

USDA Foreign Agricultural Service

# GAIN Report

Global Agricultural Information Network

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## **Tanzania - United Republic of**

**Post:** Nairobi

### **Fall Armyworm in Tanzania and East Africa**

**Report Categories:**

Pest/Disease Occurrences

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**Report Highlights:**

As millions of east African smallholder farmers seek to recover from a devastating drought, they face a new threat-**fall armyworms**. The destructive pests attacks economically important crops such as maize, wheat, millet, sorghum, sugarcane and rice at all stages. The damage can lead to 100 percent crop loss.

## Invasion of Fall Armyworm in Tanzania

*Spodoptera frugiperda* is a strain of Fall Armyworm (FAW) native to South and Central America, but also occurring in the southern United States. The worm was first detected in Africa continent in 2016 in Nigeria, and had spread to several other West African countries and to Central Africa and then in South Africa in January 2017. Confirmed by Tanzania authorities, the invasion started in February 2017, armyworms were reported in the border areas of Ruvuma and Mbeya, located in southern Tanzania. The moths of the armyworm are strong fliers and the species may have come into Tanzania through flight from neighboring Zambia. The fall armyworm is new in Africa and its caterpillars cause severe damage to more than 80 plant species especially cereal crops such as maize and rice at all stages and spreads very fast in the early stages. It is devastating once it develops into a moth as it poses a greater risk to the growth of crops.



Figure 1: The adult phase of FAW

## Damages caused by Fall Armyworm

As of mid-March 2017, damages to hundreds of hectares of maize planted earlier in the year in the western region of Rukwa and 3000 hectares of maize farms in Chalinze ward, in the coastal region were reported. Nkasi district, in Rukwa, was particularly affected, as many households in the region depend on maize for access to income and food. Although the species attacks a wide range of crops, it poses a particularly serious threat to grain farmers. It is extremely difficult to manage. Unlike the African armyworm, the fall armyworm, which is dispersed by the wind, burrows inside maize stems and cobs, making it difficult to detect and can lay up to six generations of up to 50 eggs in one location leading to rapid destruction. When maize is attacked by the destructive pests it can lead to 100 percent crop loss.



Windowing



Skeletonized leaves



Cob damage



Shot holes



Tassel damage



Grain damage

Figure 2: Damages and Impacts caused by FAW

### Intervention by the Government of Tanzania (GoT)

As of April 2017, reported by the Permanent Secretary in the Ministry of Agriculture, Livestock, and Fisheries the GoT was aware of the presence of the new species and embarked on various initiatives to control the situation in Katavi, Mbeya and Songwe areas. The GoT deployed agricultural experts, bought and distributed pesticides worth \$132,439, and educated farmers on how to fight the worms of which according to the Deputy Minister for Agriculture Livestock and Fisheries managed to control the invasion by 70 percent. Nearly 30 percent of the country was already affected with most farmers complained of incurring huge costs to contain them.

### Highlights in the Sub-Saharan Africa

Up to June 2017 FAW were already detected and officially confirmed in 19 Sub-Saharan countries where 5 countries are from east Africa.

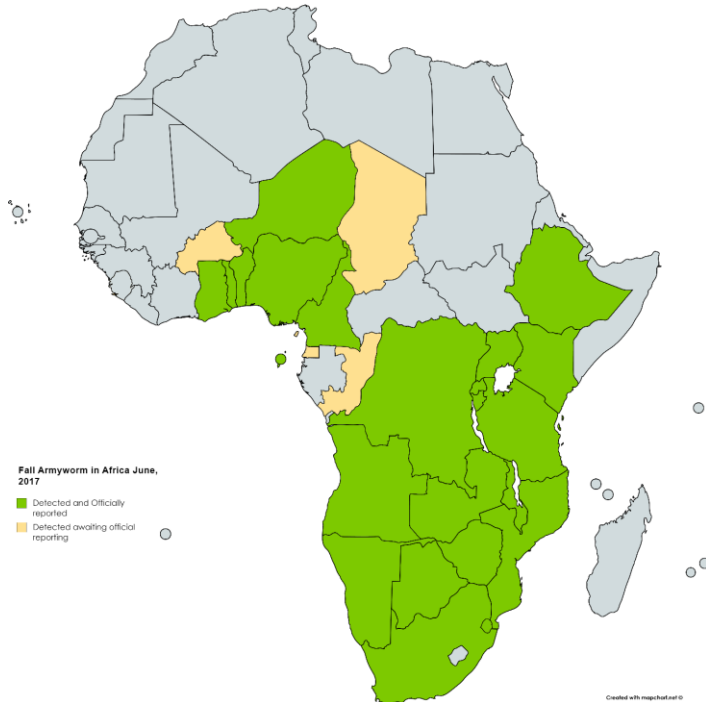


Figure 3: A map of Africa showing status of FAW in Sub-Saharan Africa.

Reported by Armyworm Network, a web resource for armyworm in Africa and their biological control.

Up to early June 2017, **In Kenya**, the pest has been reported in 27 of the 47 counties threatening more than 200,000 ha of maize crops. Ground control operations continued in all affected areas by farmers with assistance and coordination from the Ministry of Agriculture (MoA). It is worth noting that most of the infestations in Kenya were reported in the western and Rift Valley parts of the country which suggests that the pest might have migrated from Uganda.

**In Uganda**, Fall Armyworm outbreaks continued spreading and reached 78 districts by May (by late April 60 districts were reported affected). The pest was detected in Moyo, Kotido, Karamajo and other districted in North Eastern part of the country where late rains were reported.

The Government of Uganda (GoU) distributed pesticide to affected farmers and sprayers to model farmers to demonstrate appropriate control operations. The pest was reported causing a total crop loss in some places where replanting was necessitated. GoU estimates a potential annual loss of some 450,000 MT of maize to established and unabated fall armyworm outbreaks. GoU developed an action plan with a budget of USD 1 million before the pest migrated to that several dozen districts and it is expected to have revised the action plan after the pest continued affecting many more districts.

The Government of **Rwanda** (GoR) has developed an action plan for USD 700,000 with USD 200,000 from its own and the rest soliciting from partners.

The Government of **Burundi** (GoB) requested an emergency technical assistance from Food and Agriculture Organization (FAO) and FAO is considering a Technical Cooperation Program (TCP) project to assist with fall armyworm issues in Burundi.

The **GoT** has developed an action plan to carry out surveillance and monitoring during the coming seasons.

#### **Forecast:**

Originally issued by USAID's Emergency Trans boundary Outbreak Pest (ETOP) programme and summarized by the Armyworm Network hosted by Lancaster University by using material provided by DLCO-EA, IRLCO-CSA and OFDA/AELGA. With the Intertropical Front moving northward during the coming months, it is likely that the pest will continue its northward trajectory and threaten crops in many countries. In Kenya and Uganda, it will likely continue spreading further north into the western and the Rift Valley, northern and north-eastern Uganda and perhaps reach South Sudan and other areas during the forecast period.