MoAI Monthly Report

A Country Report on Agriculture in Somalia

Issue: Friday **September- 2024**

SOMALI FOOD

SECURITY REPORT

General Findings of the National Food Security

1. Despite some improvements, levels of acute food insecurity and malnutrition remain high
2. Humanitarian assistance is urgently required for Food Security, Nutrition, Health, and WASH programmes, including the treatment of acutely malnourished children
3. Current (June-September 2024): 3.6 million people (19%) of the population in Crisis or worse (IPC Phase 3 and higher)
4. Projection (October-December 2024): 4.4 million people (23%) of total population face Crisis or worse (IPC Phase 3 and higher)

Projected Food Security Outcomes (Oct-Dec 2024)

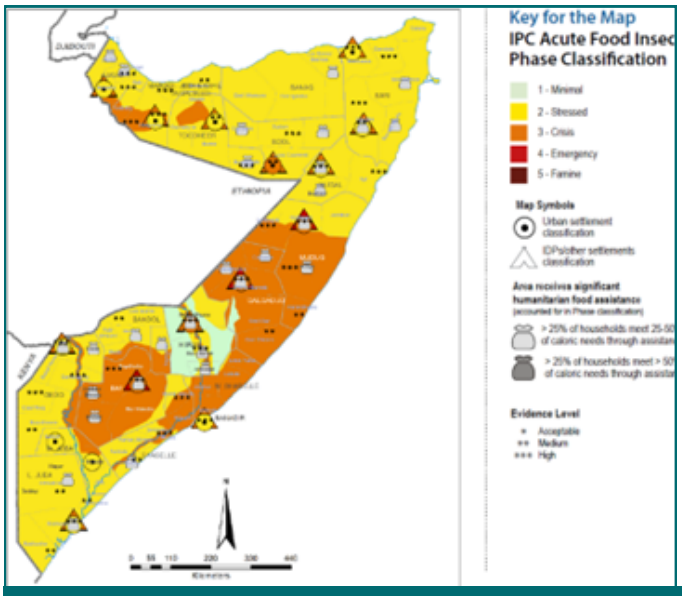


Figure 1 Source: FSNAU

Gu season rains:

The 2024 Gu season rains started on time in April but ended earlier than usual for most areas, with limited rainfall in May and June.

The early withdrawal has hampered crop production & pasture availability in most agropastoral livelihoods.

Riverine flooding was reported Juba, Shabelle, and Hiiraan regions, affecting riverine livelihoods adjacent populated area.

According to NOAA, La Niña, associated with drought conditions in the eastern Horn of Africa, including Somalia, will likely emerge in September to November (71%) and persist through January to March 2025. As a result, a below-average rainfall is likely for the October-December 2024 Deyr season in most parts of Somalia.

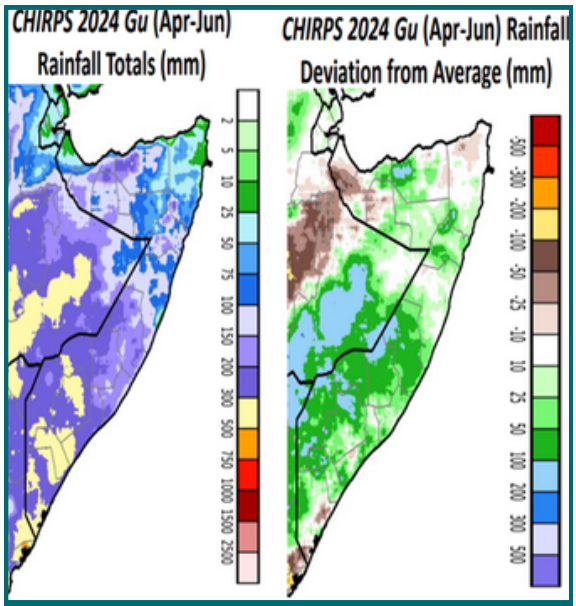


Figure 2 Source: FSNAU

- In southern Somalia, the 2024 Gu season cereal production is estimated at 64,000 tons (including 14,100 tons off-season harvest). This is 45 percent lower than the long-term average for 1995-2023.
- For northwest Somalia, the 2024 Gu/Karan cereal production is preliminarily estimated at 12,600 tons, 62% below the average for 2010-2023. Main reason long dry spells, high input prices and pest infestations.
- Main reasons for the below average production in 2024 Gu are early cessation of rainfall, floods, insecurity, pests, and shortage of farm inputs.

