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Trade-distorting SPS and TBT regulations in the EU?

A qualitative assessment from the market for live plants and cut flowers

Sophie Drogué and Estelle Gozlan
(INRA, France)

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Trade-distorting SPS-TBT regulations in the European Union?

A qualitative assessment from the market

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SOPHIE DROGUE AND ESTELLE GOZLAN¹

INRA, UMR ECONOMIE PUBLIQUE INRA-AGROPARISTECH, PARIS

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Abstract: This paper aims at providing a qualitative complement to the article of Disdier et al. (2006) on the restrictiveness of European SPS and TBT measures on agricultural trade flows. Using specific estimations of ad-valorem equivalents for the EU provided by Anne-Célia Disdier, we compare the sectors where observed trade flows are significantly lower than predicted flows, with the sectors where a SPS/TBT measure is actually notified in the TRAINS database. We find only three sectors where a significant negative coefficient match with a notified regulation: the sector of meat and meat products (chapter 02 in the HS classification); the sector of live plants & cut flowers (chapter 06); and the sector of transformed cereals and flours (chapter 19). This is consistent with their result of a low coverage (number of products affected by EU regulations), but raises questions about the effects captured in the ad-valorem coefficients, since negative and significant values are found in sectors where no SPS/TBT measure have been notified.

Focusing on the market for live plants and cut flowers, we first provide a description of the EU's import requirements with respect to plant health (SPS) and other specific regulations including quality standards (TBT). We then describe recent trends regarding the generalization of private sector standards and certification schemes with respect to quality, environmental and labour criteria. In order to get qualitative understanding of the respective trade-restrictiveness of EU SPS/TBT measures and private sector standards, we have conducted a survey among exporters of flowers in developing countries. The questionnaire consisted of four sections. The first aimed at collecting data on exporters' characteristics (country, activity, exported products by HS-6 code, details on export destinations). As the chapter 6 of the HS nomenclature distinguishes between live plants (0601 to 0602) and cut flowers and foliage (0603 to 0604) we have also conducted our analysis with respect to that distinction. Section 2 was devoted to the nature and stringency of EU Plant health requirements (PHR) concerning their exports (frequency of random inspections) and their perceived efficiency and trade-restrictiveness. The third section focused on their perception of EU marketing requirements and private standards. Finally, section 4 focused on a comparison of NTBs in the EU and other developed countries.

1. SPS regulations. All respondents are subject to PHR consisting of Plant health certificates (all participants) and random phytosanitary inspections (57% of participants

¹ We thank Catherine Guichard (COLEACP) for helpful comments; all the survey participants for their gentle collaboration and Karine Rezel for help while going through the questionnaires. Financial support from the European Commission under FP6 is gratefully acknowledged.

exporting “live plants only”, 71% of those exporting “cut flowers only” and 87.5% of those exporting both products). Results suggest that the coverage ratio is probably greater in practice than in the TRAINS database. The rate of inspections varies widely among exporters, and sometimes according to the EU-point of entry. For 27% of respondents, exports are systematically inspected, even if they have complied with the phytosanitary requirements necessary to obtain the PH certificate (issued in the exporting country). Inspections are perceived as an important barrier to trade by 45% of concerned participants, because of additional costs, delays, and risks of plants being destroyed. However, the majority of participants (79%), especially those exporting live plants, consider PHR in general as routine or a low NTB, i.e. of lower concern for regular exporters. 14% of respondents have had an experience of failing to export to the EU because of PHR. Anyhow, it is important to notice that since the Directive on Plant Health results from the transposition of internationally recognized standards (IPPC), it cannot be challenged for causing “unnecessary restrictions to trade” according under the SPS agreement.

2. TBT regulations. In addition to Plant health measures, all products in chapter 06 have to comply with the marketing standards prevailing in the EU. These legislative requirements relate to quality standards for flowering bulbs, corms and tubers and for fresh cut flowers and fresh ornamental foliage, and concern (i) minimum quality requirements, (ii) minimum size and size grading, (iii) packaging and presentation and, (iv) marking (identification of vendor, nature of product, etc.). Although marketing standard requirements are generally perceived as routine (72% of respondents), they seem to be more difficult to comply with for African exporters of cut flowers (several have voiced concern about their inability to meet “head size” requirements because of climatic reasons).

3. Private standards. One third of the surveyed firms declared that they had ever encountered difficulties due to requirements from the private sector, with respect to quality (31%), environment (24%) and/or labour conditions (14%). Answers suggest that private sector standards do not generally impede access to the European market (even though some complain about the frequency and the costs of audits required by supermarkets), but might act as a major barrier to trade in some rewarding niche markets (organic, fair-trade, eco-labelled products). African exporters mentioned the ban in certain chemicals such as Methyl Bromide (nematicide widely used for soil fumigation)² required for the Fair Trade Label as “equivalent of a trade embargo” since there are no safe alternatives available to them. Latin American exporters also complain about the “proliferation of environmental labels”. Moreover, private initiatives in the UK with regard to “airmiles” (fresh products shipped by airplane), could become a serious concern for East-African exporters.

