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Meeting European Union's Food and Agricultural Products Imports Standards: Challenges and Opportunities for Developing Countries

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ABSTRACT

This paper aims to examine the European Union (EU) sanitary and phytosanitary standards (SPSS) regulations and Rapid Alert System for Food and Feed (RASFF) mode of operation for importing food and agricultural products from developing countries. The authors discussed different EU's rules for importing food and agricultural products from developing countries. These includes food hygiene packing, hazard analysis of critical control point (HACCP), Traceability and RASFF activities. Accessing EU markets is not an easy tasks for agro-food industries among developing countries. Although there is no any barrier for trade to EU markets, but the stringent sanitary and phytosanitary standards (SPSS) make it difficult for developing countries to export their Food and Agricultural Products into EU markets.

1. INTRODUCTION

The European Union's food policy is based on high food safety standards, which aims to protect, and promote consumers' health. This policy take into consideration the risks associated with all stages of food supply chain and provide effectives rules and regulations to protect the consumers from effect of these risks. As a result, Sanitary and Phytosanitary Standard (SPSS) regulations was established in all EU member states to ensure food safety for its consumers. It main aim is to operate a competent control system that monitors and

enforces EU food safety rules and regulations to all exporting countries of food and agricultural products (FAP).

The SPSS regulations of EU is the most stringent in the world (Batz, et al., 2011) and getting access to the EU markets remains tough tasks especially for FAP exporters from developing countries. More often than none, exporters from developing countries who have a comparative advantage in exporting FAP are affected by the SPSS regulations due to inadequate traceability, poor storage facilities, limited access to international safety standard certification agencies and so on. Hence, agro-based industries from these nations are confronted with myriad of challenges in getting access to about 500 million consumers in the EU markets due to three main reasons. Firstly, the entire food supply chain from countries of origin are subjected to screening on regular basis by veterinary staff from EU. Secondly, strict border control for any FAP importing into EU member states. Thirdly, food that have successfully pass the border check-in patrol have to undergo internal quality control before they can be certified fit for the EU market. Information obtained from border and internal quality control are disseminated among all EU member states through a transmitter called Rapid Alert System for Food and Feed (RASFF). The EU member states use RASFF in exchanging information about actions taken concerning health risks identified in relation to FAP. This exchange of information assists member states to act accordingly and effectively in response to any potential health threats caused by FAP.

The question that this study aims to address is why exporting FAP by developing countries into European Union (EU) member states remains a challenging task for the past decades. The dilemma is that most farmers and agro-based industries in the developing nations lack full information about SPSS and RASFF and how it operates. More often than none, they export FAP to EU markets with the anticipation of making large profits but end up in a serious losses. Perhaps, this is because the FAP do not meet the minimum requirements of SPSS regulations and hence, rejected at border. Perhaps, sometimes the FAP may passed the border but unfortunately may found wanting and withdraw from the market. Such predicaments are detrimental to farmers as well as to agro-based industries in the developing countries where livelihood mostly depends on agriculture. Thus, it is against this background that this study aims to examine the EU's SPSS regulations and RASFF's mode of operation. The information will assist farmers and agro-based industries in developing countries in taking appropriate measures when exporting FAP into EU markets in order to ensure smooth passage of their products into the EU markets.

2. FOOD HYGIENE PACKAGE (FHP)

The latest regulations was the "EU General Food Law" (178/2002) which was officially announced in 2005 (Table 1). Its aim is to harmonize framework for food safety assurance from farm gate to final consumer within the EU member states (Bostock et al., 2004). This new rule offers a single and transparent food hygiene systems called "Food Hygiene Package (FHP)" (Ababouch et al., 2005). The key features of the FHP that are important for exporting countries are listed below (Ponte et al., 2005):

i. food sectors needs to comply with the safety rules at all level of food supply chain,
ii. countries exporting their products to the EU must comply phytosanitary regulations,
iii. exporting countries are required to appoint competent authorities to ensure implementation of the sanitary and phytosanitary rules before certificate can be issued.