Market Price Trends:

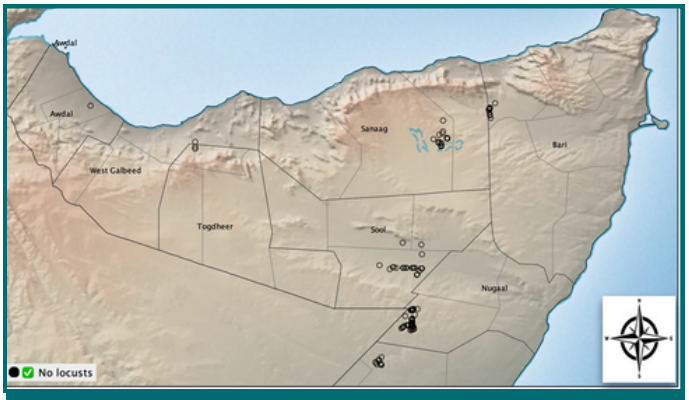
- The local currency remained generally stable amid continued decline in their use as medium of exchange and increased dollarization in most markets.
- Prices of maize and sorghum in July decreased slightly due to improved supplies from the current 2024 Gu harvest and are also below last year but near the average.
- International prices of all major cereals declined in January to July 2024 amid ample global supply but remained above average due to weak local currency, conflict and high transport costs.
- Stable or decreased Consumer Price Index due to stable or decreasing food prices in the Minimum Expenditure Basket.
- ·Between July and December 2024, staple cereal prices are expected to trend near or above average levels due to decreased cereal stocks on account of the below average 2024 Gu season production.
- The prices of imported food commodities (rice, wheat, and sugar) are expected to remain stable or decrease between July and December 2024 due to ample supplies on the global market, but prices will likely remain above average through at least December 2024.

DESERT LOCUST SITUATION

The Desert Locust (DL) situation was calm during September 2024.

No survey had been conducted in the coastal, sub-coastal and inland areas of the Desert Locust breeding area in the northwest, Puntland and Galmudug regions.

The rains that fell during the last 2 weeks of the month in the breeding areas particularly coastal area may contribute to the creation of favourable ecological conditions for locust breeding.



Figure

Forecasting

Ecological conditions may become favorable for locust breeding in some areas if abundant rainfall continues, especially in coastal areas like Zaila, Lughaya, and Berbera districts, which are primary Desert Locust breeding areas.

This could lead to the creation of favorable conditions for locust breeding.

Somalia in COP29

With COP29 on the horizon in just less than two months from now, we may briefly look back at the nature of this gathering globally and where Somalia placed in within it. Understanding historical contexts of this annul forum will definitely help us in making better planned decisions in the present as Somali Government as of now is in a middle of huge preparation this year in particular, to have a clear insight and agenda in hand before departing to one of the biggest world events that discusses one of the key global agenda (Climate change).

For those who are not familiar with environmental terms, COP is an abbreviation of Conference of the Parts which is the group of nations that have signed or joined later the UN Framework Convention on Climate Change (UNFCCC) in Rio de Janeiro- Brazil in 1992 which became effective 2 years later in Kyoto-Japan 1994.The first session of Conference of the Parties (COP1) held in Berlin-Germany on March1995.

For that time around, where many environmental summits and gatherings were taking place involving almost the nations across the globe, Somali state was in a coma state and total collapse. Later on, right after political recovery, Somali Government has formally joined to the UNFCC on 2009 and ratified Kyoto Protocol that next year (2010). The late Minister Buri Hamza has outshined in the Somali accession process in that regard.

In almost 40 days' time, 198 nation signatories will come together on November 11-22, 2024, in Baku, and it deemed as a golden opportunity for all those participants to highlight national and regional priorities in climate action and focus on the transformative potential of agriculture in the context of climate change.

While the climate change is cross cut issue which attaches to every sector but the Agriculture is the main entry points for every nation around the world and Somalia is no exception.

Therefore, Somali Ministry of Agriculture will capitalize on this platform to scale up global collaborative effort to enhance role of agriculture and food systems in the combat against climate change.

Nations usually convene national summits that bring together stakeholders and most concerned parties to come up with existing environmental gaps and list national priorities in the environmental areas in order to put it on the table in the COP as everyone sees it as opportunity to align climate finance contributions with estimated global needs.

In the regional preparation, on the sidelines of the Tenth Special Session of the African Ministerial Conference on the Environment, the Twelfth Conference on Climate Change and Development in Africa has opened on 30 August. By the way, Somalia took part in that meeting with high level delegation.

Despite the fact that the continent Africa contribute less than 4 percent of total global greenhouse gas emissions (1.45 billion tones out of 37.12 billion tones), yet it is the most recipient of the harmful impacts of the climate change (Oxfam).

Per the projections of Global Center on Adaptation, Climate change will inflict a huge damage estimated at an equivalent of 5 percent as annual loss in Africa GDP until 2040.

