DEPARTMENT OF WATER RESOURCES
SEASONAL RAINFALL PREDICTION FOR JULY-AUGUST-SEPTEMBER (JAS) 2025
&
SOCIO-ECONOMIC IMPLICATIONS FOR THE GAMBIA

1. Introduction

The Department of Water Resources (DWR) issues the Seasonal Rainfall Prediction (SRP) annually in fulfilment of its mandate to provide timely climate and weather advice to the Government and people of The Gambia. This prediction focuses on rainfall patterns during the critical July–August–September (JAS) period, offering guidance for planning and decision-making across both public and private sectors.

The forecast is particularly important for climate-sensitive sectors including agriculture, aviation, construction, water resources, disaster risk reduction, health, energy, trade, and tourism, amongst others.

DWR uses advanced forecasting tools and current scientific knowledge, drawing on sea surface temperature (SST) analyses, global climate model outputs, and regional expertise to issue the JAS outlook. Based on the 1991–2020 climatological reference period, the following consensus forecast is presented.

2. JAS 2025 Rainfall Prediction

The JAS 2025 seasonal rainfall is expected to range from **average to above-average** across The Gambia, with projected rainfall between **700 mm and 900 mm**. Forecast probabilities indicate:

- **35% chance** of above-normal rainfall
- **45% chance** of near-normal rainfall
- **20% chance** of below-normal rainfall

This suggests a higher likelihood of normal rainfall across the country, although local variations are expected.

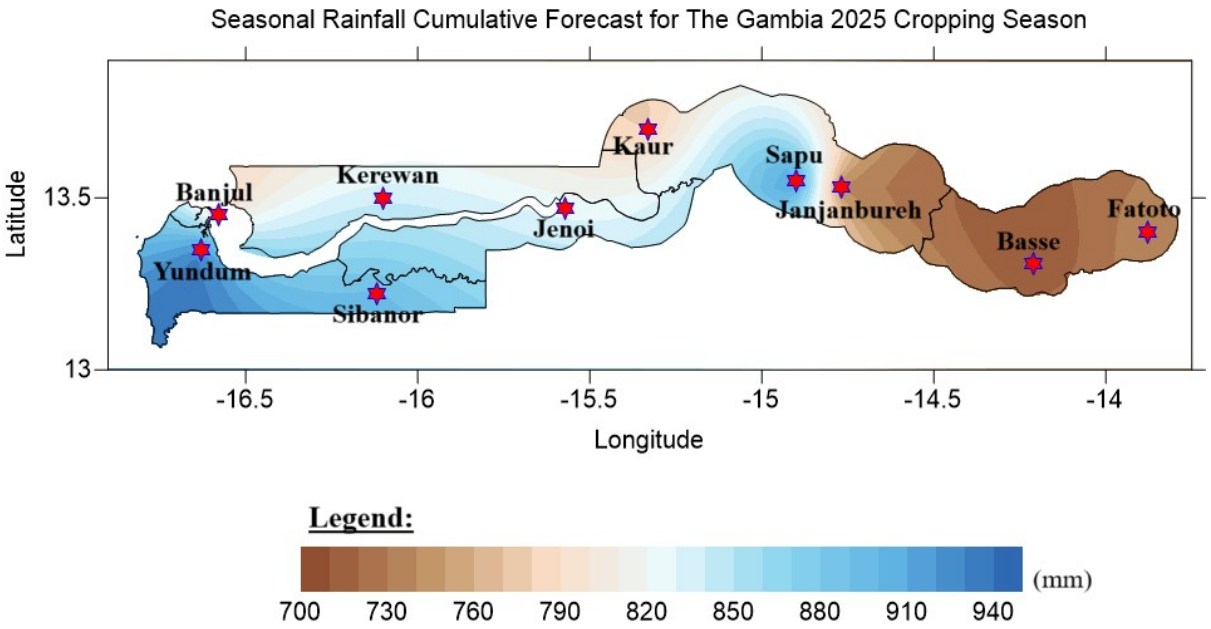

Figure 1: JAS 2025 forecast rainfall in mm

Further, the 2025 season is anticipated to be **more variable** than 2024, with likely **late to normal onset**, **flash flood events**, and **short to medium dry spells early in the season**, followed by **longer or normal dry spells later**. Weekly and medium-range forecasts will be issued by DWR to assist with intra-seasonal planning.