Table 1. New European Union Hygiene Package Regulations and Directives

Package	Regulation/Directive	Covering
Hygiene 1	European Parliament and Council Regulation (CE) 852/2004 on the hygiene of foodstuffs	General requirements primary production, technical requirements, HACCP, registrations/approval of food businesses, national guides to good practice
Hygiene 2	European Parliament and Council Regulation (CE) 853/2004 laying down specific hygiene rules	Specific hygiene rules for food of animal origin (approval of establishments, health and identification marking, imports, food chain information
Hygiene 3	European Parliament and Council Regulation (CE) 854/2004 laying down specific rules for the organization of official controls on products of animal origin intended for human consumption	Detailed rules for the organization of official controls on products of animal origin (methods to verify compliance with Hygiene 1 & 2 and animal by-products regulation 1774/2002
Hygiene 4	Council Regulation (CE) 882/04 laying down health rules governing the production, processing and importation of products of animal origin	Veterinary certification, compliance with EU rules
Hygiene 5	European Parliament and Council Directive 2004/41/EC repealing 17 existing Directives	

Source: Ababouch et al, (2005)

3. HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP)

The HACCP was first introduced in 1973 as a procedure to control and monitor food processing industries in the United States. However, it was later accepted and implemented worldwide by Codex Alimentarius, the EU and other countries including Canada, Australia, New Zealand and Japan. The EU officially legislated HACCP principles in 1991. These principles are mandatory for all EU member countries as well as exporting countries to the EU (Cato and Lima dos Santos, 1998). The EU demanded all exporting countries to comply with the HACCP principles. However, before the HACCP guidelines are to be implemented, certain prerequisites have to be observed. They are the 'Good Hygienic Practices (GHP)' and the 'Good Manufacturing Practice (GMP)'. The GMP is a general policy related to practices, procedures and processes that is vital to produce food products that are safe for consumption and of uniform quality. On the other hand, the GHP is an integral part of GMP that deals with measures required to ensure proper hygiene and safety of food products (Blackburn, 2003).

HACCP is a scientific and systematic approach that identifies, assesses and controls potential hazards to ensure that food and food products are safe for consumption at all levels of supply chain (Huss et al., 2004). This includes, production, processing, manufacturing, packaging, storage, transportation and distribution of food products, i.e. from the farm gate to the final consumer. The principles of HACCP are listed below (ICTSD, 2006; and Cato, and Lima dos Santos 1998):

i. Conduct a thorough hazard analysis
ii. Estimate the critical control points
iii. Estimate critical limits

iv. Create a system to monitor the critical control point
v. Provide the corrective action to be taken when monitoring indicates that a particular critical point is not under control
vi. Formulate a procedure for verification to confirm that the HACCP system is working effectively; and
vii. Provide report concerning all procedures and records appropriate to these principles and their applications.

The EU established two monitoring systems in ensuring that exporting countries comply with the HACCP principles prior to arrival of their food products at the EU border. Firstly, exporting countries must obtain approval to export food products to the EU market. There are two categories of approvals granted to importing countries. The first type is granted to countries considered to have achieved high regulations and monitory system rates on food safety standards. Thus, these countries are given permits to import into the EU member states without border inspections. Nevertheless, samples of the consignments are randomly selected and subjected to various hazard tests. Any slight detection of a health hazard in the food products will prompt member countries to alert all other EU countries, usually via the RASFF. Ultimately, potential importing countries will be notified of the findings and have their consignments returned to their countries of origin.

The second category is for countries whose submissions are awaiting approval from EU authorities. Hence, their FAP are considered safe but consignments from these countries are subjected to series of vital and thorough tests. In this second category, FAP from developing countries must be certified by Competent Authorities (CA) approved by the destination EU country. Subsequently, certified food products are allocated HACCP certification number and this information is transmitted to EU accordingly (Ababouch et al. 2005). For instance, in Malaysia, the Ministry of Health has been appointed by the EU as the CA for fish and fishery products in 1996 under the Commission Decision 96/608/EC. Nevertheless, CA certified FAPs will be subjected to various vital hazard tests at borders and other entry points in the EU markets. If the FAP were considered unsafe for consumption they are outright rejected and sent back to country of origin. Similarly, those FAP that are initially fortunate to entered the EU market but later discovered to be contaminated are called back immediately through RASFF and destroy or sent back to its country of origin.

