



EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL
Directorate F - Food and Veterinary Office

DG(SANCO)/ 2008-7853 - MR - FINAL

FINAL REPORT OF A MISSION
CARRIED OUT IN
EGYPT
FROM 25 NOVEMBER TO 04 DECEMBER 2008
IN ORDER TO
ASSESS THE CONTROL SYSTEMS IN PLACE TO PREVENT AFLATOXIN
CONTAMINATION IN PEANUTS AND TO FOLLOW UP RECOMMENDATIONS
MADE IN REPORT SANCO 3329/2001

Executive Summary

This report describes the outcome of a mission carried out by the Food and Veterinary Office (FVO) in Egypt from 25 November to 4 December 2008.

The objectives of this mission were to evaluate the facilities and measures in place to control aflatoxin contamination in peanuts intended for export to the European Union and to follow up the recommendations made after FVO mission DG SANCO 3329/2001.

A national set of legislation is in place. However, the requirements for the storage facilities are not equivalent to the requirements laid down in Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 4 (Annex II) of that Regulation.

The responsibilities of the various competent authorities are clearly defined and communication is adequate at all levels.

Peanut farmers visited are certified to international private standards on Good Agricultural Practices (GAP) and in line with the Code of Practice of the Codex Alimentarius for the Prevention and Reduction of Aflatoxin Contamination in Peanuts (CAC/RCP 55-2004), in particular the recommended practices based on GAP (pre-harvest and harvest).

The sorting and storage facilities in the majority of peanut companies visited are not conducive to good hygiene practices, including protection against contamination. Moreover, many peanut sacks were stored outside the storage facilities in the open. These conditions are not in line with the requirements of Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 4 (Annex II) of the same Regulation.

The companies visited do not check the effectiveness of sorting techniques with regard to aflatoxin controls. Half of the companies visited have not implemented food safety procedures based on HACCP principles. This is not in line with the requirements of Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 5 of the same Regulation.

The control system in place for peanut consignments intended for export to the EU is properly implemented. However, for some products covered by Article 1c (CN codes 20081194, 20081198, 20081192, 20081196) of Commission Decision 2006/504/EC, customs authorities do not require the health certificate. The mission team was informed that no peanut consignments were exported to the EU under the above CN codes in 2007.

Overall, there is a control system in place for peanuts intended for export to the EU. The export procedure (sampling, laboratory performance and export certification) for aflatoxin is considered adequate. However, some shortcomings were identified mainly with regard to legislation, the design of facilities, storage conditions and poor implementation of food safety procedures based on HACCP principles, which may lead to contamination of the product and might hamper the effectiveness of the control system including the reliability of the health certificate.

This report makes a number of recommendations to the Egyptian authorities to address the deficiencies noted.

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ABBREVIATIONS & SPECIAL TERMS USED IN THE REPORT

Abbreviation	Explanation
AEC	Agriculture Export Council
ARC	Agricultural Research Centre
CA	Competent Authority
CAPQ	Central Administration for Plant Quarantine
CCA	Central Competent Authority
CN	Combined Nomenclature
EU	European Union
FVO	Food and Veterinary Office
GAP	Good Agricultural Practice
GMP	Good Manufacturing Practice
GOIEC	General Organisation for Import and Export Control
HACCP	Hazard Analysis and Critical Control Point
HPLC-FLD	High Performance Liquid Chromatography-Fluorescence Detection
ISO	International Organisation for Standardization
LOD	Limit of Detection
MALR	Ministry of Agriculture and Land Reclamation
MS	Member States
MTI	Ministry of Trade and Industry
PT	Proficiency test
QCAP	Central Laboratory of Residue Analysis of Pesticides and Heavy Metals in Food
RASFF	Rapid Alert System for Food and Feed
SANCO	Health and Consumers Directorate-General
SD	Standard Deviation
SOP	Standard Operation Procedure

1 INTRODUCTION

The mission took place in Egypt from 25 November to 4 December 2008. The mission team comprised two inspectors from the Food and Veterinary Office (FVO) and one expert from the Institute for Reference Materials (DG Joint Research Centre).

The mission was undertaken as part of the FVO's planned mission programme.

The inspection team was accompanied during the mission by representatives from the central competent authority (CCA), the Central Administration for Plant Quarantine (CAPQ) of the Ministry of Agriculture and Land Reclamation (MALR).

An opening meeting was held on 25 November 2008 on the premises of the Department of Foreign Agricultural Relations of the MALR. Also present were representatives of the various departments of the MALR (extension services, foreign agricultural relation department, CAPQ), the Agricultural Research Centre, (ARC), the General Organisation for Import and Export Control (GOIEC) of the Ministry of Trade and Industry (MTI), the Agriculture Export Council (AEC), the University of Alexandria, the central laboratory for residue analysis of pesticides and heavy metals in food, and the European Union (EU) Delegation to Egypt. During this meeting, the objectives of the mission and its itinerary were finalised and confirmed by the mission team.

2 OBJECTIVES OF THE MISSION

The objectives of the mission were:

- To verify whether the control systems are in place to control aflatoxin contamination in peanuts intended for export to the European Union within specified European Union (EU) contaminant limits, in compliance with or at least equivalent to Commission Regulation (EC) No 1881/2006.

