



Better Markets, Better Lives



STUDY ON COUNTERFEITING OF PEST CONTROL PRODUCTS IN KENYA

EXECUTIVE SUMMARY

SUBMITTED BY



Integrated Development Consultants Ltd
Surveyors Court Apart No.4, Woodvale
Groove Road, Westlands, Nairobi,
Kenya
P.O BOX 1963-06060 Sarit NAIROBI
Tel : +254705911136/254729871251
Email: admin@idconsulting.org or
bkagira@gmail.com
24th May 2021

1.0 INTRODUCTION

The Study on Counterfeiting of Pest Control Products in Kenya was commissioned by Agrochemical Association of Kenya in collaboration with PCPB. It is responding to the growing national and global concerns about the rising trend of counterfeit pest control product. AAK while commissioning this study observed in the background to the study that “*the risk faced by the industry is real and seems to be spread countrywide*’. This concern is further amplified by the recently concluded National Baseline Survey on Illicit Trade (ACA February 2020), where the agrochemical industry featured under the chemical and allied industry. The size of illicit trade in the industry was estimated at KES11.8billion in 2017, rising by 23% to KES14.6billion in 2018. At the global level, the European Parliament report of January 2021, citing the European Crop Protection Agency (ECPA) noted that: “*the trade in counterfeit pesticides has grown into a major profitable criminal enterprise. A global operation called Silver Axe seized 1,346 tonnes of illicit pesticides, worth up to EUR 94 million, during just the first four months of 2020 (Europol, 2020)*”.

The threat that counterfeits pest control products pose to any economy are well known and have been a subject of research since 2010. These include environmental degradation (EOCD (2020)¹, putting human health at risk, loss of productivity, unfair competition, sales losses (OECD, 2011), loss investments (ACA, Feb 2020), food insecurity (OECD Dec.2018), loss of government revenues (ACA Feb 2020), among many other negative effects.

The significance of the study is underscored by the role that the agrochemical industry is expected to play in Kenya’s economic development. This fact is best demonstrated by the significance of Kenya’s agriculture sector in the overall economy. Agriculture is the lead contributor to Kenya’s national wealth creation and a means of livelihood and employment as demonstrated by the sector’s contribution to the country’s Gross Domestic Product (GDP) annually. Between 2017 and 2019 the sector’s contribution to the country’s GDP was on average 28%. Over the same period the sector accounted for an average 58% of the country’s total exports.

This reality has made the Government place the sector at the heart of the country’s economic transformation blueprints which are, Vision 2030, the Big Four Agenda and Integrated National Export Development Strategy (INEDPS). The latter strategy has assigned agriculture exports an annual growth rate of 25% per year as a contribution to the country’s targeted export of KES2 trillion by 2025. Among the key determinants of the sector’s ability to deliver this targeted growth rate is pest control products. A significant number of agricultural products being produced, either for the domestic or export market require application of pest control products.

The sector and the economy in general are therefore exposed to the negative impact that is associated with counterfeit pest control products. This assignment is geared towards contributing to the search for the solution to this challenge through assessment of the situation to **determine the extent of counterfeiting of pest control products/pesticides in Kenya and measures to arrest the situation.** The study has achieved this goal through: -

- a) Assessment of the success of past and current efforts to manage and control the counterfeit pest control industry in Kenya;
- b) Assessment of the degree and presence of the counterfeit pest control products;
- c) Assessment of the extent to which counterfeit pest control products are stocked and used in the country;
- d) Determining the nature and key stakeholders of the counterfeit pest control product industry and the key entry points;
- e) Determining the factors that drive the counterfeit industry to prosper in the country;

¹ OECD (2020): Trade and Environment Working Paper N°1 © OECD 2020

2.0 APPROACH AND METHODOLOGY

The scope of the assignment dictated the approach and methodology that was used in the envisaged assessments of the counterfeit pest control products. The driver in determining the approach and methodology applied was the need to document: degree and presence, extent of stocking and use, factors behind the thriving of counterfeit pest control industry in Kenya and past and current efforts of management and control of the counterfeit pest control products. The following complementary approaches and methods were used:

1) The degree and presence counterfeit pest control products

Three internationally acclaimed and complementary methods of measuring the magnitude of counterfeits in an economy were used.

- a) Seizure method, which focuses on Government Agencies seizures of counterfeit pest control products. Seizures are recognized a measure of counterfeits in any economy (OECD/EUIPO (2016))²
- b) Firm sales losses method, which focuses on reported firms sales losses as a result of their products being counterfeited. Firm sales losses have been accepted as a measure of magnitude of counterfeits by (KAM (2012) and ACA (June 2020))³
- c) International trade-based method, which focuses on illicit trade, based on the understanding that counterfeits are considered to be part of the illicitly trade products. Therefore, although this method does not tell the level of counterfeit, it is a pointer that there could be counterfeit pest control products in the documented level of illicitly traded pest control products. The method has been used in ACA (Feb 2020) building on experiences of (OECD) 2008⁴ and EUIPO (2016)⁵.

2) Supply of counterfeit pest control product

This was determined through firm level survey, targeting sample of manufacturers, distributors and Agents. Respondents' firms were required to provide information touching on the supply of counterfeits pest control products and firm level impact among other areas of assessment.

3) Stocking of counterfeit pest control product

This was assessed through nation-wide survey of stockists that targeted the selected sample of stockists in 34 counties. The respondents were required to provide information on the presence of counterfeit pest control products, stocking of these products by licensed and unlicensed stockists, factors behind stocking of counterfeits and their sources, among other elements.

4) Demand of counterfeit pest control product among users

This was a survey among a sample of users, who included farmers, commercial users, spray service providers, among others. The respondents were required to provide information on the presence of counterfeit pest control products, ability to tell or identify pest control products, extent of purchasing and factors behind the purchasing of the products, source of the products, among other elements.