3. Onset, Cessation, and Length of Season

- **Onset Dates:**
  - Eastern regions (URR & CRR): **12–19 June 2025**
  - Western regions (LRR, NBR & WCR): **20–25 June 2025**
  - These are expected to be **1 week later** than average in many areas.
- **Cessation Dates:**
  - Across the country: **20–26 October 2025**
- **Length of Season:**
  - Expected to last **122–125 days** in most areas
- **Dry Spells:**
  - **Short to medium** at the start (first 50 days)
  - **Normal to long** toward the end (last 70 days)

4. **River Gambia Flow:**

- Expected to be **normal to above normal**

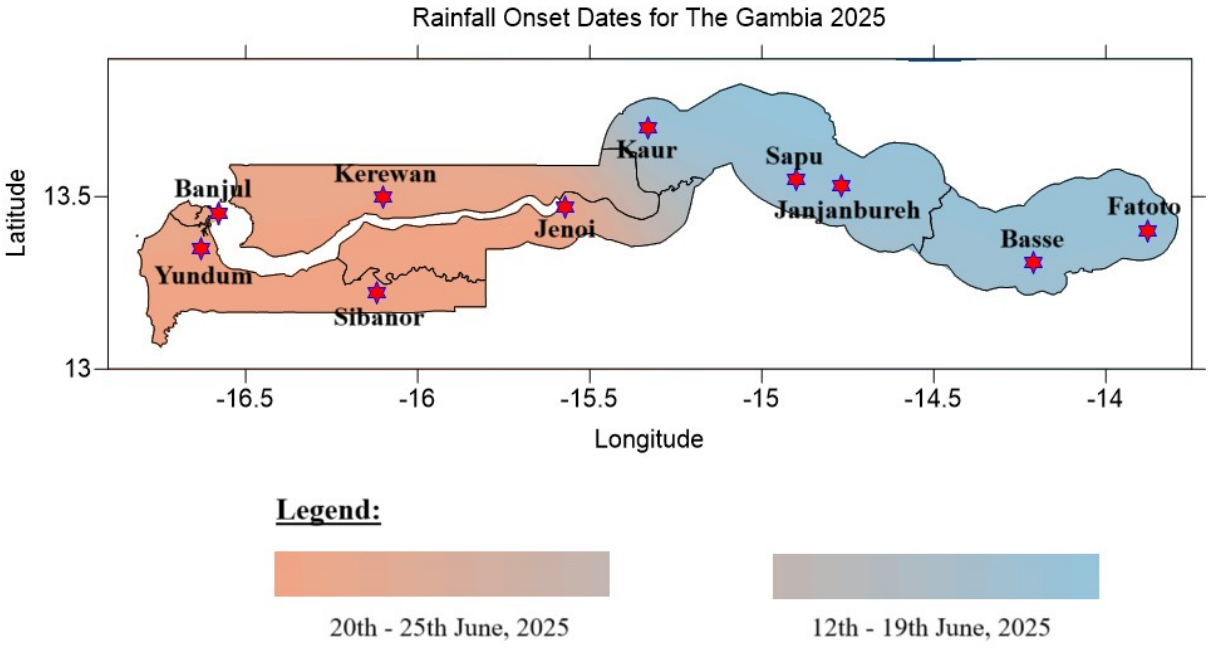

Figure 2: 2025 Forecast onset dates

5. POTENTIAL SOCIO-ECONOMIC IMPLICATIONS OF 2024 SEASONAL RAINFALL PREDICTION.

5.1 Possible Negative Implications of the 2025 Seasonal Forecast

The 2025 seasonal forecast, while predicting generally favourable characteristics, may also have negative implications alongside or instead of the more expected positive ones. Indeed, in areas where above-average rainfall totals, Late to normal onset dates, above-average to average runoffs and Short to medium dry spells are expected, it is not excluded to observe inconvenient situations that can, for example, be linked to excess humidity, rapid filling of low-pressure areas and overflowing of rivers, the rise of groundwater, the poor preparation of the agricultural season and transhumance movements, the impassability of roads, the difficulties of travel and access to areas of vital, economic and health interests.

5.2 Risks related to the negative implications of the rainy season

The likely risks related to the expected characteristics of the 2025 rainy season can be many and varied depending on the area. The wet nature of the season portends significant risks of flooding, submersion and therefore reduction of arable land, destruction of infrastructure (homes, roads, markets and schools, etc.), loss of crops and fodder, drowning of livestock and human beings, proliferation of germs of waterborne and diarrheal diseases (cholera, malaria, schistosomiasis etc.), crop pest outbreaks, water pollution, restriction of movement of people and animals, soil water erosion, silting up of watercourses, weed outbreaks, post-harvest losses, loss of human and animal lives, etc.