Additionally, the mission team followed up on action taken by the competent authorities (CAs) in response to recommendations made by the FVO in the previous report (SANCO 3329/2001).

To achieve these objectives, the following visits were carried out in accordance with the itinerary agreed between the CAPQ and the FVO.

Competent Authority Visits			Comments
Competent authority	Central	1	CAPQ
	regional	2	General Administration in Alexandria and West and General Administration in Port Said and North Sinai Customs offices in North region (Alexandria) and East region (Port Said)
	local	1	Ismailia Plant Quarantine local office under the General Administration in Port Said and North Sinai in the presence of General Organisation for Import and Export Control (GOIEC)
Laboratory visits			
Public laboratories		1	Aflatoxin analysis in peanuts
Farmers			
Peanut farms		4	Farms which supply to the main biggest peanuts export companies.
Establishments			
Peanut companies		4	Ismailia and Al Nubarria areas
Ports of export			
Alexandria		1	Main port of export

		of peanuts
Port Said	1	Second port of export of peanuts

3 LEGAL BASIS FOR THE MISSION

3.1 LEGAL BASIS

The mission was carried out in agreement with the MALR of Egypt and under the general provisions of Community legislation, in particular:

- Article 46 of Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

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

3.2 OTHER RELEVANT LEGISLATION

- Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004
- Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002
- Council Regulation (EEC) No 315/93 of 8 February 1993
- Commission Regulation (EC) No 1881/2006 of 19 December 2006
- Commission Regulation (EC) No 401/2006 of 23 February 2006
- Commission Decision 2006/504/EC of 12 July 2006
- Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004

4 BACKGROUND

4.1 OVERVIEW OF PREVIOUS MISSIONS REGARDING AFLATOXIN CONTAMINATION IN FOODSTUFFS

The European Commission has carried out missions to Iran, Egypt, Turkey, China, Brazil, India, the USA, Argentina and Ghana with the objective of evaluating official control systems for the prevention of aflatoxin contamination in foodstuffs originating from those countries. In addition, missions to assess controls on imported products of plant origin have been carried out in 18 Member States (MS): Austria, Belgium, Bulgaria, the Czech Republic, France, Germany, Greece, Hungary, Italy, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania, the Slovak Republic, Spain and the UK. The reports on these missions are available on the DG Health and Consumers website at: http://europa.eu.int/comm/food/fvo/index_en.htm

4.2 BACKGROUND TO THE PRESENT MISSION

Egypt's total national production in 2007 was 217,534 tonnes of peanuts, of which *circa* 11,000 tonnes were exported to the EU.

Information on foodstuffs found to have public health implications is disseminated in the form of alert notifications via the Rapid Alert System for Food and Feed (RASFF) to all MS and to the exporting country. From 2006 up to the time of the mission, 52 notifications relating to aflatoxins in peanuts and derived products from Egypt had been transmitted via the RASFF. The breakdown of these notifications from 2006 to 2008 and the volume of imports into the EU are shown in Table 1. The main importing MS are indicated in brackets.

Table 1: Imports of peanuts into the EU

EGYPT	Imports into the EU (tonnes)		Number of RASFF notifications		
	2006	2007	2006	2007	2008 (up to 20 Nov.)
In-shell peanuts (CN code 12021090)	10,038 (IT, DE, HU)	10,762 (IT, DE, NL)	17	13	22
Shelled peanuts (CN code 12022000)	742 (LU, NL, IT)	195 (NL, EL, IT)			

Source: Eurostat database and EC, RASFF database

Table 2 : Frequency of controls at import by MS for peanuts

	Year	Num. of	Num. of	Num. of	% of compliance	% of non-	RASFF

		consign. analysed	consign. compliant	non- compliant consign.		compliance	
PEANUTS	2006	178	164	14	92	8	17
	2007	196	178	18	91	9	13
	2008 (up to 30 September)	82	66	16	80	20	25

Source: SANCO E3 and MS reports.

Peanuts from Egypt form part of a series of missions conducted in third countries in relation to mycotoxins. In addition, there has been an increase in the number of notifications in the current year regarding aflatoxins in peanuts originating in or consigned from Egypt. For the above reasons, the FVO decided to undertake a mission with the objectives set out above and to follow up the recommendations made in report SANCO 3329/2001.

4.3 FOOD PRODUCT INFORMATION RELATED TO PUBLIC HEALTH ISSUES

Aflatoxins are mycotoxins produced by certain species of *Aspergillus*, which develop at high temperatures and humidity levels and may be present in a large number of foods. The aflatoxin group includes a number of compounds of varying toxicity and frequency in food. Aflatoxin B1 is the most toxic compound. For safety reasons, it is advisable to limit both the total aflatoxin content (compounds B1, B2, G1 and G2) in food and the aflatoxin B1 content. Maximum limits for aflatoxins in food have been set in the legislation, taking into account the known possible effects of sorting, mixing or other physical treatment to reduce the aflatoxin content of peanuts. Under Annex to Regulation (EC) No 1881/2006, the maximum admissible aflatoxin levels in groundnuts, nuts and dried fruit are as follows:

a) Groundnuts, nuts and dried fruit and processed products thereof, intended for direct human consumption or use as an ingredient in foodstuffs:

2 µg/kg aflatoxin B1 content; and

4 µg/kg total aflatoxin content.

b) Groundnuts to be subjected to sorting or other physical treatment, before human consumption or use as an ingredient in foodstuffs:

8 µg/kg aflatoxin B1 content; and

15 µg/kg total aflatoxin content.

