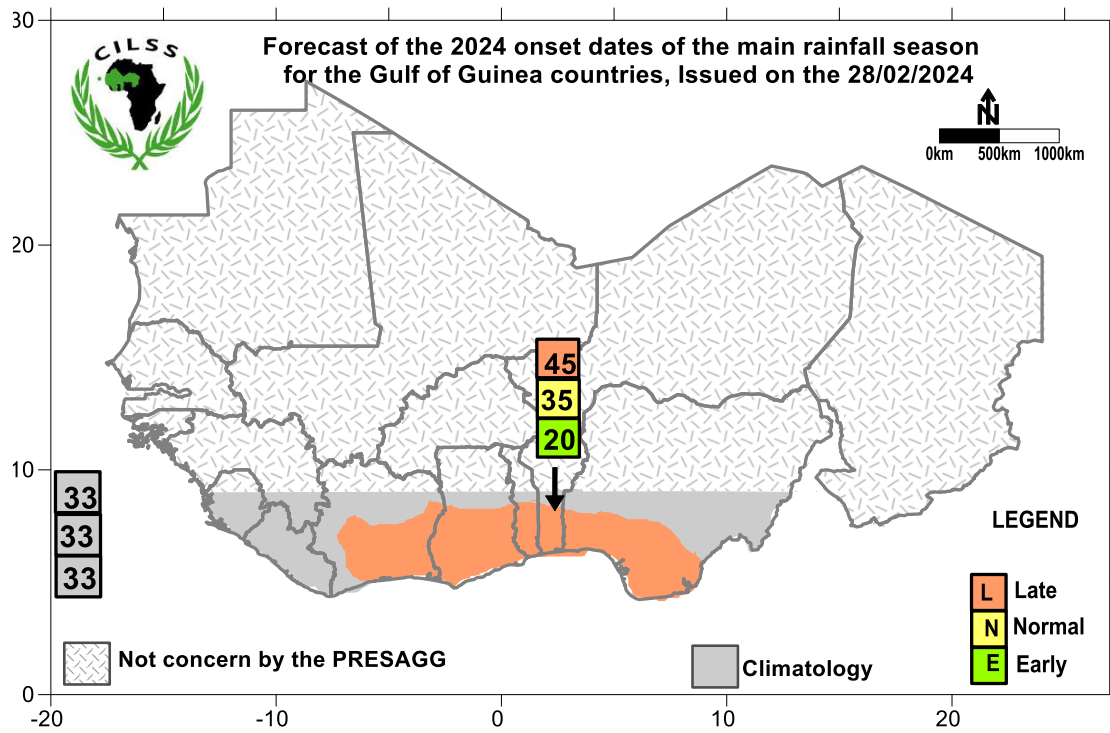
- supporting the deployment of climate-smart techniques to increase crop yields in the face of climate risk factors such as droughts, floods and crop pests;

