

EARLY WARNING BULLETIN FOR FOOD SECURITY

No. 2018/15

IN THE GAMBIA

Period: September 21 - 30, 2018



Government of The Gambia

Produced and Published by The Gambia National
Multidisciplinary Working Group (MWG)

Focal Point: Department of Water Resources
TEL: (+220) 4227631 / 4224122 / 8905229 - FAX: (+220) 422 50 09
E-MAIL: lmtouray@yahoo.co.uk / WEB: www.ccews.com



1.0 SYNOPTIC SITUATION:

The mean surface position of the ITD has embarked on its southward retreat with its western axis oscillating over northern Senegal, stretching across central Mali, Niger and then sloping onto southern Chad.

The weather to the north of the ITD was characterized by dry and stable atmosphere with patches of dust haze reported over central Algeria and Libya during the period. Places to the south of the ITD were characterized by scattered to widespread rain showers and thunderstorms, occasionally associated with very strong winds.

1.1 OUTLOOK FOR THE NEXT DEKAD (1st - 10th October 2018)

Warm and humid atmospheric conditions will persist during the first half of the dekad with high chances of isolated slight to moderate rain showers and thunderstorms, most likely from 01st – 03rd October 2018. The rest of the dekad is expected to be mainly warm and partly cloudy.

2.0 RAINFALL SITUATIONS:

Rainfall is continued to be recorded in this dekad with frequencies as low as three days to as high as five days. Daily intensities ranged from 1.2mm over Kerewan in the Western Third to 59.8mm over Sapu in the Middle Third of the country thus giving Kerewan to record the lowest decadal total of 9.2mm and Sapu recording the highest decadal total of 131.0mm (figure 1a). The rainfall situation is good enough to retain the soil moisture content since last dekad and will enable the late planted crops to reach maturity.

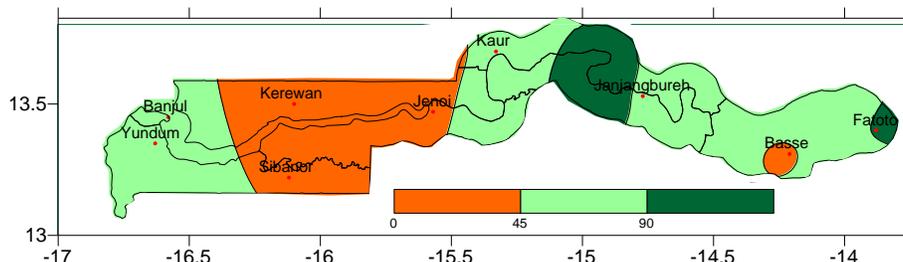


Figure 1a: Dekadal rainfall totals from September 21st – 30th, 2018.

The seasonal rainfall totals across the country as at 30th September 2018 indicates that the Eastern Third where rainfall in the country usually begins and has been indicated in this year's seasonal forecast has recorded the highest total of 919.9mm over Basse. On the other hand, the lowest seasonal rainfall total of 555.3mm was recorded over Kaur located in the Middle Third (figure 1b). However, Sapu in the same Middle Third was able to record a cumulative rainfall total of over 800mm. In the Western Third too, despite being the region where rainfall started late this year, has recorded a significant amount of 901.2mm over Sibanor. The significant adjustment in rainfall amounts were recorded in the most recent decades.

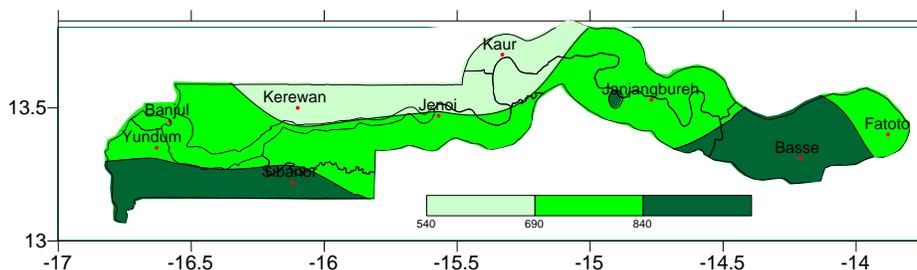


Figure 1b: Rainfall Seasonal totals from May 1st 2018– September 30th 2018.