Sampling also plays a crucial part in determining mycotoxin levels, which are very

heterogeneously distributed in any consignment. Therefore, Commission Regulation (EC) No 401/2006 established sampling procedures and general criteria to ensure that the laboratories conducting the analysis use methods that give comparable levels of performance.

5 MAIN FINDINGS

5.1 RELEVANT NATIONAL LEGISLATION

Legislation is drafted by the relevant competent authority, and consists of Laws, Presidential Decrees, Ministerial Decrees and Regulations.

The relevant legislation within the scope of this mission is as follows:

- Law No 53 of 1966 which describes the MALR official activities and tasks.
- Ministerial Decree No 62/2000 which was jointly signed by the MALR and the MTI. It covers stages of production, processing, sampling and export procedures with regard to peanuts. As mentioned in the previous report, the decree establishes the legal limits for aflatoxin in peanuts for both the domestic market (5 µg/kg aflatoxin B1 content, and 10 µg/kg total aflatoxins) and the EU export market (see 4.3). The sampling procedures for peanuts intended to be exported to the EU are also described in Ministerial Decree No 62/2000 and are in accordance with the requirements of the former sampling Directive 98/53/EC which has been repealed and replaced by Commission Regulation (EC) No 401/2006.
- In the abovementioned Decree, the requirements for the storage facilities are not equivalent to the general hygiene requirements laid down in Annex II to Regulation (EC) No 852/2004. The Egyptian Decree does not describe that the design and layout of the facilities must permit good food hygiene practices, including protection against contamination between and during operations. In particular, wall and floor surfaces of these facilities are to be maintained in a sound condition and be easy to clean.
- The drying process is not included in the above Ministerial Decree. The mission team was informed that this process is due to be incorporated in the next amendment. No deadline for the entry into force of this amendment has yet been established. In addition, a new draft Ministerial decree on the system of production, preparation and examination of peanuts for export, which will amend the above decree, was presented to the mission team. The new draft includes general provisions for dealings with infringements, analysis of seed for aflatoxins, procedures for manual and mechanical harvesting, moisture content of the seeds after being dug up, regular inspection of the storage facilities by the plant quarantine inspectorate, details of sampling under Regulation (EC) No 401/2006, and container requirements for export.
- Ministerial Decree No 268/1998 of the MALR, which designates the central laboratory of residue analysis of pesticides and heavy metals in food (QCAP) as the

official laboratory for testing aflatoxins in peanuts intended for export.

- Ministerial Decree No 1425/1998 of the MALR which authorises the QCAP laboratory to analyse all contaminants in food for export.
- Ministerial Decree No 167/2008 of the MTI which lays down measures to ensure that the exporter remedies the situation in the event of non-compliance. The type of actions taken by the MTI (from a warning to a suspension of operation of all the export activities for the whole year) varies according to the percentage of rejected consignments in relation to the total export volume of the company, and the number of notifications made via the RASFF.
- Quality standard 661/1978 of the MTI which lays down general and specific requirements on peanuts. General requirements are related to the maturity, cleanness and good condition of the peanuts. Specific requirements are described for both in-shell and shelled peanuts and establish, *inter alia*, the moisture content level.
- Presidential Decree No 106/2000 on facilitating exportation and importation procedures. It requires approval from the MTI prior to export.
- Regulation No 770/2005 of the MTI on the procedures for exportation. It requires the certificate of origin of the product prior to export.

5.2 COMPETENT AUTHORITIES

The MALR has a number of sectors including the Agricultural Services and Follow-up Sector, which comes under the scope of this mission. Within this Sector, the CAPQ and the Central Administration for Cooperation carry out aflatoxin controls in peanuts intended for export to the EU.

5.2.1 Central Administration and Plant Quarantine (CAPQ)

The role of the CAPQ has not changed since the last mission in that it is still the coordinating body in respect of peanut production and export and the main policy making organisation with respect to aflatoxin controls.

The CAPQ structure has changed since the last mission. There are five General Administrations across Egypt, three of which (General Administration in Port Said and North, General Administration in Alexandria and West, and General Administration in Cairo and South) are mainly involved in the context of this mission.

The five general Administrations have altogether 25 local offices which are responsible for performing official controls (inspection and sampling) on agricultural commodities, including peanuts intended for export. In the context of this mission, the relevant local offices are also responsible for issuing the health certificate for export to the EU.

Communication between CAPQ central level and the 5 directorates takes place by means of circulars (e.g. circular of 14 October 2006 on EU legislation including Commission Decision 2006/504/EC and sampling Regulation (EC) No 401/2006) and instructions relating to plant health issues, Ministerial Decree No 62/2000, issuing of the health certificate and sampling.

In the context of this mission, the QCAP organises an annual training session on EU

sampling requirements. Two laboratory staff, who were trained in the EU, delivered training on sampling to eleven inspectors from the General Administration in Port Said and North, including the local office in Ismailia, and from the General Administration in Alexandria and West in November 2008. Around twenty staff from the General Administration in Alexandria and West were also trained in 2007.