5) Management and Control of counterfeit pest control products

The framework that was used to assess the effectiveness of the management and control of pest control products was adapted from OSCE (2015) and OECD (2018). It included the following areas of assessment:

- a) Prevention of counterfeits
- b) Preparatory actions to arrest or deter spread of counterfeit pest control products
- c) Response actions on reported incidents of counterfeit pest control products
- d) Guidelines to identify illegal trade as well as trade of counterfeit pesticides

² OECD/EUIPO (2016): *The quantitative analysis in the report was based on a unique, global set of half a million-customs seizure data over the period of 2011-13.*

³ ACA (June 2020): *The National Baseline Survey on the Extent of Illicit Trade in Kenya*

⁴ OECD (2008): *The Economic Impact of Counterfeit and Piracy.*

⁵ EUIPO (2016), *'Trade in Counterfeit and Pirated Goods'*.

3.0 SUMMARY OF FINDINGS

3.1 MAGNITUDE AND PREVALENCE OF COUNTERFEIT ILLICITLY TRADE PEST CONTROL PRODUCT

The magnitude of counterfeit and illicitly traded pest control products as measured through the seizure and firm sales losses and international method, respectively is as detailed below.

- Using the seizure method, which relies on data on seized goods, for total magnitude of counterfeit pest control products between 2017 and 2019 was KES4.82million;
- Using the firm sales losses method (which relies on firm level data on sales losses as a result of losing market to counterfeit pest control products), total magnitude of counterfeit pest control products between 2017 and 2019 was KES607.94mn. This shows the size of counterfeit pest control is much higher than indicated by seizure data;
- Magnitude of illicit trade in pest control products (which by definition includes counterfeits and all other illegally imported pest control products) between 2017 and 2019 was KES11.3billion.

3.2 THE SUPPLY OF COUNTERFEIT PEST CONTROL PRODUCTS BY MANUFACTURERS/FORMULATORS, DISTRIBUTORS AND AGENTS

1. Level of counterfeiting of pest control products that are produced by Kenyan industries

Counterfeiting of pest control products was confirmed by 60.98% of the respondent firms who indicated awareness of cases of their products being counterfeited and sold in the domestic market.

2. Impact on firms that indicated awareness of their products being counterfeited and sold in the domestic market

a) Sales losses

Out of the total firms that indicated awareness of their products being counterfeited and sold in the domestic market, 80% reported having experienced sales loss as a result. The sales loss over the period 2017 to 2019 amounted to KES608million. The source of the counterfeit pest control products was given as domestic as well as foreign markets. The top five counties where firms recorded sales losses were given as Kirinyaga, Nairobi, Kajiado, Bomet and Embu.

b) Loss of employment

In total, respondent firms reported a total of 110 job losses as a result of counterfeiting and sale of their counterfeited products in the domestic market.

c) Loss of investment opportunity

Over the three-year period, 2017-2019, investment opportunity lost in the pest control industry because of counterfeiting and sale of counterfeited pest control products in the domestic market stood at KES324 million.

d) Loss of Government

The total government revenue loss over the three-year review period (2017-2019) stood at KES199million.

3. Supply of counterfeit pest control products by manufacturers, distributors or agents of counterfeit pest control products

In total, 39% of total respondents indicated awareness of manufacturers/formulators, distributors, agents or stockists (agrovets) of counterfeit pest control products. This finding demonstrates that there are manufacturers/formulators, distributors and agents who are engaged in the supply of counterfeit pest control products in the country. This finding is further supported by stockists who gave their source of counterfeit pest control products to be manufacturers/formulators.

4. User complaints

Majority of respondent firms (41% of total respondents) indicated having received users' complaints of their counterfeited pest control products. This finding reaffirms the respondent firms' assertion that they were aware of their products being counterfeited and sold in the domestic market. It is also an affirmation of the presence of counterfeit pest control products in Kenya.

5. Reporting of incidents of counterfeit pest control products

The level of reporting of incidents of counterfeiting of respondent firms' pest control products was quite high, with 85% of the affected firms indicating having reported these incidents to Government Agencies. The level of satisfaction with action taken on reported cases was rather worrying because 40% of those who reported indicated that they were not satisfied with the action taken.

3.3 STOCKING OF COUNTERFEIT PEST CONTROL PRODUCTS

a) Presence of counterfeit pest control products in the domestic market

An overwhelming 84.43% of the stockists indicated awareness of counterfeit pest control products in the domestic market. They gave domestic and foreign market as the source of these products.

b) Stocking of counterfeit pest control products by licensed and unlicensed stockists

i) Stocking by unlicensed stockists

According to 52.4% of the respondents, there are unlicensed stockists stocking and sell counterfeit pest control products. The following counties were cited by most of the respondents as counties with unlicensed stockists: *Kilifi, Taita-Taveta, Marsabit, Makueni, Nyandarua, Kiambu, Uasin Gishu, Laikipia, Bomet, Bungoma, Busia, Homa Bay, Tharaka-Nithi, Migori, Embu, Kisii, Kakamega, Meru, Kajiado, Kirinyaga, Narok, Nairobi, Nakuru.*

The most counterfeited pest control products that are stocked by unlicensed stockist are insecticides. This is followed by acaricides, herbicides and fungicides. The factors behind the sale of counterfeit pest control products by unlicensed stockist included low price, product popularity, ease of availability and brand name. The sources of counterfeit pest control products that are stocked by unlicensed stockists were given as traders, home based network of distributors, manufacturers/formulators, other agrovets and online platforms/shops (2.71%).

ii) Licensed stockists that could be selling counterfeit pest control products

According to 31.21% of the respondents, there are some licensed stockists who stock and sell counterfeit pest control products. The lead counties that these stockists are located are as follows: Nairobi, Kisii, Kirinyaga and Kiambu. Other counties that also featured prominently are Narok, Nakuru, Mombasa, Kakamega and Uasin Gishu. The most popular counterfeit pest control products that are stocked by licensed stockist are herbicides, acaricides, fungicides and insecticides.

