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FINAL REPORT ON A MISSION

CARRIED OUT IN KENYA

FROM 15 TO 21 NOVEMBER 2007

IN ORDER TO EVALUATE CONTROLS OF PESTICIDES IN FOOD OF PLANT  
ORIGIN INTENDED FOR EXPORT TO THE EUROPEAN UNION

*Please note that factual errors in the draft report have been corrected.  
Clarifications provided by the Kenyan Authorities are given as footnotes,  
in bold, italic, type, to the relevant part of the report.*



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## ABBREVIATIONS & SPECIAL TERMS USED IN THE REPORT

ACP	The countries of Africa, Caribbean and Pacific that are signatories of the Cotonou Agreement
CA	Competent Authority
ECD	Electron Capture Detector
EU	European Union
EUROSTAT	Statistical Office of the European Communities
FID	Flame Ionisation Detector
FVO	Food and Veterinary Office
GC	Gas Chromatograph
HACCP	Hazard Analysis and Critical Control Points
HCDA	Horticultural Crops Development Authority
HPLC	High Performance Liquid Chromatography
ISO	International Organisation for Standardisation
KEPHIS	Kenya Plant Health Inspectorate Service
MA	Ministry of Agriculture
MH	Ministry of Health
MRL	Maximum Residue Level
MSD	Mass Selective Detector
NFSCC	National Food Safety Co-ordination Committee
NPD	Nitrogen Phosphorous Detector
PCPB	Pest Control Products Board
PIP	Pesticides Initiative Programme
PPP	Plant Protection Product
RASFF	Rapid Alert System for Food and Feed
UV	Ultraviolet

## **EXECUTIVE SUMMARY**

The objective of the mission was to evaluate the control system in Kenya for pesticides in food of plant origin intended for export to the European Union. It was decided to carry out a mission to Kenya in view of the volume of its vegetable and fruit exports to the European Union (EU). There were also notifications of unacceptable levels of pesticide residues in food of plant origin from Kenya within the EU Rapid Alert System for Food and Feed (RASFF).

Legislation is in place for the authorisation and control of the marketing of plant protection products (PPPs) and for the registration of exporters.

There are clear requirements, procedures and trained staff for the authorisation of PPPs. However, the official register of authorised PPPs does not contain sufficient details on the authorised uses, and labels of PPPs were found to have short-comings. There are trained inspectors, but their number is not sufficient to carry out systematic and thorough inspections of all retailers and wholesalers of PPPs. There are no systematic checks carried out at users of PPPs.

There is no official control system for pesticide residues in place. However, exporters operate self-control systems for pesticide residues, communicate EC MRLs, and co-operate intensively with the competent authorities. The EU funded Pesticides Initiative Programme has provided substantial support for the training and capacity building of exporters, professional organisations and competent authorities.

Exporters must be licensed, and licenses must be regularly renewed. There are different types of export certificates issued for food of plant origin, but they do not relate to compliance with EC MRLs for pesticides.

There was evidence for rapid and comprehensive follow-up of a recent EU RASFF notification on pesticide residues in passion fruit.

The pesticide residue laboratory is accredited to ISO 17025. The current analytical scope is too small to detect many of the pesticides being used by growers, but a substantial increase of the analytical scope could be realised with the available equipment.

### **Overall conclusion**

Exporters operate self-control systems for pesticide residues and co-operate intensively with the competent authorities. There is no official control system for pesticide residues in place. Official controls are in place for the marketing of plant protection products. These are supported by clear legal provisions and procedures, but the implementation is restricted due to an insufficient number of staff.

The report contains recommendations to Kenya to address identified shortcomings.

## **1. INTRODUCTION**

The mission took place in Kenya from 15 to 21 November 2007. The mission team comprised two inspectors from the Food and Veterinary Office (FVO) and one Member State expert.

The mission was undertaken as part of the FVO's planned mission programme and was the first mission to Kenya dealing with pesticide residues in produce of plant origin.