4. TRACEABILITY

The outbreak of mad cow disease and other food related diseases in the EU instigated radical changes in food industries. Hence, the issue of traceability was considered crucial. Traceability involves a process of proper documenting of activities along food supply chains such as feed, fertilizer, medications, antibiotics, pesticides, harvesting techniques, environmental monitoring, products handling, packaging and so on. The traceability systems are of two types; internal traceability and external traceability. The first refers to documentation at the production site while the later involves reporting activities along value chain (Lupin, 2006). Table 2 illustrates purposes, objectives and attributes of traceability system.

Table 2. Traceability, Purposes, Objectives, Attributes to Trace and Examples

Purpose	Objective	Attributes
Safety	Consumer protection (through recall and withdrawal)	Specified in food & fish safety regulations
Security	Prevention of criminal actions (through verifiable identification and deterrence)	Specified in security regulations
		Verification of selected attributes on package and/or food
Regulatory Quality	Consumer assurance (through recall and withdrawal)	Specific attributes included in regulations
Non-regulatory quality & Marketing	Creation and maintenance of credence attributes	Specific attributes included in public standards
Food chain trade & logistics management	Food chain uniformity & improved logistics	Specific attributes required to food and services suppliers by contract
Plant Management	Productivity improvement and costs reduction	Internal logistics and link to specific attributes

Source: Lupin (2006)

5. RAPID ALERT SYSTEM FOR FOOD AND FEED (RASFF)

The primary role of RASFF is to provide information on measures taken in response to risks associated with certain FAPs. These measures depend on the gravity of the risks identified and potential frequencies of their occurrences. It includes destruction of the consignments, re-dispatching and complete withdrawal of the product from markets. In some cases involving livestock, staffs from veterinary offices in EU countries are sent to the concerned potential importing countries to investigate the FAP production processes. Based on findings of such missions, countries in violation can incur stringent penalties such as banning of FAPs from a particular company or the entire industry of affected countries. A case in point is the EU ban of fish and fish products on Malaysia in 2008 (Alavi, 2009). Similarly, Benin Republic was given a two year ban on shrimp importation into the EU in 2003. (Houssa and Verpoorten, 2015). Other countries who experienced bans on fish products to EU include Bangladesh, Kenya and Uganda. Many empirical studies shows that the impact of such bans resulted in great economic losses. Though, the import bans of FAPs into EU markets has negative economic consequences. However, it is argued that such restrictions trigger overall improvement of the industries in the long run. Such experiences enable potential exporting countries strive to meet The EU's stringent sanitary and Phytosanitary standards, thereby gaining access to about 500 Million consumers. (Alavi, 2009; Dey, et al., 2005; Yunus, 2009;

Cato and Santos, 2000; Calzadilla-Sarmiento, 2002; Keizire, 2004; Henson and Jaffee 2006; Henson and Loader 2001)

RASFF notifications are classified into three divisions. They are alert, information and border rejection notifications.

5.1 Alert Notification

An alert notification is signaled when a food products, feed or food contact material that is in the market but is showing serious risk, thus necessitating a quick action. Among its responsibilities is to verify the market presence of the risky FAP from all network members and so, take immediate necessary actions. The alerts are generated by the member of the network that identified the case and has started appropriate measures, such as withdrawal or recall. Each network member country have their own approaches in carrying out such measures, including the provision of comprehensive information about the menace through the media if necessary. The percentage of alert notification growth over a period of five years is about 3.6% as shown in Table 3.

5.2 Information Notification

Information notification is specific to an identified health risk associated with FAP that do not necessitate immediate actions. Probable reasons could be that the risk is insignificant or the FAP concerned is yet to reach the EU market. The information notification is further classified into two sub-divisions namely information notification for follow-up and information notification for attention. The first is for FAP that are already in the market or intended for markets in another member country while the second one is for FAP that are present only in the notifying member country, has not been released to the market or is no longer available in the market.