In areas expecting late onset and long dry spells, poor rainfall distribution may disrupt farming calendars, forage production, transhumance patterns, prolong hunger seasons, and exacerbate rural exodus.

5.3 For the agriculture sector

In view of the moderately wet nature expected of the 2025 rainy season in The Gambia and shorter to medium dry spell, it is recommended that farmers, herders, water resource managers, projects, NGOs and authorities:

- Invest more in high-yielding crops tolerant of wet conditions (rice, sugar cane, tubers, etc.)
- Develop irrigated crops, particularly in the floodplains of the River Gambia, while taking care of the risks of flooding,
- Set up systems for the collection and conservation of runoff water for agricultural and domestic uses in the dry season,
- Support the deployment of climate-smart techniques to increase crop and fodder yields, in particular those related to excess rainwater.
- Strengthen the information, supervision and agro-hydro-meteorological assistance systems to farmers;
- Facilitate farmers access to improved seeds and agricultural inputs adapted to their needs,
- Support agricultural insurance schemes to protect producer incomes
- Prioritize high land areas for planting particularly areas along the River Gambia.
- Make the most of the above average runoff situations of the River Gambia, by developing irrigated crops particularly in URR and CRR, while avoiding the risk of flooding.
- Intensify desert locust surveillance and control activities.

5.4 Disaster Management Sector

The overall rainfall expected in The Gambia and the overall above average flows expected of the river Gambia suggest a high risk of flooding that could lead to loss of crops, property and animal and human lives in exposed localities. To deal with those, it is recommended to:

- Strengthen the communication of seasonal forecasts and their updates in order to inform, raise awareness among communities about risks and strengthen their capacities to avoid disasters, by supporting the efforts of the press, disaster risk reduction platforms, NGOs and country EWS;
- Strengthen the monitoring and response capacities of agencies in charge of flood monitoring, disaster risk reduction and humanitarian aid,
- Advise against and avoid the uncontrolled occupation of flood-prone areas with habitations as well as crops and animals.
- Strengthen protective dikes and ensure the maintenance of bridges and road infrastructure,
- Clean drainage channels to facilitate the evacuation of rainwater,
- Closely monitor the alert thresholds in areas at high risk of flooding, particularly in the riverine areas;
- Provide reception sites for populations exposed to the disaster,
- Promote the cultivation of crops adapted to the persistence of situation of excess water in the soil
- Closely follow the updates of these seasonal forecasts and the short and medium range forecasts produced and disseminated by the Department of Water Resources,
- Conduct simulation exercises as part of the preparation of flood response plans
- Restrict habitation and farming in flood-prone zones.
- Maintain the strong collaboration between the hydrological and meteorological services in order to allow the anticipatory management of flood risks in the areas concerned.

5.5 Regarding health risks

Wetlands and flooded areas can be conducive to the development of water-related diseases (Cholera, malaria, diarrhoea, schistosomiasis, etc.). To this end, it is strongly recommended to:

- Strengthen the capacities of national health systems and national platforms for disaster risk reduction;
- Raise awareness and disseminate alert information on climate-sensitive diseases, in collaboration with meteorological, hydrological and health services,
- Prevent diseases, by vaccinating populations and animals, encourage the use of mosquito nets, set up stocks of medicine for curative treatments, especially in areas that will be difficult access following floods,
- Monitor water quality and set up stocks of treatment products
- Clean up agglomerations and avoid contact with contaminated water, through drainage and gutter cleaning operations;

- Sanitise inhabited areas and avoid contact with contaminated water, through drainage and cleaning of gutters ;
- Increase vigilance against diseases and pests of crops (armyworm and other insect pests);

6. Conclusion

A seasonal forecast provides a probabilistic guide to expected climatic conditions. When well understood and used appropriately, it can inform decisions that reduce risk, boost resilience, and increase productivity.

The Department of Water Resources encourages policymakers to treat the JAS seasonal forecast as an early warning tool, aligned with national planning and the **Recovery-Focused National Development Plan (2023–2027)**.

An **update of the 2025 forecast** will be issued by DWR at the end of June 2025 to reflect new data and observations.