The inspection team was accompanied during the whole mission by representatives from the central competent authorities, the Kenya Plant Health Inspectorate Service (KEPHIS) and the Pest Control Products Board (PCPB).

An opening meeting was held on 15 November 2007 with KEPHIS, the PCPB, the Horticultural Crops Development Authority (HCDA), the Ministry of Health (MH), and the National Taskforce on Horticulture. At this meeting, the objectives of, and itinerary for, the mission were confirmed by the inspection team.

## **2. OBJECTIVES OF THE MISSION**

The objective of the mission was to evaluate the control systems for pesticide residues in foodstuffs of plant origin intended for export to the European Union (EU). The facilities and measures in place for the determination of such residues in foodstuffs of plant origin intended for export to the EU were assessed to ensure that the produce is within specified limits laid down in EU legislation. As residue controls are related to the placing on the market and use of plant protection products, the control system for the latter functions was also evaluated. The mission formed part of a wider series of missions to Third Countries to evaluate control systems and operational standards in this sector.

The mission was carried out in the framework of:

- Regulation (EC) No 178/2002<sup>1</sup>;
- Regulation (EC) No 882/2004;
- Regulation (EC) No 852/2004;
- Council Directive 76/895/EEC;
- Council Directive 90/642/EEC;
- Council Directive 86/362/EEC;
- Regulation (EC) No 396/2005.

In pursuit of these objectives, the following sites were visited:

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<sup>1</sup> Legal acts quoted in this report refer, where applicable, to the last amended version. Full references to the acts quoted in this report are given in the Annex.

**Table 1: Mission visits and meetings**

Visits/meetings		Comments
<b>COMPETENT AUTHORITIES</b>		
Central	5	KEPHIS, PCPB, HCDA, MH and Ministry of Agriculture (MA);
Export Point	1	KEPHIS airport facilities.
<b>LABORATORIES</b>		
Public	1	KEPHIS laboratory for pesticide residue analysis and formulation analysis of PPPs.
<b>INSPECTION OR SITE VISITS</b>		
Packing houses/Exporters	2	Visit to an exporter of French beans and passion fruit to the EU (600-700 tonnes exported annually); visit to another exporter of leguminous vegetables and fruit to the EU (70-80 tonnes exported weekly);
Growers	2	Visit to a group of 30 farmers of beans and other vegetables in Mwea, farmers have 1-1.5 hectares of land; visit to another group of 22 farmers of mixed crops in Embu, farmers cultivate 0.1–1 hectare of passion fruit;
Retailer of PPPs	1	Observation of an inspection visit to a retailer (annual turnover: 21.000 EUR) by two PCPB inspectors in Embu.

### 3. LEGAL BASIS FOR THE MISSION

The mission was carried out under the general provisions of Community legislation, in particular under Article 46 of Regulation (EC) No 882/2004, and in agreement with the competent authorities in Kenya.

### 4. BACKGROUND

According to data from EUROSTAT for the year 2005, Kenya was the second largest exporter of fresh and chilled leguminous vegetables to the EU, and exports amounted to approximately 41,000 tonnes or 20 % of the total imports to the EU. Kenya is also a significant exporter of avocado and passion fruit to the EU (approximately 20,000 tonnes of fruit exported to the EU).

According to information received from the competent authorities, French beans were grown on 6,154 hectares in 2006, which produced 43,821 tonnes (including 31,870 tonnes for the export). The ratio of volumes for smallholders (producing on 0.05 to 1.6 hectares) was over 60 %. French beans were the most important smallholder export crop produced by 6,400 small-scale farmers with less than 2 hectares. In the same year, passion fruit were grown on 4,419 hectares, which produced 32,744 tonnes for domestic consumption and for export. The ratio of volumes for passion fruit smallholders (50 to 1000 vines) was 90 %. According to information from the Pesticides Initiative Programme<sup>2</sup>, the Kenyan horticulture

<sup>2</sup>[http://www.coleacp.org/FO\\_Internet/Pip/Upload/Documents/00000000\\_File%20PIP%20activities%20in%20Kenya%20def.pdf](http://www.coleacp.org/FO_Internet/Pip/Upload/Documents/00000000_File%20PIP%20activities%20in%20Kenya%20def.pdf)

export industry comprises several dozen larger producers and some 25,000 small growers. Many of the larger producers export their own produce plus that of up to several hundred small growers.