Somalia considered one of the most vulnerable countries in the world to the impacts of climate change. In fact, Somalia ranked as the second most vulnerable country on the Index to climate change and other global challenges, (Voluntary National Review VNR Report 2022).

ENHANCING AGRICULTURAL RESILIENCE:

MoAI techincal team conducted supervision and Capacity Building in Jowhar's Canal Rehabilitation Project.

introduction

Technical staffs from the Ministry of Agriculture and Irrigation conducted a field visit to Jowhar district to supervise and monitor the ongoing project activities related to the implementation of secondary canals rehabilitation.

During their visit, the team supervised the implementation of several activities and provided technical backstepping to the implementing team from the ministry of Agriculture and irrigation of Hirshabelle state.

The team supervised training activities and the rehabilitation of the secondary canals; the supervised activities were included activities such as the capacity building of water management committees, technical capacity building of farmers for cooperative formation, organizational management, community consultative meetings for the establishment and strengthening of farmers' cooperatives, and the progress of canal rehabilitation activities, AAP, and PSEA during the reporting period.

Training Activities

During the field mission, the Ministry of Agriculture and irrigation, with the support of Hirshabelle state's MoAI, co-facilitated two separate training programs.

Water Management Committee Training:

The Weedow Canal Water Management Committee recently participated in a two-day training program focusing on various aspects of water management.

The training covered topics such as proper water/irrigation management, committee formation, dispute resolution, canal maintenance, modern irrigation systems, and best practices for sustainable resource management.

87 attendees shared their reflections on the training and expressed their eagerness to apply the lessons they learned to their practices.

They also expressed curiosity about sustainable farming and readiness to put their newfound knowledge into action.

Farmers' Cooperative Management Technical Training:

This one-day training focused on the areas of cooperative formation, the importance of farmers' unions and cooperatives, management aspects of cooperatives, rules and regulations of cooperatives, and real-life examples of cooperative structures. 87 participants also learned about the most important thematic areas of cooperatives and how they need to support each other financially and technically. The session also included information on Village Savings and Loan Associations (VSLA) to empower Somali women in cooperative involvement and how they can establish women-led cooperatives by using VSLA as a funding source. The trainees shared their reflections and commitment to building cooperative farmers, both for those who haven't created coops yet and for those who have, while practicing lessons learned and looking for other available resources to improve production.

Community Mobilization for Food Security and Income Opportunities:

A two-day agricultural event on community mobilization and sensitization about food security and income generation opportunities was organized for 42 participants.

The event aimed to enhance understanding of food security and create income generation opportunities in the productive sector to improve food security at both household and community levels.

The Progress of Canals Rehabilitation

To revitalize the collapsed irrigation infrastructure and assure that programs designed by the ministry has been implemented successfully, ministry of agriculture monitored the rehabilitation 11 secondary canals beneath Weedow primary canals implemented by the ministry of Agriculture at Hirshabelle state.

Some of these canals have vehicle crossings, while others have culverts.

The intended result of establishing these canals is to restore farming activities in the surrounding areas and build a more promising and resilient future for the population living in Jowhar and Middle Shabelle.

During the supervision, we observed an immense farmland in the area and identified the urgent need to implement these secondary canals.

These canals will contribute to providing water access for irrigation for the farmers in the surrounding area.

The limited financial resources and environmental impact in the area are hindering farmers from cultivating their land, according to the canal committee.

Once the rehabilitation of these secondary canals is achieved, it will restore cultivation on the vast farmlands in the area.

This will create livelihoods for both small and large-scale farmers in Jowhar and contribute to a more sustainable future in Middle Shabelle.

Additionally, it will enhance food security and household income for farmers in the region.

Figure 1

Figure 2

Figure 3

TUTA ABSOLATA

(GELECHIIDAE)

Identification of tomato leaf miner

Tomato is one of the most important edible and nutritious vegetable crops in Somalia. Yet, average yield of tomato in Somalia is low. This is due to the fact that tomato production is highly constrained by several factors including insect pests and disease. One of the most important insect pest that is constraining tomato production is the new devastating pest, tomato leaf miner -*Tuta absoluta* This pest may be responsible for losses of up to 80-100% in tomato plantations.

Identification

The tomato borer *Tuta absoluta (Lepidoptera: Gelechiidae)* is an invasive pest of tomato crop that is rapidly expanding around the world. It is considered a devastating pest.

Tuta absoluta, has become the most important pest constraint to tomato production in Africa. Spreading at an average 800 km/year, it is now present in 41 African countries

It is believed to have entered into Somalia in 2012 through the southern part of the country, likely from Ethiopia, a country severely affected by infestations of tomato leaf miner

Morphology

Tuta absoluta is a micro-lepidopteran insect. The adults are silvery brown, 5-7 mm long. The total life cycle is completed in an average of 24-38 days.