The mission team was informed that the head of the CAPQ is responsible for supervising the five General Administrations. The mission team visited the General Administration in Alexandria and West, the General Administration in Port Said and North of Sinai, and the Ismailia local office under the latter Administration. The mission team was also informed that the five General Administrations regularly supervise the local offices under their responsibility. However, no formal procedures are in place for this task and no official reports were made.

5.2.2 Ministry of Trade and Industry (MTI)

This Ministry, through the GOIEC, shares responsibility for export procedures with the CAPQ by undertaking joint inspections of the peanut companies.

The mission team was informed that meetings are held between the CAPQ and the GOIEC before the harvesting season on how to carry out controls in those peanut export companies that are willing to export. In addition, when peanut consignments are rejected by the EU MS, the MTI is responsible for conducting an inquiry in collaboration with the CAPQ and Customs.

Instructions from the MTI have been sent to the Customs concerning the EU requirements on peanuts intended for export to the EU. These instructions include a provision that peanuts in shell and shelled can only be exported if the CAPQ has given its approval.

5.2.3 Customs authorities

The Customs Administration, which is under the Ministry of Finance, is divided into eight sectors. Under the operations sector at central level there are three regions (Northern, Southern and Eastern). Each region has four central directorates and each central directorate has several general directorates of which the general directorate for export comes under the scope of this mission.

Customs has the ultimate responsibility for releasing peanut consignments outside Egypt.

The mission team visited two general directorates for export in the northern region in Alexandria, which covers Alexandria port and Dekheila port, and in the eastern region in Port Said.

Peanuts intended for export to the EU are mainly shipped from Alexandria port and from Dekheila port. Only six consignments of peanuts were shipped to the EU from Port Said in 2008.

5.2.4 Other organisations

The Central Administration for Cooperation of the MALR is responsible for peanut cultivation, which includes giving training to the farmers on Good Agricultural Practice (GAP) and inspection of peanut farms. There are 28 governorates across the country. Each governorate has an agricultural extension department which is responsible for carrying out the above official tasks.

The role and the structure of the ARC have not changed since the last mission. The post-harvest diseases department of the Plant Pathology Institute of the ARC is responsible for undertaking research activities regarding aflatoxin contamination in peanuts. A guidance document, which contains information on aflatoxin contamination and prevention in peanuts, has been circulated to peanut exporters via the AEC.

The University of Alexandria has recently (September 2008) started a research project on aflatoxins in peanuts to identify toxigenic and non-toxigenic strains of *Aspergillus spp* by taking soil samples. The mission team was informed that the results of this research will be available by mid-2009.

The AEC, which has replaced the former Agricultural Commodity Council, is a semi-private organisation that promotes Egyptian agricultural commodities. Within the AEC there are a number of committees, including a committee for oil crops and beans. Representatives of the MARL and MTI are also part of this committee. The committee held a meeting on 26/8/2008 to discuss setting up an integrated system of production and export of peanuts, in the form of procedural and technical measures to reduce the incidence of aflatoxin in shipments of peanuts for export. Follow-up meetings were held with the head of CAPQ to discuss the implementation of the above issues. Minutes of these meetings were presented to the mission team.

5.3 PROCESS CONTROLS IN THE PEANUT PRODUCTION CHAIN

5.3.1 Peanut cultivation

The main peanut-growing areas are in the north of the country, and in the areas of reclaimed desert to the east and west of the Nile Delta north of Cairo. East Owinat in the southern valley is also used for peanut cultivation as part of new agricultural projects.

According to the statistical data provided by the Egyptian authorities, the peanut cultivation area in 2000 was around 135,575 feddans (2.5 feddans is approximately one hectare) and the number of peanut farmers totalled 39,217. However, registration is not compulsory for peanut farmers.

The biggest export peanut companies have their own farms, and the size of those farms is usually over 500 feddans. The mission team met some peanut farmers, including the owners of the biggest export peanut companies. The farmers met by the mission team reported that their farms had been certified to international private standards on GAP.

Cultivars of Virginia type peanuts, including "NC" and "Gregory", are used in Egypt. The mission team was told by the farmers visited that some recommended practices based on GAP are followed at pre-harvest stage, such as soil tests before planting, crop

rotation every three years, the choice of peanut variety and timely irrigation (e.g. fields are sprinkle-irrigated, and irrigation ceases seven days prior to harvesting). The sowing period is mid-March.

Peanuts are supposed to be harvested at full maturity using the "hull scrape method", which consists in taking some peanuts and scratching the surface of the pods. If the colour after scratching is black, this means that the peanut has reached full maturity. Between mid August and September, peanuts in small plots are pulled by hand or in larger farms are harvested using a peanut digger. After being dug, pods are exposed to dry for between 5 and 8 days in order to bring the moisture level below 10%. Peanuts are picked by hand or using a conventional peanut combine. In the case of peanuts intended for export to the EU, the harvesting is highly mechanized.

Peanuts are cleaned by threshing (removing peanut pods from the vines) and loaded into the lorry mainly in bulk and subsequently transported to the peanut company. The mission team was told that the transport vehicles used for peanut are not fully enclosed and no covering such as tarpaulin is used in order to protect the peanuts from all additional moisture.