The competent authorities stated that all PPPs supplied in Kenya are imported (except a few pyrethrum based house-hold products). Kenya imported 8,151 tonnes of PPPs in 2006/2007, compared to 7,707 tonnes in 2005/2006 and 7,047 tonnes in 2004/2005.

## **5. MAIN FINDINGS**

### **5.1. Legislation**

Authorisation and control of the marketing and use of plant protection products is regulated by the Pest Control Products Act CAP 346 and its four implementing Regulations of 1984, which were revised in 2006. No national MRLs for food of plant origin have been established, and there is no legal requirement for traceability in the food chain and keeping records of PPP applications.

The control of exporters is regulated by the Export Order of 1995, Legal Notice 231 under the Agriculture Act CAP 318. The Agricultural Produce (Export) Act CAP 319 of 1962, as revised in 1979, regulates the export and lays down that agricultural products intended for human consumption shall not be exported, if they are unfit for consumption. The Plant Protection Act CAP 324 regulates the issuance of phytosanitary certificates at point of export. The Food, Drugs and Chemical Substances Act CAP 254 is administered by the Ministry of Health although it gives enforcement powers to the Ministry of Agriculture, i.e. the Director of Agriculture as relevant public officers.

KEPHIS was established by the Kenya Plant Health Inspectorate Service Order 1996; PCPB was established by the Pest Control Products Act of 1984; and HCDA has been established by the Horticultural Crops Development Authority Order of 1967.

### **5.2. Competent authorities**

The responsibilities of competent authorities within the scope of this mission are described in Table 2.

The National Food Safety Co-ordination Committee (NFSCC) was established in June 2007 and comprises representatives of several Ministries and Official Bodies which deal with feed and food safety. The NFSCC is responsible for coordinating all food safety activities and for ensuring compliance with international trade standards. The committee has developed a 5 year strategic national action plan.

**Table 2: Responsibilities of competent authorities**

Ministry	Organisation	Competencies
MA	KEPHIS	Competent authority for controls of pesticide residues, for follow-up of RASFF notifications, and for plant health certification at point of export.
MA	PCPB	Competent authority for authorisation of PPPs and controls of the marketing and use of PPPs.
MA	HCDA	Competent authority for licensing of exporters and compilation of export statistics.
MA		Chair of the NFSCC, provides extension service to farmers.
MH		Secretariat of the NFSCC.

### 5.3. Controls of the marketing and use of plant protection products

#### 5.3.1. Authorisation of plant protection products

All PPPs require prior authorisation before being placed on the market and used. The requirements for authorisation under CAP 346 were revised substantially in 2006. At PCPB, five staff are responsible for evaluation of PPPs, including co-formulants, biocides, and pesticides for veterinary use. They also are responsible for re-evaluation of authorised PPPs under the revised requirements of CAP 346, renewal of the certificates of registration, approval of PPP labels and accreditation of stations for biological testing of PPPs. The staff are experienced and received comprehensive training during the last few years.

There are 805 PPPs authorised in Kenya, containing 294 active substances. In the EU, approximately 50 of these substances can not be marketed and used, because a decision was taken not to include the substances in the EU positive list, Annex I of Directive 91/414/EEC. Some of the 50 substances are only authorised for use in flowers. Insecticides represent 48 % of the PPPs authorised in 2005/2006. Fungicides were the second largest group, representing 22 % while 13 % of the products authorised were herbicides. Other PPPs, including plant growth regulators and acaricides represented 16 % of the total PPPs authorised in the year. The certificate of registration is valid for a period of three years and may be renewed for periods not exceeding two years. A temporary authorisation can be granted for one year. An official register of authorised PPPs is published annually as a hard copy and on the PCPB website, but the register does not specify the application rates, pre harvest intervals and the expiry dates of authorisations. PCPB stated that the electronic version of the register on the internet, which is accessible for a fee, is updated 3-4 times during the year.

