

Pesticides in Kenya:

Where are we?

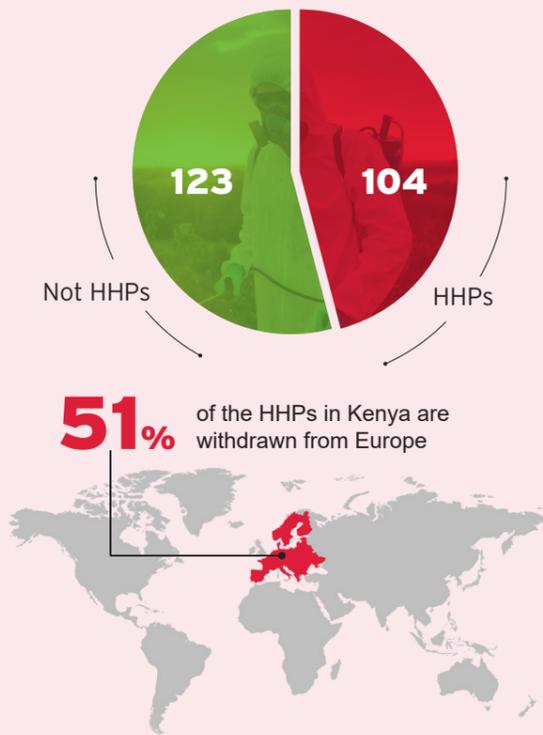
According to the World Health Organisation, highly hazardous pesticides (HHPs) are dangerous to human health, animals and the environment.

In many countries, HHPs are found in food, which puts the health of consumers at risk. They are especially dangerous to farmers and land workers exposed to them.

The Food and Agriculture Organisation (FAO) with the support of the Pest Control Products Board (PCPB) initiated a project in Kenya to phase out HHPs.

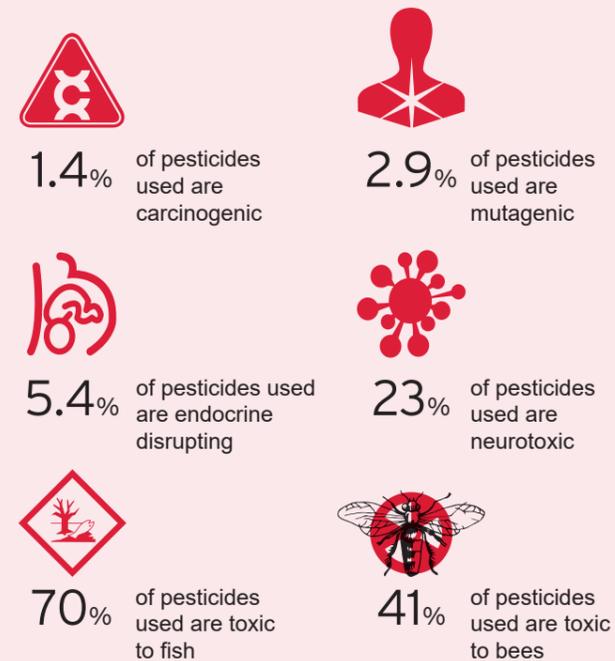
Kenya's National Assembly, in response to a public petition, has recommended that the Ministry of Agriculture, through the PCPB, withdraw harmful and toxic pesticides from the market.

Pesticides in Kenya



Pesticides use in counties

Research has shown that pesticides used in Kenya can cause harm. A survey in Kirinyaga and Murang'a counties revealed²:



What are endocrine disrupting chemicals?

Many pesticides are considered endocrine disrupting chemicals. EDCs interfere with hormone systems of wildlife and humans. These disruptions can cause cancerous tumors, birth defects, and other developmental disorders.



30% of farmers in Kirinyaga and Murang'a did not wear protection equipment

67% of the pesticides used by farmers in Kirinyaga and Murang'a are HHPs

74% of all households in Kirinyaga and Murang'a use HHPs

Crops with highest number of HHP applications

From samples collected in Kiambu, Kirinyaga, Machakos and Meru, not one single crop is cultivated without the use of HHPs.



Agrovets and extension officers recommended HHPs for pest control.

Misuse of pesticides was observed



Use of pesticides that are not registered for vegetables and fruits (e.g. dimethoate, chlorpyrifos)



Use of pesticides that are not registered in Kenya at all (e.g. methamidophos)



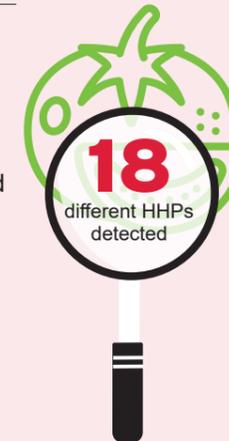
Use of wrong pesticides (e.g. use of an insecticide to control fungus)

Consumer exposure

HHPs in tomatoes

Residue analysis from three different counties (Kirinyaga, Machakos and Meru) confirmed the intense use of pesticides on tomatoes. 18 different HHPs were detected in a total of 25 samples.

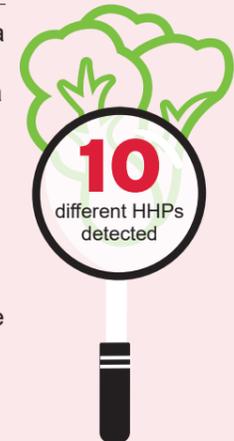
Mixture toxicity is a problem. 80% of the samples showed more than one HHP per sample.



HHPs in Sukuma Wiki

Residue analysis in Sukuma Wiki from three different counties (Kiambu, Kirinyaga and Meru) showed ten different HHPs on Sukuma Wiki samples.

In Kirinyaga County, a maximum number of four pesticides (three HHPs) per sample was detected. Three Sukuma Wiki samples exceeded the MRL.



What are Maximum Residue Limits (MRLs)?

MRLs are the highest level of a pesticide residue that is allowed in or on food or feed.



Pesticides require strict mitigation measures



Personal protection equipment



Pre-harvest intervals



Buffer zones



Spray times to avoid pollinators



Pesticides should be heavily restricted or withdrawn from the market, because circumstances in Kenya make it impossible for farmers to adhere to mitigation measures.

Citations:

¹ Kenya Organic Agriculture Network (2020). Pesticide use in Kirinyaga and Murang'a Counties: A wake up call for better control strategies. Available. www.koan.co.ke
² Route to Food Initiative (2019). Pesticides in Kenya. Why our health, environment and food security is at stake. Available. www.routetofood.org