Damage

Infestation of tomato plants occurs throughout the entire crop cycle. Feeding damage is caused by all larval instars and throughout the whole plant. On leaves, the larvae feed on the mesophyll tissue, forming irregular leaf mines which may later become necrotic. Larvae can form the stems which 0ff extensive galleries in act the development of the plants. Fruits are also attacked by the larvae, and the entry-ways are used by secondary pathogens, leading to fruit rot.

Figure 1

Figure 2

Figure 3

integrated Pest Management

To control the pest effectively it is critical to combine all available control measures including cultural methods, biological control agents and the correct use of registered pesticides

The integrated control method recommended employs, massive trapping before planting, clearing the soil of crop residues, the application of imidacloprid in the irrigation water 8- 10 days after planting

Pre-Season

- Remove cull piles
- Kill weed hosts
- Renovate GH
- Moth-proof GH (fix screens)
- Monitor adults-Ph Traps
- Choose tolerant varieties
- Use pest free transplants

During-Season

- Manage the removal of in-season infested pruned stems and fruit.
- Use pheromones and sticky traps to monitor and mass trap adults.
- Use pheromone dispensers for Mating Disruption
- Augment and conserve natural enemy populations
- Use optimal spray volume, maintain and calibrate spray equipment

Figure 1

Post-Season

Rotate to non-host crop & incorporate a host free period: - subsequent crop plantings should be of a different crop type, which is not a host to the pest.

Institute an area-wide for fallow period where only non-host crops to pest can be planted disrupting the life cycle of *Tuta absoluta*.

Figure 2

Figure 3

HOW SMART AGRICULTURE GREENHOUSES

Can Drive Youth Employment and Urban Development"

Figure

Introduction:

East Africa, including Somalia, faces unique challenges in agriculture due to harsh climatic conditions, limited arable land, and increasing urbanization.

Traditional farming methods often struggle to meet the growing food demands.

Smart agriculture greenhouses offer a solution by enabling year-round production, optimizing resource use, and improving resilience against climate variability.

These systems provide a controlled environment for high-quality crop production, making agriculture more viable and attractive, especially for the youth.

Job Creation for Youth:

The youth in East Africa face high unemployment rates, and agriculture remains underexplored as a potential source of employment.

Smart agriculture greenhouses create opportunities across various sectors, such as technology, management, logistics, and marketing.

By investing in training and capacity-building programs, we can equip young people with the skills needed to operate and manage these advanced systems.

This not only reduces unemployment but also fosters a generation of agripreneurs who can drive innovation and growth in the agricultural sector.

Urbanization and Sustainable Development:

In rapidly urbanizing areas like Mogadishu and other East African cities, integrating smart agriculture greenhouses into urban settings can enhance food security and reduce the environmental impact of food supply chains.

Urban greenhouses can utilize unused spaces, rooftops, and peri-urban areas to grow fresh produce close to consumers, reducing transportation costs and carbon footprints.

This model can be a cornerstone for sustainable urban development, promoting green cities that are resilient and self-sufficient.

Advantages of Smart Greenhouses in East Africa:

Water and Resource Efficiency:

With advanced irrigation and climate control systems, smart greenhouses are well-suited for water-scarce regions like Somalia, significantly reducing water usage compared to traditional farming.

Enhanced Climate Resilience: These systems provide protection against extreme weather events, pests, and diseases, ensuring consistent crop production even in unpredictable climates.

Increased Productivity and Income: Higher yields and the ability to grow high-value crops, such as vegetables and herbs, can increase farmers' incomes and provide more stable livelihoods.

Promoting Innovation:

Smart greenhouses introduce new technologies to the region, encouraging innovation among youth and transforming agriculture into a modern, technology-driven sector.

Conclusion:

Smart agriculture greenhouses offer a promising pathway for job creation, youth empowerment, and sustainable development in East Africa, particularly in Somalia.

By integrating these systems into urban planning and youth engagement in this sector.

Recommendations:

Government and Policy Support: Implement policies that incentivize investment in smart agriculture, provide subsidies for technology adoption, and support research and development in this sector.

Youth Engagement Programs:

Develop programs that provide training, mentorship, and financial support to young agripreneurs interested in smart agriculture.

Urban Integration:

Encourage the incorporation of smart greenhouses in urban planning, utilizing vacant urban spaces for agricultural production.

By embracing smart agriculture, Somalia and East Africa can transform their agricultural landscapes, creating vibrant economies that are powered by innovation and led by the youth.