There is a lack of authorised PPPs for use in passion fruit in Kenya. The exporters recommend their suppliers to use PPPs authorised for various fruit, vegetables or flowers on passion fruits, but these uses are not supported by data.

### 5.3.2. *Controls of the marketing of plant protection products*

Under the Pest Control Products Act CAP 346, persons who manufacture, package, sell or store pest control products, must be licensed annually. In order to be licensed, traders, manufacturers and users with pesticide stores must fulfil requirements for worker's health and safety, and have adequate knowledge in plant protection. There are seven inspectors in PCPB responsible for inspections. Inspectors are empowered to seize any non-compliant products, and severe non-compliances can be taken to Court. The Kenyan professional organisation of PPP traders estimates that there are approximately 8,000 traders of PPPs in Kenya. In 2005/2006, PCPB carried out inspections of 3817 retailers, 52 packagers and 148 large scale growers with pesticide stores. 852 premises were licensed in 2005, and 807 in 2006. A total of 19 non-compliances were investigated and 3 cases were taken to Court. PCPB stated that many premises were not licensed because fees were not paid. The annual fee for a PPP retailer is 1000 KShs (approximately EUR 10.50).

The mission team observed an inspection of a PPP retailer by two PCPB inspectors. The inspectors usually travel by service car, and stated that they inspect 15-20 retailers per day. The visited company was a typical small retailer of PPPs, who sold PPPs, fertilisers and seed to local farmers. Due to lack of space, fertilisers and seeds were stored on the floor of the shop, while PPPs were stored in shelves. The shop assistant had to step on the fertiliser bags to reach PPPs on the shelves. The shop assistant had been trained by different multinational manufacturers of PPPs. As required, the retailer maintained stock cards which contained information about all stocks and sales of PPPs. The shop had been inspected and licensed by PCPB two weeks before the FVO visit, and the PCPB inspectors had recommended collecting rain water, as no water was available in the shop for washing or cleaning. The inspectors followed a standardised check-list, which also served as a format for the inspection report. The check-list included mainly health and safety aspects, and also a general compliance check of the labels. They did not perform a detailed check whether the PPPs were packaged and labelled in accordance with the authorisations granted. The mission team evaluated the labels of three PPPs. As required in Kenya, all PPPs were labelled in English and Kiswahili. The label of the first evaluated product contained different uses than stated in the printed register, and did not contain a registration number. The label of the second product also contained different uses than in the register and did not specify the authorised application rate in the English version of the label. Also the label of the third product contained different uses than specified in the register. The PCPB inspector completed and signed the inspection report, and a copy was handed to the shop assistant. The inspector had a degree in agriculture, and received training in a project by the professional organisation of PPP traders.

Imports and exports of PPPs must be licensed by PCPB. An import levy of 0.8 % is collected by PCPB, half of which is forwarded to the professional organisation of traders for training. The professional organisation has organised training of PPP retailers and extension staff of the MA, and provided funds for training of growers by the MA staff. Licensed and trained retailers of PPPs can apply for a voluntary certification. Certificates are signed by both PCPB and the professional organisation.

From January to mid November 2007, 88 samples of PPPs were taken by PCPB inspectors at retailers and wholesalers of PPPs, and analysed by the KEPHIS laboratory and three other laboratories.

### *5.3.3. Controls of users of plant protection products*

Controls of the users of PPPs are restricted to the pesticide stores at 148 large scale growers, because these stores are covered under the Act CAP 346. The use of PPPs not authorised for specific crops is not controlled at grower's level. For example, a plant protection product for mangoes may be used on passion fruit.