The country average as at 30th September 2018 stood at **773.4mm**, which is 13.2mm more than last year's amount of **760.2mm** thus indicating the first time that a surplus is recorded this year.

3.0 AGROMETEOROLOGICAL SITUATION:

Average temperatures recorded in this dekad ranged from 27°C to 28°C in the Western Third, 26°C to 27°C in the Middle Third and 28°C in the Eastern Third, thus indicating generally a margin of 1°C. Minimum temperature recorded was 17°C over the Middle Third, whilst maximum temperature recorded was 35°C recorded over all the three Thirds of the country.

Average relative humidity (RH) recorded during this dekad has generally reached 80% across the country. Winds were light to moderate in speed with a maximum gust of 31km/h recorded over Sapu in the Middle Third of the country.

4.0 AGRICULTURAL SITUATION:

Generally, agricultural situations in the country during this period under review shows that most of the crops grown have reached majority stage. Harvesting is ongoing for crops like maize and the Philippine type groundnuts and the evident of which is the sale of the products across the country. Harvesting of early millet has also commenced in some areas but the crop has reached maturity stage in other areas and farmers are waiting for the rains to subside before they can start harvesting. If this trend of rainfall continues, farmers may resort harvesting early millet on stand and stack them in homes or safe places to avoid damage that the rain can cause. On the other hand in some areas where

farmers grow their crops late due to inadequate rain at the start of the rainy season, some of these crops have not reached majority. Farmers who were engaged in the cultivation of rice in the lowlands during the dry season especially in Central River North (CRRN) have already harvested and transplanting is also ongoing during this rainy season. Other late planted fields are at tillering stage.

5.0 PESTS AND DISEASES SITUATION:

Pest Problems

One of the most important field pests in crop production is the weaver birds (*Quelea quelea*). They attack mainly cereals such as rice and early millet. The birds attack crop fields in swarms which allow them to devastate the fields within a short span of time. The management of birds is hectic as farmers conduct bird scaring early morning to late evening in order to minimize damage. The weaver bird continues to threaten rice and millet production especially in the CRR South where they are generally found throughout the year and have been one of the major causes of crop loss in the region.

The invasive fruit fly species (Tephritidae family) are also a major pest of horticultural crops. Fruit fly adults often lay their eggs in the fresh flesh of fruits and vegetables. The eggs hatch into whitish colored larvae (maggots) which often feed on the inside of the fruit, resulting in a soft disorder. The tissues of the fruit begin to rot resulting to the mass dropping of the fruits. The mangoes are the most infested and damaged crop by the fruit flies but currently the water melon fields are faced with an infestation by the pest. The species causing damage to water melon are the *Zeagodacus curcubitae* and *Bactrocera dorsalis*. Water melon fruits are punctured by the females for egg laying causing damage and loss to the producers. The incidence is prevalent mostly in the WCR and NBR which are also the invasive fruit fly hubs in the Gambia.



Bactrocera dorsalis



Zeagodacus curcubitae

The most recent reports of the pest situation from all the regions indicate drastic reduction in the fall armyworm (*Spodoptera frugiperda*) incidences. Majority of the maize plants are now at the advance stage of maturity and some fields have already being harvested and sold for consumption. The leave axil, the tassels and the cobs are the parts of the plant where close observation should be done for the larvae. The IPM approaches recommended for use by farmers have proven dividend according testimonies from farmers who applied the different management options. However, the application of the IPM options in large scale production looks fairly unfeasible due to area and inadequate labor. The observations shows that the intensification of the FAW control during the vegetative stage of plant growth has a great bearing on minimizing the potential damage and loss.