The factors behind the sale of counterfeit pest control products by licensed stockist included low price, product popularity, ease of availability and brand name. The sources of counterfeit pest control products that are stocked by licensed stockists were given as traders, home based network of distributors, manufacturers/formulators, other agrovets and online platforms/shops.

iii) Licensed stockists who indicated having stocked counterfeit pest control products

Licensed stockists accounting for 16.31% of the total respondents admitted having ever stocked counterfeit pest control products. However, an overwhelming 65.01% of the respondents were categorical that they had never stocked counterfeits. The most stocked counterfeit pest control products by the agrovets who declared having ever stocked these products was herbicides, acaricides, insecticides and termiticides. Whatever the reason that prompted these agrovets to stock counterfeit pest control products, the message coming from this finding is that there is risk that counterfeit pest control products are being vended in licensed agrovets.

There was no prior awareness, among 50.72% of the total licensed stockists who admitted having stocked counterfeit pest control products, that the products being stocked were counterfeits. The lead reason that made licensed agrovets who declared having ever stocked counterfeits stock them was brand name, low price, origin of the product, and ease of availability. The source of the counterfeits was given as follows: manufacturers/formulators, home-based network of distributors.

The agrovets who indicated having stocked counterfeit pest control products in their licensed outlets were categorical that they will not be knowingly stocking these counterfeit products. This view was held by 82.98% of the licensed stockists who admitted having stocked counterfeits. This revelation should be used as an asset to stop stocking of counterfeits in licensed agrovets through education, training, awareness creation and partnership distributor/manufacturers supplier network with agrovets that ring fences the licensed agrovets from infiltration of peddlers of counterfeit pest control products. This policy measure will also dry up the source of counterfeit pest control products for the few licensed agrovets who hubber plans to stock these products knowingly.

iv) Awareness of legal consequences of stocking counterfeit pest control products

The level of awareness of legal consequences of stocking counterfeit pest control products was quite high as evidenced by 98.26% of the respondents who indicated being aware of the legal consequences. The consequences that were cited included arrest, license revocation, closure of business, heavy fines, among others.

3.4 DEMAND FOR COUNTERFEIT PEST CONTROL PRODUCTS

a) Presence of counterfeit pest control products in the domestic market

Presence of counterfeit pest control products in Kenya was confirmed by 86.10% of the respondents who indicated awareness of these products being sold in the domestic market. The source of these products was given as domestic and foreign markets.

b) Ability of users to tell a counterfeit pest control product at sight or when buying

Ability of users to tell counterfeit pest control products at sight or when buying is high as evidenced by 54.28% of the respondents who indicated having this capability. The users attributed their capability to tell counterfeits at sight or when buying to the following sources of knowledge: advertisements, sensitization, experience, seminars, brand owners, training and agrovets.

c) Awareness of the legal consequences of buying counterfeit pest control products

Majority of respondents (56.28%) indicated that they were not aware of the legal consequences of using counterfeit pest control products. This low level of awareness of the legal consequences is a concern in the fight against counterfeit pest control products because it suggests that the current legal deterrents are not adhered to because they are not known.

d) Purchase of counterfeit pest control products

Out of the total respondent, only 24.22% indicated having ever purchased counterfeit pest control products, with the rest of the respondents (37.98%) indicating that they never purchased counterfeit products and 29.15% of the respondents indicating not being sure whether they bought or they did not and choosing to be nonresponsive.

The lead counties where users indicated having purchased counterfeit pest control products were: Nakuru, Kirinyaga, Nairobi and Embu. The most purchased types of counterfeit pest control products were herbicides, acaricides, insecticides, rodenticide, growth regulators and nematicides, rodenticide

Majority of the respondents (83.70%) who indicated having purchased counterfeits did not have prior knowledge that the products were counterfeit at the time of purchase of the products. This finding

illustrates that ignorance and failure of the users to tell a counterfeit pest control product at the time of purchase is a key factor that is contributing to the growth in trade of counterfeit pest control products.

The lead reason that prompted purchase of counterfeit pest control products was ease of availability (in shops, kiosks, hawkers and home-based distribution), low price and product popularity.

3.5 MANAGEMENT AND CONTROL OF THE COUNTERFEIT PEST CONTROL PRODUCTS IN KENYA

1. Effectiveness of preventive system for management and control of counterfeit pest control products in Kenya

The parameters that were used to assess effectiveness of the preventive system were **registration of pest control products, customs clearance protocols, logistics and sales, waste and packing disposal, raising awareness, interaction with business, joint raids, quarantine protocols, raising awareness on incidences of counterfeit and international cooperation**. The assessment sought to establish the extent to which the preventive system has embraced this international best practice in prevention of trade in counterfeits. The findings for each of these parameters are as detailed below.

a) Pest control products Registration

i) Mandate to register pest control products

Registration of pest control products is aimed at ensuring that only registered products are offered for sale or are in use in the country. The only agency that does registration of pest control products in Kenya is PCPB. This is in line with the international best practice where registration of these products is a preserve of the competent Authority, which in this case is PCPB.