### *5.3.4. Formulation laboratory*

The formulation laboratory of KEPHIS is the main laboratory engaged in analysing PPP formulations. The other laboratories with a role in analysing formulated products are the Laboratory of the Government Chemist, the University of Nairobi and the Pyrethrum Board of Kenya. The KEPHIS laboratory is accredited to ISO 17025 by the South African National Accreditation Body. Products are analysed for identity and content of the active substance, but not for physical/chemical properties. The KEPHIS laboratory is equipped with GC-FID and HPLC-UV.

## **5.4. Controls of pesticide residues in food of plant origin on the domestic market**

There are no regular sampling plans for official pesticide residue analysis. However, sampling is carried out under a research project from July 2007 to July 2008, which includes the plan to take and analyse a total of 208 samples by the KEPHIS laboratory. Until the time of the mission, 50 samples of various fruits and vegetables (including peppers, beans, peas, tomatoes, passion fruit, mangoes and oranges) had been taken, mostly at supermarkets and municipal markets in different regions of Kenya, and analysed. Two samples were taken at the airport of produce for export (see chapter 5.4.5). Of the 50 samples, 15 were found to contain pesticide residues. No follow-up was undertaken due to the lack of national MRLs.

## **5.5. Controls of pesticide residues in food of plant origin to be exported**

### *5.5.1. Organisation of controls*

There is no official control system for pesticide residues in place. However, exporters operate self-control systems for pesticide residues, and co-operate intensively with the competent authorities.

### *5.5.2. Communication of EC MRLs*

EC MRLs for fruit and vegetables are communicated by the National Task Force for Horticulture, the Exporter's Associations, and the exporters in co-operation with their EU customers (see chapter 5.5.9).

### *5.5.3. Approval and control of exporters*

Under the Export Order of 1995, exporters must be licensed by the HCDA. Licenses must be renewed every three years. In order to be licensed, exporters must provide a business registration, a trade license from the Ministry of Trade, written contracts with their suppliers regarding the quality of produce and prove an adequate knowledge of quality standards. Exporters must complete an application for licensing, and are inspected by an HCDA inspector. No standardised procedures

exist for these inspections, and a HCDA inspector stated that the main purpose of the visits is to verify that the exporter is a *bona fide* company. Normally no inspections are carried out for the renewal of licenses. HCDA do not have enforcement powers. The license of one of the exporters met by the mission team had expired on 11 March 2006. He had applied for renewal of his licence on 28 March 2006, but did not have a renewed licence on file. The renewed license, dated 28 November 2007, was sent to the FVO after the mission. At present, 1077 exporters are registered by HCDA, of which about 400 are active. In addition to licensing, HCDA provide training to growers and exporters, and generate detailed statistical data on exports.

#### *5.5.4. Traceability and record-keeping*

HCDA published a voluntary code of conduct, which encourages growers to keep records of applications of PPPs. The exporters and growers visited by the mission team had established comprehensive systems for traceability and record keeping (see chapter 5.5.9).

#### *5.5.5. Sampling programme for pesticide residues*

There are no sampling plans for official pesticide residue analysis. Two samples of passion fruit for export were taken by KEPHIS in September 2007 under the domestic research project in response to the recent EU RASFF notification (see 5.5.7). Exceedance of EC and CODEX MRLs was identified for lindane and triazophos in both samples and the results were sent by KEPHIS to both exporters concerned on 19 November.

Two KEPHIS laboratory staff demonstrated the sampling procedure for a lot of French beans at an exporter. They followed the Codex Alimentarius method for sampling for pesticide residue analysis, which is incorporated in Directive 2002/63/EC. The demonstrated sampling procedure broadly followed the requirements for random sampling, and a sampling report was completed following a standardised form. However, the sampling report identified the sample very generally as "French beans" and did not include a clear reference to the sample or further available relevant information about the lot as required by point 3.5 of the Codex method, which is identical to point 4.5 of the Annex to Directive 2002/63/EC. The sampling bags were labelled, but not sealed as required by point 3.6 of the Codex method (point 4.6 of the Annex to Directive 2002/63/EC). The sample was placed in a cool-box for transport to the laboratory.