The mission team was informed that there are 34 co-operatives of peanut farmers in Ismailia. The extension service of the Central Administration for Cooperation is responsible for providing advice on these cooperatives. The size of the cooperatives varies from 1 500 to 300 00 feddans. The co-operatives have approximately 4 000-5 000 small farmers as members. The extension service has designated one expert per co-operative, with the result that there are now 34 extension experts at farm level. Written information about peanut growing is delivered to the farmers in form of periodic circulars and booklets. Extension service staff carry out specific seminars related to GAP before the growing season for peanut farmers. Before the harvest period, farmers and exporters receive specific harvest and post-harvest training. Currently, there are no national provisions for GAP

5.3.2 Peanut companies visited

The areas of Ismailia and Al Nubaria in the north of Egypt are where the majority of peanut companies exporting to the EU are located. In one of these two areas, there are a number of export companies which account for 80% of the total export volume of peanuts to the EU. Currently, there are 44 peanut export companies authorised to export to the EU.

The mission team visited four peanut export companies, which account for most of the total export volume of peanuts to the EU, and also examined inspection procedures there. Two of the companies were notified through the RASFF system. All the companies were subjected to a documented inspection and subsequently authorised by a joint committee (GOIEC and CAPQ), which is set up every year at the beginning of the peanut season.

In two companies some in-house checks were performed on moisture and rotten mouldy level at reception.

The design of the sorting and storage facilities as well as the storage conditions in the

majority of peanut companies visited were not in line with Article 4 (Annex II) of Regulation (EC) No 852/2004 in that these designs do not permit good hygiene practices including protection against contamination and, in particular, pest control. There were no walls in these facilities, and the floor surfaces of these facilities were not made of impervious, non-absorbent and washable materials. Moreover, in the companies visited a very large number of peanut bags were stored outside the storage facilities without roof and wall. Not all the peanut bags were stacked on pallets and stored at temperatures between 0 and 10°C (long time storage) as recommended by points 39 and 41 of Code of Practice for the Prevention and Reduction of Aflatoxin contamination in Peanuts (CAC/RCP 55-2004).

In addition, the storage conditions were not in accordance with Ministerial Decree No 62/2000, in that it was impossible to attain the required storage temperature (10-15°C) and not all peanuts were stored on wooden pallets. These findings were already reported in the previous report SANCO 3329/2001

Sorting is the main method of aflatoxin control in the companies visited. However, these companies do not check the effectiveness of sorting techniques by conducting regular aflatoxin analysis of the sorted peanut stream or of the finished products as recommended by point 53 of Code of Practice for the Prevention and Reduction of Aflatoxin contamination in Peanuts (CAC/RCP 55-2004). The mission team was informed that the effectiveness of sorting is not checked, as every single peanut consignment intended for export to the EU has to be sampled and tested for aflatoxin by the CAPQ.

Two out of the four peanut export companies visited did not have food safety procedures in place based on HACCP principles. This is not in line with the requirements of Article 5 of Regulation (EC) No 852/2004.

Traceability to the peanut farms was provided by the four companies visited.

The mission team was informed by the exporters visited that in some cases the sampling and analysis of Egyptian peanut consignments by the MS CAs at the EU import points have created a delay in which the above consignments might constitute a great threat for aflatoxin contamination of peanuts consignments.

5.4 METHOD OF SAMPLING FOR PEANUT CONSIGNMENTS

Before sampling takes place, the CAPQ staff carry out a visual pest and disease check of the peanuts. Once compliance is established by the visual check, sampling takes place. The mission team evaluated one sampling demonstration of a consignment of peanuts in shell. The net weight of the peanut consignment was 14.5 tonnes, in 22 jumbo bags of around 650 kg each. Staff from CAPQ took 100 incremental samples of 300 g each from 5 selected jumbo bags to produce an aggregate sample of 30 kg. Incremental samples were taken from different layers of the jumbo bags by gradually emptying the peanuts from the jumbo bag into small containers. If the company is supplied by more than one farm, the number of selected jumbo bags can be as high as 10. The aggregate sample was divided into three equal laboratory samples of 10 kg. Each laboratory sample was labelled and sealed, and sent to the QCAP laboratory.

5.5 PROCEDURE FOR EXPORTING PEANUTS TO THE EU

Before the start of the peanut export season, exporters have to apply to CAPQ to be officially listed. The CAPQ informs GOIEC and a joint committee of inspectors from the CAPQ and from the GOIEC is then set up in accordance with Ministerial Decree No 62/2000. CAPQ and GOIEC inspectors at local level check the facilities using a checklist that contains simple questions relating to enclosure walls, area for sorting and storage facilities. This checklist is based on the requirements laid down in Decree 62/2000. If the peanut facilities are in compliance with these requirements, they are authorised for export. In cases of non-compliance, a follow-up inspection is made to check that corrective steps have been taken. Once the export companies have been inspected and recognised, a list is drawn up with the names of these companies and submitted to all ports in Egypt and the CAPQ local offices.