ii) Registration system

A registration system that facilitates timely registration of pest control products for ease of referencing, especially on suspected illegal or unregistered products is a mandatory requirement from an international best practice point of view. PCPB indicated that they did not have such a system. Given that PCPB website gives information on registered products (<https://www.pcpb.go.ke/crops/>; <https://www.pcpb.go.ke/biopesticides-on-crops/>), the issue is a weak registration system rather than lack of one.

iii) Requirement for uniform registration for original and generic products

Facilitating distinction of original and generic products is considered a prudent disclosure practice in the international best practice for registration of pest control products. PCPB indicated having this policy on uniform registration of original and generic pest control products, thus earning a score on this international best practice benchmark.

iv) System for audit of registered brands/products for expired registration or removal from the approved list of pest control products

Efficacy in management and control of pest control products is enhanced by system for audit of registered brands for expired registration or removal from the approved list of pest control products. **PCPB the only Agency that is mandated to register pest control products, indicated that they did not have the system for audit of registered brands/products for expired registration or removal from the approved list of pest control products.**

v) Share the current list of registered pest control products with Customs Authority, Kenya Revenue Authority, ACA and National Police Force

PCPB was adhering to this practice because it indicated that it shares the list with Customs Authority, ACA and the National Police Force.

b) Customs Clearance

PCPB indicated having a system for detection, interception and detention of illegally traded pest control products by customs. The efficacy of this arrangement is however put to question by the huge discrepancy in data on seized counterfeit pest control products between 2017 and 2019, as reported in the Section 4.0 of this report (Magnitude and Prevalence of Counterfeit Pest Control Products) which stood at KES4.8million and reported sales losses from counterfeited products sold in the domestic market, which stood at KES608million and illicit trade in pest control products in 2019 which was estimated using international trade method to be KES4.4billion in 2019.

c) Logistics and sales

PCPB indicated that there was a national system of monitoring distribution and sale of pest control products in the country. **As for certified carriers, PCBP was nonresponsive, meaning that there lacks a clear policy or system on certified carriers for pest control products.** The efficacy of the national system of monitoring distribution and sale of pest control products is however put to question by the widespread distribution of counterfeited products that, as noted by manufacturers resulted in sales losses in 43 counties.

d) Waste and pest control products packing and disposal

The survey, through the response by PCPB, revealed that other than technical regulation on distribution of the pest control products, all the other parameters on waste, packaging and disposal of pest control products, are in place. This presents a good platform for fighting counterfeit trade.

e) Raising awareness

The three Agencies, PCPB, ACA and NEMA responded by indicating that they have awareness programs on counterfeit pest control products. However, only PCPB and NEMA indicated running awareness programs with active involvement of local authorities, media and civil society organizations. Whereas this response makes these Agencies get a score in this international best practice, the presence of counterfeit as well as illegally traded pest control products in Kenya points to the inadequacy of the awareness program in terms of outreach to users and other stakeholders.

f) Interaction with business

PCPB indicated that they engaged with business associations across the pest control value chain or life cycle. The business associations that the Agencies listed as associations they had engaged with are as follows:

- i) Agrochemicals Association of Kenya (AAK)
- ii) Kenya Association of Manufacturers (KAM)
- iii) Kenya Private Sector Alliance (KEPSA)

2. Effectiveness of the preparation system

The international best practice parameters to existence and effectiveness of a country's preparation system, following OSCE and OECD (2018) are as follows: Joint raids, Quarantine warehouses, Raising awareness on cases of counterfeit pest control products and International cooperation. The status of these parameters in Kenya was determined during the survey and the results are as below: -

a) Joint raids

All the three Government Agencies whose mandate touch on counterfeit pest control products indicated having conducted joint raids with other Government Agencies and business in response to incidents or reported cases of counterfeit pest control products. The Government Agencies and businesses engaged in the joint raids included the following: ACA, KRA Customs, NPS, NEMA, KEBS DCI and brand owners.

b) Quarantine warehouses

PCPB indicated that it has a total of five (5) specialized protected quarantine warehouses for storage of seized counterfeit pest control products pending investigation and court proceedings that are secured to ensure against these products leaking to into the market. This is a plus in the country's fight against counterfeit pest control products.

c) Raising awareness on cases of counterfeit pest control products

PCPB indicated that there was provision for obligatory media coverage of seized or arrested counterfeit pest control products, which includes involvement of civil activists and businesses. It is the only Agency among the three that indicated having mandate on counterfeit pest control products that indicated having this obligatory media coverage. On how many coverages had been undertaken between 2017 and 2019, PCPB was nonresponsive, indicating that the data may not have been readily available at the time of the survey.

d) International cooperation

There exists an operational intelligence information exchange between Customs Authority and PCPB and equivalent agencies in the countries that Kenya imports pest control products. This policy and practice is laudable, because it makes Kenya have a score on this international best practice parameter.

3. Effectiveness of the system for response to incidents of counterfeit pest control products in Kenya

The three Government Agencies, PCPB, ACA and NEMA indicated that the response provision for reported incidents of counterfeit pest control products was in place and that it was enshrined in regulatory framework that also provided for: -

- i) All arrested counterfeit pest control products be transferred to specially protected warehouses;
- ii) Secure integrity of sample/exhibits;
- iii) Customs and law enforcement officers involved in seizure procedures should undergo proper training.

The three Agencies also affirmed that the customs and law enforcement officers involved in seizure procedures had adequate training and had access to proper personal protection equipment for use during response missions. This standard, which is already in Kenya's framework for management and control of pest control products is commendable as it makes the country have a score in this international best practice parameter.