#### *5.5.6. Certification of exports*

All exported consignments must be certified by HCDA for export statistics and tax purposes. Phytosanitary certificates and certificates for conformity with EU marketing standards (such as quality, size, labelling, packaging and presentation) are issued for some commodities by KEPHIS under the Acts CAP 319 on Exports of Agricultural Products and CAP 324 on Plant Health. The certificates are issued at the point of export. These certificates do not relate to compliance with EC MRLs and KEPHIS certificates are not required for all exported commodities. The KEPHIS Manual of Procedures requires inspectors at the KEPHIS Airport Office to determine that the produce is "free from pesticide residues". However, this requirement is not enforced as no samples are taken for pesticide residue analysis and documentation is not checked for pesticide treatments or residue analysis.

#### *5.5.7. Follow-up of notifications in the EU RASFF*

Since 2005, there were three notifications in the EU Rapid Alert System for Food and Feed (RASFF) for pesticide residues in passion fruit and okra from Kenya. KEPHIS provided detailed information about the follow-up of a RASFF notification for the pesticide ethion in passion fruit of 23 August 2007: the RASFF notification was received by the MA on 31 August and by KEPHIS on 5 September. On 7 September two follow-up samples of passion fruit were taken from exporters (see 5.5.5). The analyses of these samples dated 30 October, and results were sent to the exporters involved on 19 November. On 11 September, the KEPHIS Airport Office was instructed to suspend the issuance of phytosanitary certificates to the involved exporter, and the exporter was informed on 13 September. In addition, all exporters were informed about the notification on 17 September, and meetings were held between competent authorities and exporters on 26 September and 2 November.

On 17 September, KEPHIS requested all exporters of passion fruit "to ensure that the produce is tested and found to be free from unacceptable levels of pesticide residues before presenting it for certification", stating that KEPHIS would not certify produce without proof of conformance. At the visit to the KEPHIS Airport Office, the mission team found that this requirement was not enforced, and KEPHIS stated that the reason is the lack of a legal basis. Under Act CAP 319, certification can only be refused, where produce can be proven to be unfit for human consumption. KEPHIS stated that a possible legal basis to stop exports is the Act CAP 254, which attributes enforcement powers to the Director of Agriculture who can authorise public officers to take enforcement action. This legal basis requires a letter from the Director of Agriculture to KEPHIS, and was used to follow-up another EU RASFF notification regarding cadmium in pineapples.

In addition, the exporter involved in the RASFF notification for passion fruit had been informed about the pesticide detection by his EU customers on 21 August, and conducted a field visit at the supplier on 22 August. The contract with the farmer had immediately been suspended.

#### *5.5.8. Laboratory for pesticide residue analysis*

##### *5.5.8.1. Organisation*

The mission team visited the KEPHIS laboratory. It is the only laboratory in Kenya which has performed official pesticide residue analysis. KEPHIS also provides analysis of private samples.

##### *5.5.8.2. Resources and training*

The laboratory has good facilities. The staff involved in pesticide residue analysis includes eight persons with third level degrees and six technicians. The laboratory staff has been regularly trained and is sufficiently qualified to operate the current instruments.

##### *5.5.8.3. Analytical spectrum and methods*

The laboratory is equipped with GC-ECD and GC-NPD, which are used for the multi-residue analysis of pesticides. A GC-MSD is used for the confirmation of positive results in full scan mode. The multi-residue method involves acetonitrile extraction with additional clean-up on a fluorosil column for the organochlorine

pesticides followed by GC-ECD or GC-NPD analysis. The multi-residue method covers about 20 organochlorine and organophosphorous pesticides and pyrethroids. The period between sampling and reporting of the analytical results varies from 2 to 7 weeks.

#### 5.5.8.4. Quality assurance systems

The laboratory has been accredited to ISO 17025 by the South African National Accreditation Body in May 2006. Method validation data was available for 4 organochlorine, 3 pyrethroids and 4 organophosphorous pesticides; as well as for two commodities, beans and passion fruit. Quality control procedures, including the use of control charts, are implemented though some factual errors were found in the laboratory reports. Matrix matched standards are not used for quantification. In case of exceeding an MRL, no second analysis is carried out to confirm the first result. Estimation of uncertainty is based on the laboratory's ongoing recovery work. The laboratory participated in one recent international proficiency test with four pesticides. A substantial number of certified standards were available but the stability of standards and working solutions was not checked.

