## **EXECUTIVE SUMMARY**

A general overview of Togo's agricultural activities shows that agriculture occupies an estimated cultivable area of 3.6 million ha, i.e. 60% of the country's total area, of which 41% is cultivated (1.4 million ha).

In an effort to control insect pests, weeds and microscopic fungi that are harmful to crops, a large quantity of chemical pesticides are commonly used. One of these is chlorpyrifos.

Mindful of the dangers associated with the use of chemical pesticides in Togo, the Government has taken measures to regulate their use in the agricultural sector.

Togo has a national policy framework for the registration and control of pesticide-related chemicals. The country has also signed international agreements, and has national legal and institutional frameworks for pesticide-related chemicals.

Regarding the use of chlorpyrifos in Togo, it should be noted that it was registered for the first time in Togo in 2017 by the Sahelian Pesticides Committee (CSP<sup>1</sup>, *SPC in English*). This product is used to protect the soil from insect pests. From 2017 to 2021, several pesticide containing active substances such as chlorpyrifos were registered by the CSP. See the table below.

Table : Chlorpyrifos import from 2020-2022 in Togo

Registered/Commercial Name	Active substance	Year of approval
ASKIA SOWS	Chlorpyriphos (25g/L) Thirame (25g/kg)	0948-A0/In/05-17/ APV -SAHEL, expired in May 2020
CALTIIIO C 50 WS	Thirame (250g/kg) chlorpyriphos -ethyl (250g/kg)	0551 -HO/In,Fo/11 -16/HOM-SAHEL: expired in Nov. 2021
COMBAFOS48% EC	Chlorpyrifos-ethyl (480 g/1)	0953-A0/1n/11-17/AI'V-SAHEL, expired in Nov. 2020
IIELCHLOR 424 EC	Chlorpyrifos-ethyl (400 g/L) Deltamethrin (24 g/L)	091 0-A0/1 n/05-161 To V-SAHEL, expired in May 2019
DURSBAN 240 ULV	Chlorpyrifos-ethyl (240 g/L)	0004-H4/ln/07-17/H0M-SAHEL, expired in July 2022
DURSBAN 4 EC	Chlorpyrifos-ethyl (480 g/L)	0011-H4/ln/07-17/1H0M-SAHEL, expired in July 2022

<sup>&</sup>lt;sup>1</sup> Comité sahélien de pesticides (Sahelian Pesticides Committee in English) is a regional committee which registers pesticide in more than ten countries in the West Africa region.

DURSBAN 450 ULV	Chlorpyrifos-ethyl (450 g/L)	0001-H4/ln/07-17/H0M-SAHEL, expired in July 2022
DURSBAN 5% DP	Chlorpyrifos-ethyl (50g/kg)	0002 H4/ln/07-17/H0M-SAHEL Expired in July 2022
DURSBAN 5 G	Chlorpyrifos-ethyl (5 g/kg)	0003-H4/ln/07-17/H0M-SAHEL, expired in July 2022
PYRIBAN 450 ULV	Chlorpyrifos-ethyl (480 g/L)	0664-AI /ln/11-16/ APV-SAHEL, expired in Nov. 2018
PYRIBAN 480 EC	Chlorpyrifos-ethyl (480 g/L)	0662-AI /ln/11-16/ APV-SAHEL, expired in Nov. 2019
PYRIBAN 480 ULV	Chlorpyrifos-ethyl (480 g/L)	0663-AI /ln/11-16/ APV-SAHEL, expired in Nov. 2019

Thus, during 2020 and 2021, Togo imported seven (07) tons of chlorpyrifos according to the Plant Production Directorate ( $DPV^2$ ).

This quantity may be higher, if we take into account the informal pesticide distribution channels. It is difficult to obtain data on imports from the informal market (60-65% of the pesticides market), which is a constraint for pesticides management.

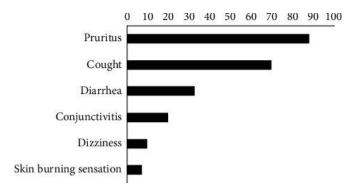
Chlorpyrifos is mainly used against aphids and white flies, locusts and grasshoppers. Togo does not manufacture chlorpyrifos. Depending on the distribution channel (formal or informal), imports come from China and Ghana. Most products are formulated, packaged and imported from Ghana, China, France, Spain, India and Hong Kong.

Local (formal) businesses involved in the import and distribution of chlorpyrifos-based pesticides are: STIEA Sarl; SPROCA Sarl; PARIJAT-Togo; DIEU MERCI Sarl U and UPL Togo. During this study, these companies did not provide most of the information requested from them.

Poor application of pesticides can lead to direct exposure (through eyes, nose, or even skin). Several adverse health effects were reported by several farmers met in different localities of Togo, the most common of which were pruritus (85.4%), headache (70.8%), cough (68.8%), and muscle pain (64.6%). This shows the importance of protective equipment when handling and applying pesticides. In addition to the consequences on the health of producers, the accumulation of plant protection products in vegetables and soil can be a source of poisoning. Children of market gardeners, who during weekends and/or during holidays help their parents, are also at great risk of poisoning as well as pregnant women who help their husbands<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Direction de la production végétale (Plant Production Directorate)

<sup>&</sup>lt;sup>3</sup> Aboudoulatif Diallo and others, Pesticides Use Practice by Market Gardeners in Lome (Togo), published online on Sep 22, 2020.



*Fig. 1 Distribution of produces according to adverse health effects due to pesticides*<sup>4</sup>*.* 

The search for pesticide residues in 29 soil samples and 13 groundwater and water samples revealed the contamination of where the producers are growing.

Residues of organochlorine, organophosphorus and synthetic pyrethroid pesticides such as: 4,4 DDE, -endosulfan, endosulfan sulphate, alphaHCH, beta-HCH, delta-HCH, gamma-HCH, aldrin, heptachloro-exo-cis, chlorpiriphos-ethyl and lambdacyhalothrin were identified in soils at concentrations ranging from non-detectable to 26.93 g. kg-1<sup>5</sup>.

In order to be on the safe side, Togo has taken certain measures to phase out, ban, or restrict the use of Highly Hazardous Pesticides (HHP), including chlorpyrifos. These measures include:

- the promotion of alternatives to chemical pesticides through integrated pest management and the use of organic agricultural inputs;
- the promotion of agroforestry systems; and
- the enhancement of training and awareness-raising initiatives for stakeholders on agroecology or organic agriculture.

Nevertheless, there are challenges associated with the chlorpyrifos elimination campaign. These include insufficient legal and institutional capacities; lack of plans and programs, as well as aspects related to the capacities of stakeholders, technical management; infrastructure; control and monitoring. To remove these challenges, it is important to raise awareness and to advocate for the adoption of coercive prohibitive measures.

<sup>&</sup>lt;sup>4</sup> idem

<sup>&</sup>lt;sup>5</sup> Gbénonchi Mawussi and others, March 2015, P 50, Utilisation de pesticides chimiques dans les systèmes de production maraîchers en Afrique de l'Ouest et conséquences sur les sols et la ressource en eau : Le cas du Togo (*Use of chemical pesticides in market gardening systems in West Africa and consequences on soils and water resources: The case of Togo*).