5.3 Border Rejection Notification

A border rejection notification is targeted at consignments of FAP that are completely denied entry into the EU markets due to high risks associated to human health, animal health or to the environment. Though, the border rejection is the highest among the three divisions of RASFF notifications, its percentage changes over the years (2011-2015) is only 1.7 as illustrated in Table 3. This indicates that the exporting countries could not meet the SPSS of EU perhaps due to reasons such as ignorance of its regulations, insufficient information and inadequate processing and logistic facilities.

Table 3: The number of notifications from 2011 to 2015

Year	Alert	Border rejection	information for attention	information for follow-up
2011	617	1820	720	551
2012	523	1712	679	507
2013	584	1438	679	429
2014	725	1357	605	402
2015	750	1380	476	378
% Changes	3.4	1.7	-21.3	-6

Source: RASFF, 2015 report.

6. NOTIFICATIONS BY FOOD PRODUCTS CATEGORY AND CLASSIFICATION

Fruits and vegetables have received the highest border rejection notifications followed by nuts, nuts products and seeds for the past five years (Table 4). Food contact materials are third on the list of rejected food products. The overall notifications received in 2015 by fruit and vegetables is about 634 in which 424 (67%) are border rejection cases. Similarly, nuts, nut products and seeds have received a total of 477 notifications out of which 403 (85%) are border rejection case. This high border rejection rate could be related to contamination found in the products that are hazardous to human health. On the other hand, fish and fish products, poultry meat and poultry meat products and meat and meat products (other than poultry) recorded border reject notifications of 67, 59 and 24 in 2015, respectively. These three food categories received highest alert than rejection notifications. Milk and milk products received least number of notifications with no border rejection in 2013 and 2015, respectively. Perhaps, these products are exported from developed countries such as Netherlands and Denmark to EU markets. More often than none, these border rejections cases were mainly due to lack of information on sanitary and phytosanitary regulations and inadequate modern facilities from the exporting countries. Consequently, information on EU sanitary and phytosanitary standard regulations on FAP becomes imperative for exporting countries so as to enable them access market worth of 500 million consumers in the EU member countries.

Table 4: Notifications by product category and by classification

Products category	2011		2012		2013		2014		2015
	Alert	BR	Alert	BR	Alert	BR	Alert	BR	Alert
Fish and fish products	95	217	63	166	77	86	118	82	104
Fruit and vegetables	61	360	40	479	55	402	91	369	81
Meat and meat products	61	50	65	40	74	64	67	53	83
Poultry meat and poultry meat products	20	14	19	53	50	106	48	79	62
Milk and milk products	22	4	25	2	22	0	48	3	48
Herbs and spices	26	116	31	83	18	77	37	51	40
Cereal and bakery products	57	64	36	69	42	36	45	43	65
Nuts, nut products and seeds	30	424	15	272	30	215	31	250	46
Food contact materials	61	125	40	127	23	156	23	104	24
Feed materials	13	133	8	103	24	65	25	55	12

BR= border rejection; Source: RASFF, 2011-2015 annual reports

7. CONCLUSION

Exporting food and agricultural products (FAP) to the lucrative EU markets by developing countries is an intimidating and difficult task due to its stringent sanitary and phytosanitary regulations enforced by EU member states. According to the regulations, all FAP must undergo thorough health hazard investigation before they can be granted entries into EU markets. Therefore, any FAP found to be in violation of EU market standards, is out rightly rejected at the border and sent back to its country of origin. In some cases, FAP may be

successful with the border hazard tests but rejection notifications will be transmitted through RASFF for quick withdrawal of the products from the markets if they are later discovered to pose any risks. These situations have negatively affected the livelihoods of many farmers and agro-based industries in developing countries were agricultural practices are mostly traditional. Besides, several workers lost their jobs due to this strict food hygiene rules of EU. Therefore, government agencies and authorities responsible for food and agro-based industries in developing countries need to support farmers and agro-allied entrepreneurs by providing them with current information and effective guidelines to ensure that their products meet the EU's sanitary and phytosanitary standards. Furthermore, compensations should be provided by government to those whose FAP were rejected to cushion the impact of economic losses to their agribusiness. More importantly, EU states should ensure that rejected FAPs are prevented from returning to their countries of origin by properly disposing them.

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