If exporters want to export to the EU, they have to apply in writing to the CAPQ local offices. The application contains general information about the exporter; the consignment and inspection results are included afterwards. The CAPQ local inspectors then take samples for each lot. When the results are available, the CAPQ local office concerned and the company are informed. The company then applies to GOIEC by presenting the analytical report and the relevant documents from the CAPQ local office, and to the Customs Office by presenting customs declaration form No 13. Representatives of the three CAs go to the company in order to inspect the container and to supervise the loading of the goods into the container.

The mission team was told that this procedure (the supervision of the loading of the goods into the container at the peanut company facilities) applies to 95% of peanut containers destined for the EU. If the peanuts are in compliance with the relevant requirements, customs and GOIEC staff sign the above form No 13 and customs officials seal the container. Once the analytical results are issued, the company has five days to ship the peanut consignment into the port as required by Ministerial Decree No 62/2000. When the company has the Bill of Lading, it comes to the CAPQ local office to obtain the health certificate. The company then goes to GOIEC office to obtain the certificate of origin.

The mission team observed a demonstration of the Customs system (EDI) in operation and ascertained that the information available in the system did not require the results of samplings, analyses and health certificates by the MALR for certain CN codes 20081194 (peanuts in immediate packings of a net content exceeding 1 kg), 20081198 (peanuts in immediate packings of a net content not exceeding 1 kg), 20081192 (roasted peanuts in immediate packings of a net content exceeding 1 kg) and 20081196 (roasted peanuts in immediate packings of a net content not exceeding 1 kg). The mission team was informed that no consignments under the above CN codes were exported to the EU in 2007.

Consignments returned from the EU to Egypt are considered as an import product. The owner of the peanuts informs Customs on the arrival of this commodity. When the product arrives, Customs inform the relevant quarantine service who, in turn, take samples and submit the samples to the designated laboratory for aflatoxin analysis. The

mission team was informed that, if the peanuts comply with current Egyptian legislation (5 µg/kg aflatoxin B1 content, and 10 µg/kg total aflatoxins), Customs release them to the internal market. If aflatoxin levels are above the legal limits, the products are not allowed to be released and are destroyed by customs in the presence of the quarantine services and at the exporter's expense.

5.6 LABORATORY SERVICES

Currently, there is one laboratory authorised to perform aflatoxin analysis in peanuts intended for export to the EU. This is QCAP, located in Cairo. QCAP was set up in 1995 under the umbrella of ARC and has been designated as the Reference Laboratory for the MALR in accordance with Ministerial Decree No 1425/1998.

5.6.1 Laboratory visited

QCAP has 135 staff and is divided into two main sectors of activity: the chemistry laboratory and the microbiology laboratory. There are 55 staff (professional researchers with scientific backgrounds) working in the chemistry laboratory, five of whom work specifically for mycotoxins; one of these is also appointed Quality manager. A training protocol for new staff - which includes a general overview of the organisation, training on the instrument and a final test - is in place prior to any authorisation being given to perform analytical methods, in particular if the laboratories are accredited. QCAP also provides training on sampling procedures to staff from other organisations, including to the inspectors of the CAPQ.

The criteria for the authorisation of new personnel to perform the method have not been fixed. There are plans in the quality manual for a training programme for new personnel, including repeat analysis of a sample, but criteria for acceptance or rejection of the results (and, consequently, for authorising or not authorising the carrying out of the accredited method) of these repeat analyses have not been set.

The equipment in use for the relevant method of analysis is state-of-the-art and suitable for the correct determination of the analytes (Aflatoxins B1, B2, G1 and G2) in the relevant matrix (peanuts); the sample preparation is performed using fit-for-purpose techniques and instruments.

The total number of samples of peanuts intended for export analysed for aflatoxins is given in table 3:

Table 3: Number of Analysis performed in 2007 and 2008 for export to the EU

Year	No of samples tested for export	Non-compliant samples	% Non-conforming
2007	953	136	15%
2008	671	142	20%

The QCAP has been accredited since 1996 under EN ISO/IEC 17025:2005 by the

Finnish Accreditation Service (FINAS), which is a full member of the International Laboratory Accreditation Cooperation (ILAC). The accreditation is valid until 24/01/2009. The QCAP quality system performance is assessed each year by means of internal and external audits. The method of detection for aflatoxins in nuts falls within the scope of the accreditation and, consequently, is validated. However, both in the Quality Manual and in the SOP, the criteria to establish when the method should be re-validated or verified have not been set.

Traceability of sample and lot is ensured by means of a reception system for incoming samples which assigns a unique, non-repeatable number to each sample. This unique number, without any other reference to the producer being inspected, is repeated on the working sheet and then on the Certificate of Analysis. The whole analytical process, from the registration of the sample to the issuing of the official certificate, lasts no more than two days.

The Management Review Process is in place and correctly documented. It includes Quality Assurance and Quality Control programs. The internal quality control program involves a monthly check for aflatoxin content recovery in peanut samples (blind samples and repeated fortified blank matrix samples). The external quality control programme includes participation in several international proficiency tests (PTs). The results from these PTs since 2005 have been satisfactory for the four aflatoxins.

Criteria to define acceptance of standards analysed during the sample sequence of analysis have not been set (the SOP does not include any criteria to determine whether standards used in a certain analytical sequence are still valid. Standards are prepared every six months but are not checked to establish whether there is a drop in standards; an indirect check is made via the analysis, in every sequence, of fortified blank matrix samples).