#### 5.5.9. Additional information

The National Taskforce on Horticulture is a body for consultation and information of private and official stakeholders for the common understanding of market and regulatory requirements. It was established in 2004. The secretariat is provided by KEPHIS and its members include representatives of ministries, exporters, producers and pesticide manufacturers. KEPHIS stated that the National Taskforce provides stakeholders with updates of EC pesticide MRLs.

Exporters of fruit and vegetables are organised in an Exporter's Association, which also informs its members about changes in EC MRLs for pesticides. A National Code of Practice for the Horticultural Industry in Kenya was published in 2001 jointly by the Director of Agriculture and the Exporters Association.

The Pesticides Initiative Programme (PIP) was established to support export companies from ACP countries with a view to helping them comply with the regulatory and commercial requirements of the EU market, and is funded by the EU under the European Development Fund. According to PIP, thirty Kenyan companies have participated in a project regarding the training of staff in various aspects of food safety and the implementation of systems for food safety, traceability and integrated pest management. PIP has also provided support to the Exporters Association of fruit and vegetables, and supported the development of a private code of practice, which is based on Good Agricultural Practices, HACCP principles and Kenyan legislation, and recognised by EU importers. PIP has also supported the National Task Force on Horticulture, the KEPHIS laboratory and PCPB. PIP also financed field trials followed by residue monitoring and results for green beans were submitted to the European Commission with a view to establishing import tolerances. In addition, a number of agricultural practice guides were drawn up for export crops, including green beans, avocado, passion fruit, pineapple, mango and papaya. *Inter alia*, these guides specify precisely the uses of PPPs, which growers should follow in order to comply with EC MRLs.

All growers and exporters met by the mission team had established systems for food safety and traceability. The exporters had contracts with their suppliers, and

established audit systems to cover suppliers. The growers had established systems for keeping records of PPP applications, and the mission team verified the information on file. Growers and exporters were certified, or in the process of certification to private standards of trade and retail organisations. These private standards also cover controls for the use of PPPs and pesticide residue analysis. All visited exporters had established lists of Good Agriculture Practices of PPPs for their suppliers. The lists were stated to be compiled in co-operation with pesticide distributors and customers in the EU, and considered information from the PCPB register of authorised PPPs.

## **6. CONCLUSIONS**

### **6.1. Legislation**

- (1) Legislation is in place for the authorisation and control of the marketing of PPPs, for the registration of exporters and for the establishment of the competent authorities. There are no legally binding national MRLs for pesticides and no legal requirements for traceability and for keeping records of PPP applications. Legislation allows preventing the export of produce, which is proven to be unfit for human consumption.

### **6.2. Competent authorities**

- (2) The competent authorities are clearly defined.

### **6.3. Controls of the marketing and use of plant protection products**

- (3) There are clear requirements, procedures and trained staff for the authorisation of PPPs. A substantial number of substances contained in authorised PPPs cannot be marketed and used in the EU, and if applied on produce for the export market, they can lead to exceedance of EC MRLs.
- (4) The official register of authorised PPPs does not contain sufficient details on the authorised uses, and labels of PPPs were found to have short-comings.
- (5) The number of inspectors is not sufficient to carry out systematic and thorough inspections of all retailers and wholesalers of PPPs. The observed check of a retailer of PPPs was conducted by trained inspectors and followed documented procedures, but no detailed label checks were carried out.
- (6) There are no systematic checks carried out at users of PPPs.
- (7) PPPs are regularly checked in official laboratories for identity and content of the active substances.

#### **6.4. Controls of pesticide residues in food of plant origin on the domestic market**

- (8) A small number of samples have been taken on the domestic market and analysed for pesticide residues, but the follow-up of samples with pesticide residues is hindered by the lack of legally binding MRLs.