4. Effectiveness of the system for management and control of production and trade of counterfeit pest control products in Kenya

a) Manufacturing and storage facilities

The PCPB, in line with the international best practice benchmark, indicated having an up-to-date list of manufacturing and storage facilities of pest control products with details which include: name of the pest control products; destination country; pesticide composition (distinguishing the active substance and co-formulants); date of manufacture; name and address of manufacturer(s) of active substance; date(s) of acquisition of active substance; name and address of manufacturer(s) of co-formulant(s); date(s) of acquisition of co-formulant(s); date of manufacture of pesticide; batch number; type of packaging used; name and address of purchaser; date of sale / goods out.

b) Dedicated Inspectors for management and control of pest control products

The PCPB, in line with the international best practice benchmark, confirmed that there is a dedicated office and team charged with inspection of pest control products across the industry. The total number of PCPB inspectors were given as 18. This was the figure in June 2020 against the optimal level of 30 inspectors. From this finding, it emerges that the team of inspectors is inadequate, a challenge that could have contributed to the rise in the level of counterfeit and illicitly traded pest control products.

c) Export

PCPB, in line with the international best practice benchmark, indicated having an up-to-date list of operators exporting pest control products. Further, PCPB is enforcing exporters regulations and has provision for mandatory authorization of exports of pest control products before exports are made. Similarly, and in articulation of the best practice standard, PCPB requires exporters to record the details of stored and exported pest control products and to keep these records for a period of at least 5 years,

including Name of pest control products or active ingredient, Name and address of exporter, Name, address and country of consignee, Date of shipment / delivery for shipment, Quantity shipped.

6. Effectiveness of the system for management and control of transport and importation of pest control products in Kenya

a) Pre arrival

The PCPB, in line with the international best practice benchmark, indicated having a system on pre-arrival information on consignments before they arrive at points of entry. PCPB was however nonresponsive on the system's information content and whether it was in line with the international best practice benchmark recommended (Invoices, Material Data Safety Sheets (MSDS), export certificates and packaging lists (if available))

b) In transit

Pest control products in transit are considered as products in the market, posing a threat for introduction of counterfeit or illegal pest control products in the market of the transit country. This threat, according to the international best practice benchmark is averted through technical regulations for pest control products in transit. PCPB indicated that there is no such regulation because regulations of goods in transit is a KRA customs mandate. While this is true, PCPB will need to liaise with KRA Customs and ensure that the regulations recommended by OSCE and OECD are domesticated in Kenya because pest control products, unlike general goods require special attention because of the threat they pose to the country, especially counterfeits products in transit.

c) Sale/Retail Distributors (wholesalers/retailers)

The PCPB, contrary to the stipulation of the international best practice benchmark, does not have a framework for management and controlling distributors of pest control products. This leaves a loophole in the pest control products life cycle where unscrupulous distributors can use this lapse to stock, sell and even export counterfeit or illicit pest control products.

d) Education

Education of distributors on identification of illegal pesticides is given by OECD (2018) as a best practice in management and control of pest control products. It is advocated that education of distributors should include easily identifiable common features of illegal pesticides such as packaging and labels; higher risk channels; documentation/traceability issues; and price. Further, this education should include information on the risks and hazards of illegal pesticides; the possible penalties for the storage or distribution of them, and how distributors can notify authorities of suspicious pesticides or activity.

Contrary to the above stipulated standard, neither PCPB, ACA or NEMA runs a program for educating distributors on the above-mentioned best practice education topics. PCPB should take lead in developing an education program that should be implemented through a Multi-Agency Team framework for combating counterfeit pest control products.

e) Professional users

The PCPB, contrary to the international best practice benchmark, does not have a framework for management and controlling professional users of pest control products. This leaves a loophole in the pest control products life cycle where unscrupulous users can use this lapse to stock, use and even export counterfeit or illicit pest control products.

i) Complaints from users of pest control products

The PCPB indicated having received a total of 27 users' complaints on counterfeit pest control products over the period 2017-2019. This is corroborated by responses from the users survey where only 11.43% of respondents indicated having reported incidents of counterfeit pest control products to PCPB among other Government Agencies. This low level of reporting to PCPB underscores need for enhancing awareness among the users on need to report incidents of counterfeit pest control products whenever

they are detected. PCPB needs to embrace user complaints as an indicator of the presence of counterfeit pest control products and proceed to develop a system for user reporting.

4.0 REMEDIAL MEASURES FOR FIGHTING PEST CONTROL PRODUCTS COUNTERFEITS

A. Measures to strengthen management and control of pest control products

1. Review of PCPB systems for management and control of counterfeit pest control products

The PCPB scored very highly in the assessment of the current and past efforts of practices in management and control of counterfeit pest control products on the basis of international best practice benchmarks drawn from OSCE (2015) and OECD (2018). The magnitude and prevalence of counterfeit pest control products in Kenya as revealed by this study dictates need for the review of these systems with an aim of strengthening or improvement. It is therefore recommended that the system that PCPB has put in place to management counterfeit pest control products be reviewed to determine completeness, functionality, and effectiveness. The scope for review of this system should include the international best practice benchmarks parameters that were used in this study – systems encompassing prevention, preparations, response on reported or detected incidents of counterfeits, regulation of stakeholders – manufacturers/formulators, distributors, exporters and importers, among others.

2. Review of PCPB adequacy of funding against the challenge posed by counterfeit pest control products

Comprehensive implementation and enforcement of the legislation that outlaws counterfeiting of pest control products and sets out enforcement mechanism is crucial to the fight against counterfeits in the pest control products industry. The magnitude of counterfeit pest control products as identified in this study calls for review of PCBP funding of programs and activities that are designed to combat counterfeiting and documenting the gap in funding against the cost that the entire country is exposed as a result of the risks posed by the well documented negative impact on health, environment, productivity, employment, investments, among others. The review to include exploring other alternative source of funding using international best practice cases of funding Agencies such as PCPB. A high-level forum with policy makers should be organized where these findings tabled.