A SOP was in place for sampling and grinding, extraction and final analysis of the three sub-samples obtained. The method involves dry grinding and mixing of the whole aggregate sample, casual collection of the aliquot used for analysis (laboratory sample), extraction following the AOAC method 999.07, purification on silica (solid phase extraction – SPE) and quantification with HPLC-FLD after derivatisation with trifluoro-acetic acid (TFA). Quantification is obtained with a single calibration point (the calibration curve is used only to check the linearity of the response in the relevant concentration range).

The validation of the method involved checking of the relevant parameters, such as homogeneity of the sample after grinding, range of linearity of the instrument, recovery, standard deviation (SD) of repeatability and SD of Reproducibility. Of these parameters, the last three, which are defined in Commission Regulation (EC) No 401/2006, were in line with the required performance criteria.

In the case of samples intended for export to the EU, compliance of the sample with the EU criteria is based on a precautionary action: only samples free of aflatoxins are considered for exportation. The limit of detection (LOD) obtained during its validation was 0.4 µg / Kg.

5.7 RESPONSE TO RASFF NOTIFICATIONS

The CAPQ is responsible for receiving RASFF notifications from the Commission via the EU delegation in Cairo. The CAPQ circulates these notifications to the national contact point (Foreign agricultural relations department), which is not yet operational. This information is also disseminated to the MTI, the AEC, and the companies concerned. Within the MTI there is a committee composed of members from different ministries, including the MALR. This committee conducts an investigation to identify whether the problem occurred before or after export.

A three-day workshop for African countries was held in Morocco in May 2008 as part of "better training for safer food" in the context of RASFF; it was attended by three officers from Egypt.

The mission team examined a number of files relating to the investigation of companies which were notified through the RASFF system. Currently, there are four peanut export companies which have received a warning under Ministerial Decree No 167/2008.

5.8 FOLLOW-UP TO MISSION 3329/2001

The FVO undertook a mission to Egypt in September 2001: its objective was to evaluate the control systems in place for preventing aflatoxin contamination in peanuts intended for export to the EU. The report of that mission made a series of recommendations that required attention by the Egyptian authorities.

The recommendations, the response of the competent authority and the follow-up on the current situation are summarised in table 4.

Table 4

RECOMMENDATION OF DG (SANCO 3329/2001)	RESPONSE FROM EGYPTIAN AUTHORITIES	FOLLOW UP IN MISSION DG (SANCO) 7853/2008
1) The sampling procedure in use should be altered to increase the number and distribution of incremental samples in accordance with Directive 98/53/EC.	Concerning sampling procedures the authorities identified they would alter the sampling procedure and number of incremental samples in line with the recommendation within the report within 6 to 12 months. Concerning laboratory performance the authorities identified improvements already undertaken to improve calibration curves, in line with the detailed findings related to laboratory performance.	This recommendation has been addressed (see Section 5.4 and 6.4)
2) Make continued steps to ensure that the standards identified in the Egyptian Ministerial Decree 62/2000 are complied with, particularly in respect of the storage conditions for nuts.	The authorities also undertook to review the storage requirements in Egyptian Ministerial Decree 62/2000, but no time frame was offered.	This recommendation has not been addressed (see 5.3.2 and 6.3)

6 CONCLUSIONS

6.1 RELEVANT NATIONAL LEGISLATION

- Although national legislation in relation to this mission is in place, the main item of legislation regarding the storage facilities for peanuts intended for export to the EU does not meet the requirements laid down in Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 4 (Annex II) of the same Regulation.

6.2 COMPETENT AUTHORITIES

- The responsibilities of the various authorities are clearly defined and communication at all levels is good.
- Staff met by the mission team were well trained and showed a good knowledge of

the relevant legislation and requirements.

- According to the CAPQ, supervision of the official controls is carried out on a regular basis. However, no evidence was provided to the mission team.

6.3 PROCESS CONTROLS IN THE PEANUT PRODUCTION CHAIN

- In the area of cultivation, measures have been taken to train farmers and to promote GAP. There are no national provisions for GAP.
- The farmers visited are certified to international private standards on GAP and comply with the Codex Alimentarius Code of Practice for the prevention and reduction of aflatoxin contamination in peanuts (CAC/RCP 55-2004), in particular the recommended practices based on GAP (pre-harvest and harvest).
- Most of the companies that were visited had inadequate sorting and storage facilities. Moreover, peanut bags were stored outside the storage facilities. These conditions are not in line with the requirements of Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 4 (Annex II) of the same Regulation (see also 6.1).
- There is no check on the effectiveness of sorting techniques with regard to aflatoxin controls as recommended in point 53 of Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Peanuts (CAC/RCP 55-2004).
- Two companies visited have not implemented food safety procedures based on HACCP principles; hence, their procedures are not in line with the requirements of Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 5
- Findings relating to peanut storage conditions show that the recommendation made in the previous report has not been addressed (SANCO 3329/2001).
- Traceability of peanuts back to the individual farms is adequate.

6.4 METHOD OF SAMPLING FOR PEANUT CONSIGNMENTS

- The sampling observed by the mission team was in accordance with Regulation (EC) No 401/2006 and, therefore, the recommendation made in the previous report has been addressed.