#### **6.5. Controls of pesticide residues in food of plant origin to be exported**

- (9) There is no official control system for pesticide residues in place. However, exporters operate self-control systems for pesticide residues, communicate EC MRLs, and co-operate intensively with the competent authorities. The EU funded Pesticides Initiative Programme has provided substantial support for the training and capacity building of exporters, professional organisations and competent authorities.
- (10) Exporters must be licensed by the HCDA, and licenses must be regularly renewed. There was evidence that in one case the renewal of the license was not ensured by the competent authorities. There are different types of export certificates for food of plant origin, but they do not relate to compliance with EC MRLs for pesticides.
- (11) There was evidence for rapid and comprehensive follow-up of a recent EU RASFF notification on pesticide residues in passion fruit.
- (12) The pesticide residue laboratory is accredited to ISO 17025. However, the validity of the analytical data is not always sufficiently controlled. The current analytical scope is too small to detect many of the pesticides being used by growers, but if staff receive further training, a substantial increase of the analytical scope can be realised with the available equipment.

#### **6.6. Overall conclusion**

Exporters operate self-control systems for pesticide residues and co-operate intensively with the competent authorities. There is no official control system for pesticide residues in place. Official controls are in place for the marketing of plant protection products. These are supported by clear legal provisions and procedures, but the implementation is restricted due to an insufficient number of staff.

### **7. CLOSING MEETING**

A closing meeting was held on 21 November 2007 with the competent authorities. At this meeting, the main findings and conclusions of the mission were presented by the inspection team. The representatives of the competent authorities offered some initial comments and provisionally accepted the preliminary findings.

### **8. RECOMMENDATIONS TO KENYA**

In relation to pesticide residues in food of plant origin intended for export to the European Union,

- (1) Kenya should consider improving the controls for pesticides in fruit and vegetables intended for export to the European Union, in order to guarantee that the produce complies with, or is equivalent to, European Union standards in accordance with Article 11 of Regulation (EC) No 178/2002.
- (2) Kenya should consider broadening the scope of analytes sought and continue the implementation of quality control schemes in the pesticide residue laboratory to improve the effectiveness of the controls for pesticide residues.

## **9. COMPETENT AUTHORITY RESPONSE TO RECOMMENDATIONS**

The competent authority's response to the recommendations can be found at:

[http://ec.europa.eu/comm/food/fvo/ap/ap\\_kenya\\_7221\\_2007.pdf](http://ec.europa.eu/comm/food/fvo/ap/ap_kenya_7221_2007.pdf), as soon as this report is published.

## ANNEX – EUROPEAN LEGISLATION

<b>European Legislation</b>	<b>Official Journal</b>	<b>Title</b>
Regulation (EC) No 178/2002	OJ L 31, 01/02/2002, p.0001 - 0024	Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.
Regulation (EC) No 882/2004	OJ L 165, 30/04/2004. Corrected and re-published in OJ L 191, 28/05/2004 p. 0001 - 0052	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.
Regulation (EC) No 852/2004	OJ L 165, 30/04/2004. Corrected and re-published in OJ L 226, 25/06/2004 p. 0003 - 0022	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.
Directive 76/895/EEC	OJ L 340, 09/12/1976, p. 0026 - 0031	Council Directive 76/895/EEC of 23 November 1976 relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables.
Directive 90/642/EEC	OJ L 350, 14/12/1990, p. 0071 - 0079	Council Directive 90/642/EEC of 27 November 1990 on the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables.
Directive 86/362/EEC	OJ L 221, 07/08/1986, p. 0037 - 0042	Council Directive 86/362/EEC of 24 July 1986 on the fixing of maximum levels for pesticide residues in and on cereals.
Regulation (EC) No 396/2005	OJ L 70, 16/03/2005. p. 0001 - 0016	Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 maximum residue levels of pesticide in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.
Directive 2002/63/EC	OJ L 187, 16/07/2002, p. 0030 - 0043	Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC.