2nd Seasonal Climate Forecast Forum for Soudano-Sahelian Africa

Final Communiqué

Experts in Climate, Agro-meteorology and Hydrology from the African Centre of Meteorological Application for Development, AGRHYMET Regional Centre, the National Agency for Civil Aviation and Meteorology of Senegal, representatives of West and Central African countries in charge of monitoring and producing agro-climatic and hydro-meteorological information, as well as representatives from basin organisms of the region, met in Dakar(Senegal), from May 04 to 08, 2015 **in order to produce seasonal forecasts of agro-hydro-climatic characteristics of the 2015 rainfall season and facilitate their application to food security and water resources management**

They received technical support from representatives of the World Meteorological Organization (WMO), the International Research Institute on Climate and Society (IRI, New York) and The University of Reading England.

Seasonal forecast is the result of consensus made around climate forecast model outputs and current knowledge of climate variability in the sub-region

Thus, the results are likely tendencies of cumulative rainfall for the periods of June-July-August and July-August-September, the onset and cessation dates of the cropping season, likely durations of dry spells during the critical crop growth stages, average discharges during the periods of high waters in the main river basins .Some agro-meteorological advice are also issued at the end of the forum.

I) Regarding rainfall forecast, we can notice:

- Deficit precipitations are very likely in June, July, August and September 2015 in Guinea, Sierra Leone, Liberia, the half Western part of Côte d'Ivoire, the extreme South of Mali, a large part of Eastern Nigeria and the surroundings of Lake Chad
- Surplus precipitations are very likely in July, August and September in the major part of Senegal, half West of the Gambia, South of Mauritania, Central and Northern Mali, and Burkina Faso. In particular, the rainfall situation expected for Senegal and Southern Mauritania could be better in 2015 compared to 2014. In this regards, the occurrence of heavy precipitation events is to be closely monitored in the framework of the collaboration between National Meteorological and Disaster Management agencies.
- Average precipitations are very likely in the rest of the region.
- In the entire region, perturbations in precipitation distribution are likely. Monitoring of weekly forecasts is advised to complete the seasonal forecast in support to planning and implementation of socio-economical activities.

II. Forecast of agro-climatic characteristics of the cropping season.

2.1. Onset date of the season.

- Late to normal onset of the season is expected in the West front of the Sahel Band (half Southern Mauritania, almost all Senegal, half Eastern part of The Gambia and North–West of Mali) and the area over Eastern Burkina Faso, West of Niger, North of Benin and the extreme North-West of Nigeria
- Early to normal onset could be observed in the Center of Burkina Faso, North of Benin and a portion of the South-Central Mali.
- Early onset is expected in the major part of the Center and East of Niger ,extreme North of Nigeria and West-Central Chad

2.2. Cessation dates of the season

- Normal to late cessation of the season is expected in South-Eastern Mauritania, Center and West of Senegal and in The Gambia;
- Late to normal cessation of season dates is expected in the major part of the agricultural zone of Mali, South-Eastern Mauritania, North Burkina Faso, North–West, agro-pastoral zones spanning from Central Niger to the West-Central Chad, as well as North-Eastern Nigeria.

2.3. Duration of the longest dry spells after the onset of the season (crop installation phase)

- Dry spells of duration longer than usual maybe observed in the southern part of Mauritania, North of Senegal and North West of the agricultural zone of Mali.
- There is a large probability for dry spells to be longer or normal during crop vegetative period in all the agro-pastoral zone of Niger, Burkina Faso (Except the extreme south), South Eastern Mali, Northern parts of Benin and Nigeria, and Western Chad.

2.4. Duration of the longest dry spells at the end of the season (post-flowering period)

- At the critical flowering-heading period of cereal crops, dry spells are expected to be shorter than usual in Western Mauritania and Extreme North of Senegal
- In The Gambia, Senegal (except Casamance area),South-Central Mauritania and Extreme West of Mali, longer than normal dry spells are expected towards the end of the season
- On the Sahel Band, ranging from Western Chad to South-Western Mauritania, dry spells are very likely to be longer than normal at the end of the season.

IV) Forecast of main river discharges

Hydrological forecasts in West Africa, Chad and Cameroon focus on the following main river basins: Niger, Senegal, The Gambia, Volta, Ouémé, Lake Togo, Mono, Comoé, Sassandra, Bandama and Lake Chad.

Thus, for 2015, averages global flows compared to the 1981-2010 reference are expected for the majority of river basins of the region

- **Senegal River:** Average to above average.
- **Gambia River:** Average to below average.
- **River Volta**: Average.
- **Niger River:** Average to above average.
- **Basin of Lake Chad**: average flows are expected with above average tendency on Komadougou Yobé.
- **Comoé, Sassandra and Bandama River:** Averages to below average flows are expected.
- **Mono River and Lake Togo :**Averages to below average
- **Ouémé River:** Average to below average.

V) Agro-meteorological advice

In regards of the above, the Forum formulates the **following recommendations**:

4.1. To farmers

- In areas where it is more likely to have below average cumulative rainfall, late onset dates, and longer dry spells after the onset, farmers are advised to:
  - Utilize varieties that are resistant to drought and /or varieties of short cycle duration
  - Avoid additional fertilization during the vegetative period
  - Give priority to soil water conservation techniques

- For areas where it is very likely to observe above normal cumulative rainfall, early onset dates and shorter dry spells after the onset, farmers are advised to:
  - Further invest in improved variety seeds for food crops as well as cash crops,
  - Reinforce weed and pest control measures.

4.2. For herders:

- In areas where it is very likely to observe a late onset of the rainy season, make provisions for fodder and facilitate animals access to nearest watering points in order to reduce water shortage to animals and avoid conflicts between farmers and livestock herders,
- In areas with high probabilities of above normal cumulative rainfall, watch animals closely to avoid the risk of drowning.

4.3. For national and local authorities and Development stakeholders (Non Governmental Organizations and farmers organizations)

- Support and facilitate communication of climate information and seasonal forecast to various users ,
- Set up or strengthen the monitoring and response mechanisms to climate risks and supervision of producers ,
- Take suitable measures to avoid or mitigate damage and losses related to floods in risk areas by :
  - ✓ Solving the permanent problem of anarchic use of floodable areas
  - ✓ Strengthening intervention capacities of technical services and maintain the watch of flood risks in vulnerable areas ;

The above forecasts may change during the raining season. Therefore, it is highly advised to monitor updates that will be made in May, June and July by the AGRHYMET Regional Centre, ACMAD and national Meteorological Services

The Forum

May 8, 2015