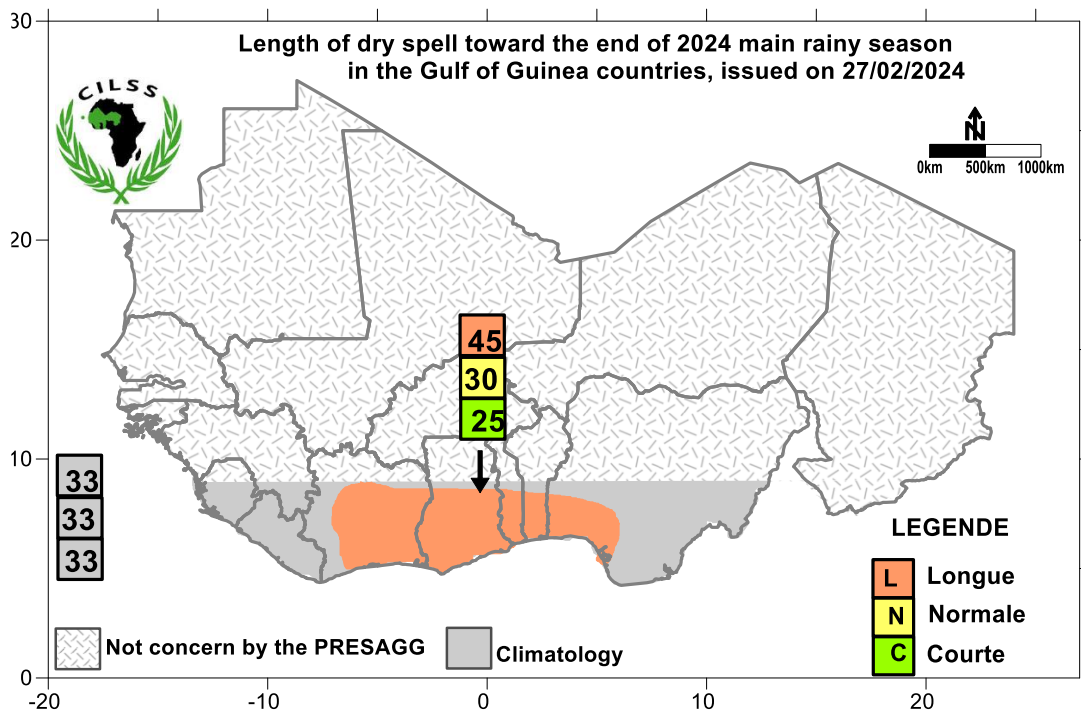
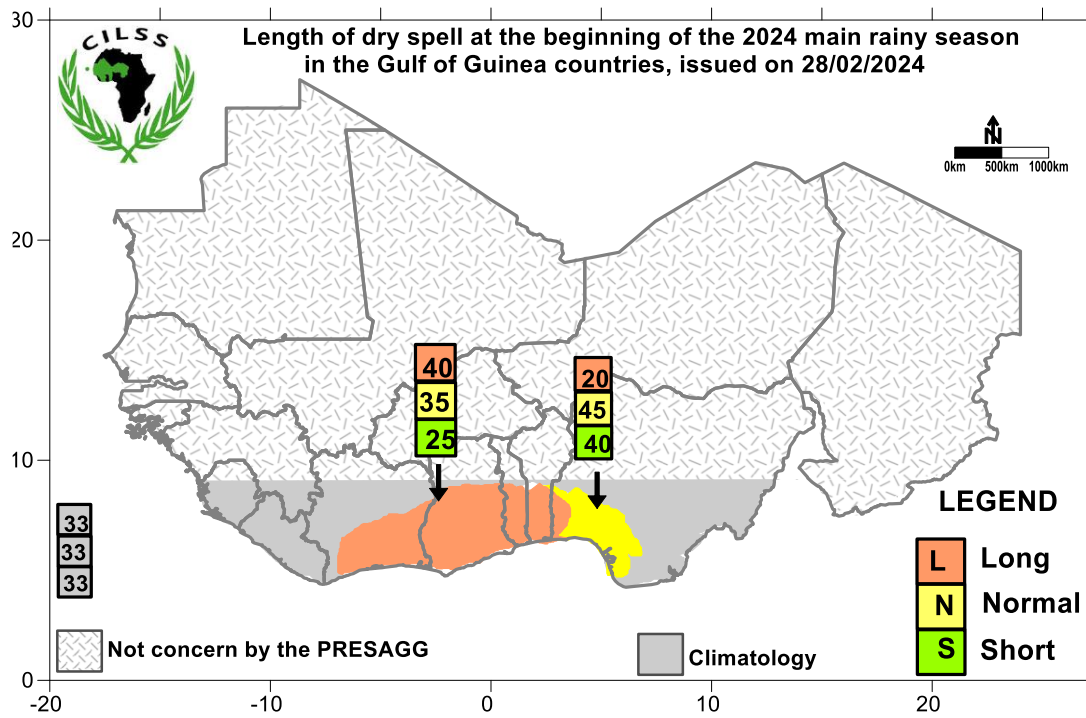
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- strengthening agro-hydro-meteorological supervision and assistance mechanisms for producers, particularly for the benefit of the most committed men, women and young people;
 - facilitating farmers' access to improved seeds, adequate agricultural equipment, micro-finance, index-based agricultural insurance and techniques adapted to situations of limited water availability,
 - taking advantage of average to above average runoff situations to develop fish farming and optimize fishing yields in river basins,
 - Strengthening the dissemination and communication of hydro-climatic information (including seasonal forecasts) and community awareness raising through radio, television, mobile telephony and information platforms for disaster risk reduction.

Finally, it is recommended that stakeholders in the various sectors be attentive to the updates that will be made by AGRHYMET RCC-WAS, ACMAD and the national meteorological and hydrological services throughout the season.

Done in Accra on March 1, 2024
The Forum







Forecasts of flows for the 2024 major rainy season in the countries of the Gulf of Guinea: [Reference 1991-2020](#)