These results suggest that the composition of trade could be as important as the volume of trade for the analysis of NTBs.

Keywords: SPS, TBT, Private standards, trade in ornamental products.

² Hazardous to the health of farmworkers, and contributing to the depletion of the ozone layer. The Montreal Protocol required that the use of methyl bromide be gradually reduced and completely eliminated by 2005 in industrialized countries, while developing countries have until 2015 to eliminate the use of the pesticide.

1 Introduction

The trade restrictiveness of domestic technical regulations (TBT) and sanitary and phytosanitary measures (SPS) has received much consideration over the last ten years because of the concern that such measures could be used as disguised protectionism aimed at compensating the effects of declining tariffs. The 1995 creation of a formal World Trade Organization, endowed with a dispute settlement body (DSB) and with two specific agreements promoting international harmonization of domestic standards (the SPS agreement in force from this date, and the 1979-TBT agreement), had given rise to great hopes with regard to the emergence of a multilateral framework challenging “unnecessary restrictions to trade”. Indeed, the need for scientific risk assessment (underpinning the legitimacy of trade-restrictive regulations under the SPS agreement) and for consistency in regulations (ensuring that countries do not implement restrictions on imports for a safety objective when other imports or domestic products with a comparable level of risk are not subject to similar regulations), have resulted in the denunciation of some obvious protectionist regulations by the DSB.

This framework has also had positive implications regarding the transparency of countries’ various import requirements (through the notification system to the SPS and TBT committees). However, in spite of recent attempts³ to address the needs of developing countries under the Doha Development Round, many studies show that the latter still face recurring difficulties in meeting SPS and technical requirements to export to developed countries, especially in the agricultural and agro-food sectors.

A few studies have tried to quantify the impact of non-tariff measures on trade flows. Focusing on a case study (residues of mycotoxins in exported pistachios), Otsuki et al. (2001) have suggested that some European regulations, though based on a sound scientific risk analysis – and therefore acceptable under the SPS agreement – could be excessively trade-restrictive: in this particular case, resulting in disproportionate export losses to African countries for only limited expected health improvements in Europe. In a more general framework, Disdier et al. (2006) have analyzed the impact of SPS and TBT regulations on

³ At the March 17-18 2004 meeting, the WTO Committee on Sanitary and Phytosanitary Measures finalized their Decision on Equivalence. Equivalence is the mutual acceptances of another Member's standards that while different in process have the same effect. This decision is aimed at helping developing nations prove that their products are as safe as those in developed nations. The decision aims to speed up recognition of equivalence of SPS measures for products previously traded or those for which information already exists (GTN, 2004).

agricultural trade flows, introducing ad valorem equivalents of these non-tariff barriers. Their results also suggest that EU regulations are more trade-restrictive than the average of OECD countries, raising questions about their use as a protectionist tool.

However, a growing number of studies⁴ suggest that beside mandatory SPS and TBT import requirements implemented by governments, voluntary standards arising from the private sector could act as an important barrier to trade, especially for small / individual exporters in developing countries failing to meet specific quality criteria on a regular basis, or to engage into recognized certification schemes. Private standards are beyond the scope of governmental measures, it is difficult for exporters to complain about them within the multilateral trading system. However, this issue has recently been discussed by the SPS Committee (WTO, 2007).

The aim of this paper is to focus on one particular sector (the market for cut flowers and live plants) to shed some light on the effects captured in the negative coefficient estimated in Disdier et al. In particular, we want to understand what kind of plant health requirements developing countries have to comply with, whether they are scientifically-based and efficient. We investigate technical requirements, and private standards that may apply. We analyze the perception of their respective restrictiveness by surveying exporters in developing countries. Finally, we want to know how European plant health requirements compare with other developed countries' regulations.

The remainder of the paper is organized as follows: section 2 describes the methodology and provides some details about the European ornamental products import structure. Section 3.1 describes the legislative requirements notified to access its markets in terms of both plant health requirements and quality standards, while section 3.2 focuses on some private standards of increasing relevance for the horticultural sector. Section 4 displays the results of the survey among exporters, and section 5 concludes.