The blister beetle continues to cause damages to the early millet fields especially in the WCR and CRR/S regions of the Gambia. The insect feeds on flowers on the millet head thus leading to poorly filled or even empty grains. It finds refuge on weeds in and around the millet field and then attack the heads. The incidence has reduced significantly in the NBR and URR due to application of some

management options. Now that most of the early millets are at head formation and maturity, the pest infestation has also been reported in the various production zones in the regions.

Management of the Pest Problems

The control of weaver bird (*Quelea quelea*) requires a holistic IPM approach. The available management options always arouses conflict of interest between the sister institutions. The methods used include explosives, mist nets, local long guns, and scaring. There are issues with the use of explosives and guns but mist nets can be used alongside scaring.

The management of the fruit flies also call for an IPM approach for effective control. The applicable and most feasible options to be integrated are;

- Field sanitation (collection and burying of infested fruits to kill the larvae)
- Use of fruit fly traps (male lures and food baits)
- Application of botanicals (Neem and hyptis)
- As a last resort the use of contact and systemic pesticides for example (Abermectin, Deltamethrin, Dimethoate etc) **Note the pre-harvest interval of each pesticide used should be adhered to in order to avoid pesticide residues in the fruits.**

For the fall armyworm (*Spodoptera frugiperda*), still the integrated pest management (IPM) approach is being promoted. For effective treatment, each maize stand should be treated in the whorls using the following options;

- Neem or hyptis leave extract solution with 30g of detergent
- Salt solution
- Application of a mixture of wood ash, saw dust, or sand to suffocate the larvae in the whorls
- Close observation and hand picking to kill the larvae
- Good crop management practices (fertilizer application, field sanitation)

The effective control of the blister beetle also calls for IPM approach as follows;

- Use of long bristled varieties to limit attack
- Always keep the area on the perimeter and within the field free from weeds as they hide in the weeds during the day and attack as night approaches
- Regularly observe the millet stands for early detection and treatment
- Use cultural method such as smoking by burning using groundnut shells, clothes or moist wood etc to repel the insects
- Apply 2% dust pesticide on the perimeters to repel the pest from entry into the field
- Apply neem leave extract on the heads weekly to repel the insect
- As a last resort, apply contact insecticides such as Deltamethrin, Abamectin, Malathion to kill the insect.

6.0 LIVESTOCK SITUATION:

Following the widespread panic and shock amongst the livestock farming communities due to the recently reported Foot and mouth disease (FMD) outbreak in the country, the Department of Livestock conducted a sort of study to establish the damages done by the FMD outbreak. The following findings were made;

- A week before the study was carried out, 2,109 cases were reported with a mortality rate of 9.86 %.

- According to the field agents, the monetary value of livestock loss due to death amounts to GMD 17,772.68 per farmer and nationally GMD 108,093,439.70. However, the farmers reported a much higher value; GMD 44,431.70 per farmer and nationally GMD 217,119,945.22.
- Milk production in the N'dama drops by 75% with losses of 5.4 Litres/day/farmer equivalent to GMD 270.00/day and nationally 24,066.6 litres/day with a value of GMD 1,203,330.00 per day.
- Respondents indicated that 89.47% of livestock owners are affected, 84.21% rating the effect as severe.



Figure 1: Mouth lesions



Figure 2: Foot Lesions

Banjul 04th October 2018
National MWG of The Gambia

Composition of MWG:

Department of Water Resources
 Planning Services - Department of Agriculture (DOA)
 Communication, Extension & Education Services - DOA
 Department of Livestock Services
 Plant Protection Services - DOA
 National Environment Agency

Direct your comments and questions to:

The Director
 Department of Water Resources
 7 Marina Parade, Banjul
 The Gambia
 Tel: (+ 220) 4227631 / 4224122 / 8905229
 Email: dwr@mofwrnam.gov.gm