6.5 PROCEDURE FOR EXPORTING PEANUTS TO THE EU

- The control system in place for exported peanut consignments is being adequately implemented.
- The current export procedure does not allow the Egyptian officials responsible for releasing peanut consignments intended for export to the EU falling under CN codes 20081194, 20081198, 20081192 and 20081196 to be aware that those consignments should be accompanied by the results of the sampling and analysis and a health certificate signed by the MALR. Therefore, it cannot be ensured that such consignments are exported by those documents (Article 1(c) of Commission

Decision 2006/504/EC).

6.6 LABORATORY SERVICES

- There is one laboratory designated to perform aflatoxin analysis in peanuts intended for export to the EU.
- The laboratory visited was accredited to ISO 17025, adequately staffed and equipped, and complied with the requirements of Annex II to Commission Regulation (EC) No 401/2006.

6.7 RESPONSE TO RASFF NOTIFICATIONS

- Adequate investigation has been carried out in the companies notified via the RASFF and also in the returned consignments.

6.8 FOLLOW-UP TO MISSION 3329/2001

- One out of two recommendations has been addressed.

6.9 OVERALL CONCLUSION

Overall, there is a control system in place for peanuts intended for export to the EU. The sampling, the laboratory performance and the export certification for aflatoxin are regarded as adequate. However, some shortcomings were identified mainly related to legislation, the design of facilities, storage conditions and poor implementation of food safety procedures based on HACCP principles, which can lead to contamination of the product and might hamper the effectiveness of the control system including the reliability of the health certificate.

7 CLOSING MEETING

A closing meeting was held on 4 December 2008 with the central competent authority, the CAPQ. Representatives of the Department of Foreign Agricultural Relations of the MALR, ARC, GOIEC of the MTI, AEC, QCAP, and the European Union (EU) Delegation in Egypt were also present. At this meeting, the inspection team presented the main findings and conclusions of the mission.

The representatives of the above CAs did not express any major disagreement

8 RECOMMENDATIONS

To the competent authorities of Egypt.

An action plan in response to the recommendations should be forwarded to the Commission within 25 days of receipt of the report. This action plan should clearly

set out the manner and deadline by which the competent authorities will address each of the following recommendations:

No.	Recommendation
1	To ensure that the Egyptian requirements for the storage facilities regarding peanuts intended for export to the EU are in line with or at least equivalent to the requirements of Article 10 of Regulation (EC) No 852/2004 in connection with Article 4 (Annex II) of that Regulation.
2	To ensure that sorting and storage facilities for peanuts, as well as storage conditions, are in line with or at least equivalent to the requirements of Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 4 (Annex II) of same Regulation, and consider storing peanuts as recommended in points 39 and 41 of the Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Peanuts (CAC/RCP 55-2004).
3	To consider checking the effectiveness of sorting techniques with regard to aflatoxin controls as recommended in point 53 of the Code of Practice for the Prevention and Reduction of Aflatoxin Contamination in Peanuts (CAC/RCP 55-2004).
4	To ensure that food business operators exporting peanuts to the EU put in place, implement and maintain permanent procedures based on the HACCP principles, which are at least equivalent to the requirements laid down in Article 10 of Regulation (EC) No 852/2004 in conjunction with Article 5 of that Regulation.
5	To consider including in the export procedures the inspection of the health certificate and the results of the sampling and analysis required in all products included in Article 1(c) of Commission Decision 2006/504/EC.

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

http://ec.europa.eu/food/fvo/ap/ap_egypt_7853_2008.pdf

ANNEX 1 - LIST OF LEGISLATION REFERENCED IN THE REPORT

Reference	OJ Ref.	Detail
Regulation (EC) No 882/2004	OJ L 165, 30.4.2004, p. 1, Corrected and re-published in OJ L 191, 28.5.2004, p. 1	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 139, 30.4.2004, p. 1, Corrected and re-published in OJ L 226, 25.6.2004, p. 3	Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs
Regulation (EC) No 2076/2005	OJ L 338, 22.12.2005, p. 83–88	Commission Regulation (EC) No 2076/2005 of 5 December 2005 laying down transitional arrangements for the implementation of Regulations (EC) No 853/2004, (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council and amending Regulations (EC) No 853/2004 and (EC) No 854/2004
Regulation (EC) No 178/2002	OJ L 31, 1.2.2002, p. 1–24	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 315/93	OJ L 37, 13.2.1993, p. 1–3	Council Regulation (EEC) No 315/93 of 8 February 1993 laying down Community procedures for contaminants in food
Regulation (EC) No 1881/2006	OJ L 364, 20.12.2006, p. 5–24	Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs
Regulation (EC) No 401/2006	OJ L 70, 9.3.2006, p. 12–34	Commission Regulation (EC) No 401/2006 of 23 February 2006 laying down the methods of sampling and analysis for the official control of the levels of mycotoxins in foodstuffs
Decision 2006/504/EC	OJ L 199, 21.7.2006, p. 21–32	2006/504/EC: Commission Decision of 12 July 2006 on special conditions governing certain foodstuffs imported from certain third countries due

Reference	OJ Ref.	Detail
		to contamination risks of these products by aflatoxins