3. Review and strengthen of PCPB Inspectorate Services

The total number of PCPB inspectors was given as 18 in June 2020 against the optimal level of 30 inspectors. In view of the revealed magnitude of counterfeit pest control products and nationwide spread, it is recommended that a review of inspectorate services personnel requirement be made to determine whether the 30 people recommended are adequate or more would be needed. This exercise should be preceded by benchmarking PCPB inspections methods and approaches to international best practice in surveillance and inspection of pest control industry and the requisite structure for inspectorate services. Any gaps should be addressed through overhaul of PCPB inspectorate approach and methods, inspectorate services delivery and structure. The number of personnel implied in the new structure should then be procured and deplored for effective inspectorate service delivery throughout the country.

4. Establish a Government Multi Agencies Team on management and control of counterfeit pest control products

Pursuant to FAO (2011), ‘Good collaboration between the inspectors and other relevant agencies such as the Customs Department, Police Department and Ministry of Trade is crucial to ensure effective enforcement of the law’. PCPB underscored need for this collaboration in the survey where it decried weak coordination among Government Agencies. It is therefore important that a ‘Pest Control Product Multi Agency Team’ be established within the framework of Government Inter-Agency Team on Counterfeits, with clear mandate on counterfeit pest control products under the leadership of PCPB. The entire team should undergo rigorous training on identification of counterfeit and illegally traded pest control products.

5. Review licensing regime for stockists/agrovets

To address cases of unlicensed stockists/agrovets who were said to be stocking and selling counterfeit pest control products, it is recommended that the licensing system be reviewed and ensure that before any stockist/agrovets is granted a county business permit it will have obtained mandatory certificate to operate from PCPB, renewable annually, as is currently the case.

There is also need for an all Government Approach to the licensing of agrovets to ensure that one Agency, e.g. KEPHIS issues certificate of operation on the basis that seeds will be stocked, only for this outlet to stock pest control products without due authorization from PCPB. Implementation of this recommendation will require a regulation on licensing and monitoring Stockists/Agrovets which should among other things protect the name 'Agrovets/Stockist' to mean an outlet licensed by Government Multi-Agency Team on Regulation of Agrovets, comprising PCPB, KEPHIS, DVS and any other Government Agencies that are currently involved in authorizing Agrovets to stock products that are regulated. The regulation will require any business operating as an Agrovets to first get regulators license before applying for a County Single Business License. Counties to commit not to license Agrovets/Stockists unless the Regulators Permit/License accompany the application. The Regulation to prescribe minimum conditions that must be met before the Regulators Permit/License is provided. This should include some basic training (for the owners and operator/staff manning the agrovets) on stocking the controlled products where identification of counterfeit and consequences of stocking and selling counterfeits would be covered.

Implementation of this regulation to be extended to current agrovets to ensure compliance across the country. This could be done at the time of renewal of the annual licenses, where agrovets will be required to comply with the new licensing and compliance requirement.

6. Education and awareness program targeting manufacturers/stockists, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers)

The presence of counterfeit as well as illegally traded pest control products in Kenya points to the inadequacy of the awareness program in terms of outreach to users and other stakeholders. Therefore, there is a need to develop and implement programs to educate users on the importance and need to avoid use of counterfeit pest control products, how to identify these products and need for reporting of incidences of counterfeits to the relevant authorities to investigate and take the necessary corrective actions. Users should be educated about the consequences of using counterfeit pest control products. The education and awareness program should be implemented jointly with private sector stakeholders in the pest control products industry and PCPB.

7. Measures to combat import-based counterfeit and illicitly traded pest control products

- a) Develop a bilateral trade facilitation program with source countries for lead sectors in import based illicit trade, aimed at customs valuation of exports and imports, under-invoicing, misdeclaration of imported goods and exchange of information on goods under illicit trade radar that are destined to Kenya
- b) Share import declaration information of pest control products under counterfeit and illicit trade radar with the Multi-Agency team on combating counterfeit and illicitly traded pest control products to ensure that envisaged importation does not end up being counterfeit of Kenyan brands or other illicitly traded products
- c) Officers from law enforcement agencies at entry points should have an on-line database of registered pest control products, including brands and their owners to safeguard against importation of counterfeit or illicitly traded pest control products
- d) Kenya should pursue with EAC and other Regional Economic Communities for a mechanism to monitor and eliminate counterfeit and illicitly trade pest control products in the region, especially the products gaining access these countries through cross border trading. In the EAC, the effort should focus on enacting the pending Bill on Anti-Counterfeit.

8. Measures to discourage manufacture of counterfeit pest control products by unlicensed manufacturers/formulators

Introduce a manufacturing enterprises registration regime, under the Ministry of Industrialization, Trade and Enterprise Development, to ensure against establishment of enterprises that manufacture counterfeit pest control products. The regulation should require, among other things, that before an establishment that manufactures or formulates pest control products is registered as a manufacturing establishment, it must first obtain a permit or license from PCPB. The regulation should require County Single Business Permit for establishments that manufacture or formulate pest control products to be issued only after the PCPB license and State Department for Industry 'Industrial Establishment' registration certificates are provided.

9. Strengthen enforcement and compliance

In order to deter counterfeiting of pest control products, it is recommended that the current measures that include fines, penalties and sanctions be reviewed with a view to coming up with punitive measures that make counterfeiting business risky and unprofitable.

10. Complaint receiving and action platform

Complaints on incidents of counterfeit pest control products is a very useful indicator of the presence of these products in the country. The higher the number in any one year implies a higher presence of these products. This indicator works better if there is an easy and straight forward system of reporting that encourages manufacturers/formulators, distributors, agents, stockists and users to report any incidents that they come across in time. We recommend that PCPB in collaboration with AAK develop such a system and have it hosted at PCPB. The system should also contain action taken or being taken and sanctions imposed. The reporter should be allowed to follow up on the actions taken on incidents they reported. The portal should allow public to view as part of the awareness campaign to combat counterfeit pest control products.

B. Measures to strengthen private sector role in management and control of pest control products

1. Encourage all private sector stakeholders in the pest control industry should be a member of a private sector association operating in the pest control industry

Private sector association in the pest control industry should enhance recruitment to ensure that all registered/licensed private sector operators in the pest control industry become members of the association. Tiered membership structure to enable the lowest of the operators, such as agrovets become non fee/low fee-paying members is encouraged. The pull factor will be services and value that these associations provides to the members. This calls for review of all programs including introduction of new programs to ensure value that elicits demand for membership from target stakeholders so that they can continue receiving this value service.

2. An all-private sector nationwide structure program for education/training of manufacturers /stockists, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers)

The private sector players – manufacturers/formulators and agents should, through leadership of private sector associations in the pest control industry, develop an education/training program on counterfeit products touching on how to identify the products, their risks, value of not using counterfeits, among other topics. The program, which should target manufacturers/formulators, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers, among others), should be run by private sector associations of the consortium of private sector companies which offer to be part of the national program on education and training. This program should be linked with the one proposed under 'measures to strengthen management and control of counterfeit pest control products' where PCPB will also be a partner of private sector associations in development and execution of the nationwide program.

3. Private sector platform for sharing innovations and methods that are being used to counter counterfeit pest control products

The private sector has invested heavily in protection of brands through embracing brand protection, technology to help a user tell a genuine product from a counterfeit product, among others. While this may look obvious to the firms that are already aware of such protective measures, many others, especially the SMEs entering the sector may have no clue on how to go about protecting their products. A platform where private sector members of private sector associations in the pest control industry wish to share such information, including the suppliers of the protection technology.

4. Strengthen private sector role in the prosecution of cases of counterfeit pest control products

The private sector owners of pest control products are encouraged to take lead in the surveillance/monitor of their products and report violation of their rights through counterfeiting. This is the model that is being used in management of counterfeiting of Intellectual Properties Rights (IPR). In this case, for better chances of favourable outcomes in court cases, product owners should record statements and appear in court as expert witnesses. Product owners are the foremost experts on their products.

5. An all-private sector/PCPB awareness program on registered products, brands, licensed outlets, manufactures/formulators, distributors, agents and stockists/agrovets

The private sector, through leadership of AAK in partnership with PCPB should run annual awareness program using various platforms to create awareness on licensed manufacturers/formulators, distributors, agents and stockists/agrovets across the country and deregistered products

5.0 PROPOSED ACTION PLAN FOR IMPLEMENTATION OF RECOMMENDED MEASURES FOR FIGHTING COUNTERFEIT PEST CONTROL PRODUCTS

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
A. Measures to strengthen management and control of pest control products										
1. Review of PCPB systems for management and control of counterfeit pest control products	a) PCPB Board consideration and endorsement	PCPB								
	b) TORs for an assignment to facilitate the review	PCPB								
	c) Review of PCPB system for management and control of counterfeit pest control products	PCPB								
	d) Implementation of the recommendations for the review	PCPB								
2. Review of PCPB adequacy of funding against the challenge posed by counterfeit pest control products	a) PCPB Board consideration and endorsement	PCPB								
	b) TORs for an assignment to facilitate the review	PCPB								
	c) Review of PCPB adequacy of funding against the challenge posed by counterfeit pest control products	PCPB								
	d) Implementation of the recommendations for the review	PCPB								
3. Reviewed and strengthening of PCPB Inspectorate Department	a) PCPB Board consideration and endorsement	PCPB								
	b) TORs for an assignment to facilitate the review	PCPB								
	c) Review of PCPB Inspectorate Department	PCPB								
	d) Implementation of the recommendations for the review	PCPB								
	a) PCPB Board consideration and endorsement	PCPB								

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
4. Establish a Government Multi Agencies Team on management and control of counterfeit pest control products	b) PCPB to prepare a concept paper on Government Multi Agencies Team on management and control of counterfeit pest control products as a platform within the Government Inter-Agency Team on Counterfeit and Illicit Trade	PCPB		■	■					
	c) Present the paper to the Government Inter-Agency Team on Counterfeit and Illicit Trade	PCPB/ACA			■					
	d) PCPB to operationalize the Government Multi Agencies Team on management and control of counterfeit pest control products	PCPB/ACA				■	■	■	■	■
5. Review licensing regime for stockists/agrovets	a) PCPB Board consideration and endorsement	PCPB	■							
	b) PCPB to constitute a Government/Private Sector Task Force/Team to consult and steer the review of licensing regime for stockists	PCPB/AAK/Other Government Agencies		■						
	c) TORs for an assignment to facilitate the review	PCPB			■					
	d) Review of review of licensing regime for stockists	PCPB			■	■				
	e) Implementation of the recommendations for the review	PCPB					■	■	■	■
6. Measures to combat import-based counterfeit and illicitly traded pest control products	a) PCPB Board consideration and endorsement	PCPB	■							
	b) PCPB to constitute a Government/Private Sector Task Force/Team to combat import-based counterfeit and illicitly traded pest control products	PCPB/AAK/Other Government Agencies		■	■					
	c) TORs for an assignment to facilitate development of a system for	PCPB			■	■				

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	combating import based counterfeit and illicitly trade pest control products									
	d) Development of a system for combating import based counterfeit and illicitly trade pest control products	PCPB								
	e) Operationalization of the system for combating import based counterfeit and illicitly trade pest control products	PCPB								
7. Measures to discourage manufacture of counterfeit pest control products by unlicensed manufacturers/formulators	a) PCPB Board consideration and endorsement	PCPB								
	b) PCPB to develop a concept paper on industrial establishments for manufacturer/formulation of pest control products, making a case for registered industrial establishment by State Department for Industry followed by PCPB licensing before county business permits can be availed.	PCPB								
	c) PCPB to present the case for industrial establishment to State Department for Industry (SDI) for consideration in the context of National Industrial Policy	PCPB								
	d) SDI to introduce the system for registration of industrial systems for manufacture/formulation of pest control products	SDI								
	e) PCPB, SDI and County Governments to develop requirements and guidelines for licensing establishment for manufacture/formulation of pest control products	PCPB/SDI/COG								
	f) PCPB in collaboration with SDI and County Governments undertake a nationwide exercise of ensuring that	PCPB/SDI/COG								

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	all existing and new manufacturers/formulators of pest control products are accorded registered industrial establishment for manufacture of counterfeit pest control products in accordance to the guidelines									
	g) The PCPB to develop a system for all licensed manufacturers/formulators under the new system	PCPB								
	h) The PCPB to create awareness of the manufacturers/formulators under the new system, directing stockist to source from these organizations and drawing users on products from these organizations	PCPB								
8. Strengthen enforcement and compliance	a) PCPB Board consideration and endorsement									
	b) Develop ToRs for review of the current regime of penalties, fines and sanctions for counterfeiting pest control products									
	c) Review of the current regime of penalties, fines and sanctions for counterfeiting pest control products									
	d) Consideration of the recommendations from the report on 'Review of the current regime of penalties, fines and sanctions for counterfeiting pest control products'									
	e) Review and amendment of relevant legislation to align it with the adopted recommendations of the report on 'Review of the current regime of penalties, fines and sanctions for counterfeiting pest control products'									

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	f) Implementation of the revised legislation									
9. Develop system for reporting, receiving and actioning complaints on counterfeit pest control products	a) PCPB Board consideration and endorsement	PCPB								
	b) PCPB to constitute a Government/Private Sector Task Force/Team to consult and steer the platform for reporting, receiving and actioning complaints	PCPB/AAK and other Govt Agencies								
	c) TORs for an assignment to facilitate the review	PCPB								
	d) Develop system for reporting, receiving and actioning complaints on counterfeit pest control products	PCPB								
	e) Commission the system for reporting, receiving and actioning complaints on counterfeit pest control products	PCPB								
	f) Training PCPB and AAK staff on the system for reporting, receiving and actioning complaints on counterfeit pest control products	PCPB/AAK								
	g) Awareness creation on system for reporting, receiving and actioning complaints on counterfeit pest control products	PCPB								
B. Measures to strengthen private sector role in management and control of pest control products										
1. Encourage all private sector stakeholders in the pest control industry to join Agrochemical Association of Kenya	a) AAK Board to consider and endorse									
	b) Review current membership requirement and develop a value based system of membership recruitment that would encouraged private sector operators in the industry to join AAK									

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	c) Undertake nationwide recruitment using PCPB licensed operators as the basis									
	d) Develop a value based portal for the members to facilitate profiling them for business linkage									
2. An all-private sector nationwide structure program for education/training of manufacturers/stockists, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers)	a) AAK&PCPB Boards to consider and endorse									
	b) AAK to constitute a Private Sector Task Force/Team to consult and steer the nationwide structure program for education/training of manufacturers/stockists, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers)									
	c) Develop ToRs for the assignment									
	d) Develop the curriculum and modules for the nationwide education/training program for manufacturers/stockists, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers)									
	e) Training of Trainers									
	f) Conduct nationwide education/training program for manufacturers/stockists, distributors, agents, stockists/agrovets and users (farmers, commercial users, professional users/spray service providers)									

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3. Private sector platform for sharing innovations and methods that are being used to counter counterfeit pest control products	a) AAK Board consideration and endorsement		■							
	b) AAK to constitute Private Sector Task Force/Team to consult and steer the platform for information sharing			■						
	c) TORs for an assignment to facilitate the review			■	■					
	d) Develop system for private sector to share information on innovations and methods that are being used to counter counterfeit pest control products				■	■				
	e) Commission the system for private sector to share information on innovations and methods that are being used to counter counterfeit pest control products					■	■			
	f) Training AAK staff on the system for private sector to share information on innovations and methods that are being used to counter counterfeit pest control products					■				
	g) Awareness creation on system for private sector to share information on innovations and methods that are being used to counter counterfeit pest control products					■	■	■	■	
4. Strengthen private sector role in the prosecution of cases of counterfeit pest control products	a) AAK Board consideration and endorsement	AAK	■							
	b) PCPB to provide guidelines to assist private sector assist with prosecution cases that touch on their counterfeited pest control products	PCPB/AAK		■	■					
	c) PCPB/AAK to post all won cases/verdicts in their website	PCPB/AAK				■	■	■	■	

Proposed Actions	Activities	Responsibility	2021/2022				2022/2023			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
5. An all-private sector/PCPB awareness program on registered products, brands, licensed outlets, manufactures/formulators, distributors, agents and stockists/agrovets	a) AAK&PCPB Boards to consider and endorse									
	b) AAK/PCPB to constitute a Task Force/Team to consult and steer the nationwide awareness program on registered products, brands, licensed outlets, manufactures/formulators, distributors, agents and stockists/agrovets									
	c) Develop nationwide awareness program on registered products, brands, licensed outlets, manufactures/formulators, distributors, agents and stockists/agrovets									
	d) Conduct nationwide awareness program on registered products, brands, licensed outlets, manufactures/formulators, distributors, agents and stockists/agrovets									