

The war against pest, weed invasions

By Marion Wagaki

RISING frequency of foreign pest incursions, invasive weeds and disease outbreaks in African countries has raised fears about massive crop losses and destruction of biodiversity.

Kenya, for instance, has in recent years had to grapple with the impact of the Fall Armyworm, Maize Lethal Necrosis disease, fruit flies, migratory desert locusts, larger grain borer, *Tuta absoluta* and weeds such as water hyacinth and parthenium on food production and livelihoods.

The UN Food and Agriculture Organization (FAO) estimates that plant pests and diseases cause food crop losses of up to 40 percent, noting that the damage exacerbates the growing world hunger and threatens rural livelihoods.

Experts warn that the effects of climate change will aggravate the problem.

“Climate variability such as prolonged droughts and periodic wet seasons adversely affect plant health and biodiversity while the variations in weather patterns and global warming have contributed to pest outbreaks in areas which were traditionally not known to be favourable for the pests,” said Prof. Theophilus Mutui, the managing director of the Kenya Plant Health Inspectorate Service (KEPHIS).

KEPHIS regulates the trade and movement of all plant material and



Prof. Theophilus Mutui, the Managing Director of the Kenya Plant Health Inspectorate Service (KEPHIS). Photo Credit: Marion Wagaki.

plant products through phytosanitary inspection and certification, provision of diagnostic services to support plant health and seed certification.

It has implemented the Sanitary and Phytosanitary (SPS) Agreements under the Food and Agriculture Organization (FAO) to safeguard against introduction, establishment and spread of harmful plant pests.

But to address the adverse impacts of climate change on plant health and biodiversity, the Kenyan plant health regulator is advocating the adoption for climate-smart solutions in crop production as well.

These include drought-resilient and high-yielding crops for specific regions, prudent water utilisation, technology integration and expanding production units while conserving natural ecosystems.



Seedlings on a nursery. Photo Credit: Marion Wagaki.

According to Jingyuan Xia, Director of FAO's Plant Production and Protection Division, sustaining plant health promotes food security and nutrition while protecting the environment and biodiversity and boosting livelihoods and economic growth, in the context of global challenges, particularly climate change.

Prof Mutui notes countries should also strengthen monitoring and early warning systems to protect plants and plant health as well as promote investment in plant health innovations, research, capacity development and outreach.

"There is need to raise awareness on the importance of keeping plants healthy in order to achieve the UN 2030 Agenda, particularly SDG 2 (Zero Hunger) and campaign to minimise risk of spreading plant pests through trade and travel by triggering

compliance with international plant health standards," he said during the celebrations to mark the International Day of Plant Health at the KEPHIS headquarters in Nairobi in May.

"Plants play a significant role in the lives of people, making 80 percent of the food we eat and 98 percent of the oxygen we breathe and therefore the importance and benefits of plants in our lives cannot therefore be overemphasised."

The International Day of Plant Health was being marked globally for the first time this year.

The UN proposed the day be observed every year on May 12 to create awareness of how sustained plant health can reduce hunger, poverty, protect existing biodiversity and the environment and accelerate economic development.

The United Nations estimates that the world population will reach 10.9 billion by the turn of the century, requiring greater food supply.

Most of this population growth is projected to be in sub-Saharan Africa, which at present is a food-insecure region.

"This day is significant to Kenya and the global community because it is being celebrated at a time when threats of devastating diseases such as banana wilt disease and others are being reported across our borders," Prof Mutui said.