2 Methodology

In order to centre our study on a sector where EU regulations seem particularly trade-restrictive, we started with the analysis of Disdier et al's (2006) estimates of NTB coefficients by sector (at the HS-2 level). More exactly, since the coefficients by sector in the paper did not

⁴ Recent studies (Henson, 2006; Fulponi, 2006) show how private standards have changed the food sector and are extending beyond national boundaries. This trend is mainly driven by large retailers/supermarkets engaged into traceability programs, and has important implications for exporting developing countries.

allow for a comparison between the EU and the average of OECD countries, Anne-Célia Disdier ran new simulations for us, providing specific sectoral NTB coefficient estimates for the EU. These are displayed in the first two columns in Table 1. For comparison, the average of OECD countries (published in their paper) are displayed in the two next columns. We then extracted from the UNCTAD database she used the list of sectors where at least one SPS or TBT measure has been notified (last column in Table 1). Sectors where observed trade flows are significantly lower than predicted flows are highlighted in bold, and the lines shaded in grey represent the sectors where a negative and significant NTB coefficient match with a notified regulation. Labels of the sectors (HS-2 chapters) included in the analysis are detailed in the Appendix.

While a significant negative coefficient is estimated in nine sectors (in bold in Table 1), only in 4 cases (highlighted in grey) does a SPS/TBT notification correspond. This is consistent with Disdier et al's results in terms of ratio coverage (small number of tariff lines really affected by a regulation notified by the EU), but raises questions about the effects captured in the estimated coefficient – since negative and significant values are estimated in sectors (like HS24, that is, tobacco) where there is no SPS or TBT measure notified by the EU. We chose to focus on the sector for live plants and cut flowers (HS06) because it appeared to be the sector with the highest ad valorem coefficient matching with the notification of a NTB. Moreover, the chapter HS02 (meat and meat products) has probably been affected by recent temporary import bans due to outbreaks of BSE, FMD, Avian flu, etc., which pose specific concerns.

Table 1: *Estimated NTB coefficients for the EU as compared to the average OECD countries, and notified measure by sector*

Chapter	NTB coefficient : EU		NTB coeff. : average OECD		SPS / TBT measure notified by the EU (UNCTAD database)
	<i>All other coeff. constrained</i>	<i>Regressions sector by sector</i>	<i>All other coeff. constrained</i>	<i>Regressions sector by sector</i>	
<i>(HS-2 sector)</i>					<i>Note: Do not necessarily affect all products at HS-6 level</i>
HS01	0.58	1.54 (*)	-0.02	0.32	Authorization to protect wildlife
HS02	-0.84 (**)	-1.07 (***)	-0.40	-0.76 (***)	Prohibitions to protect human health + Authorization to protect wildlife
HS04	-0.13	0.38	0.61 (***)	0.99 (***)	Authorization to protect wildlife
HS05	0.25	0.49	0.82 (***)	0.97 (***)	Authorization to protect wildlife
HS06	-2.72 (***)	-2.59 (***)	-2.03 (***)	-1.72 (***)	Authorization to protect wildlife
HS07	0.18 (*)	0.14	0.11	0.11	
HS08	-0.20 (**)	-0.24 (***)	-0.12 (*)	-0.19 (***)	
HS09	0.35 (***)	0.47 (***)	0.35 (***)	0.44 (***)	
HS10	2.52 (***)	2.99 (***)	1.80 (***)	2.91 (***)	
HS11	-0.38 (**)	-0.27	0.24 (*)	0.35 (**)	
HS12	-0.03	-0.07	-0.11	0.03	
HS13	-1.76 (***)	-1.81 (***)	-1.90 (***)	-2.29 (***)	Authorization to protect wildlife
HS14	-0.17	-0.29 (*)	-0.15	-0.17	Authorization to protect wildlife
HS15	-0.25	-0.27	0.001	-0.05	Authorization to protect wildlife
HS16	0.50	-3.20 (*)	0.52	-0.42	Authorization to protect wildlife
HS17	-0.69 (***)	-0.80 (***)	-0.67 (***)	-0.88 (***)	
HS18	-0.85 (***)	-1.02 (**)	-0.75 (***)	0.52	
HS19	-0.28 (**)	-0.42 (***)	-0.46 (***)	-0.49 (***)	Product characteristics requirements to protect human health + Labelling requirements to protect human health
HS20	-1.41 (***)	-1.74 (***)	-0.72 (***)	-1.20 (***)	
HS21	0.40 (***)	1.05 (***)	0.51 (***)	0.77 (***)	
HS22	-1.61 (***)	-1.71 (***)	-1.13 (***)	-1.28 (***)	
HS23	-0.55	-0.51	0.37	0.20	Authorization to protect wildlife
HS24	-3.49 (***)	-3.11 (***)	-2.07 (***)	-3.19 (***)	
HS33			-0.87 (**)	-1.54	
HS35			1.72 (**)	0.57	
HS41	-0.38	-0.19	0.28	1.46 (**)	Authorization to protect wildlife
HS43	1.54	-1.38	-0.61	1.63	Authorization to protect wildlife
HS51	0.82	2.81 (***)	1.26 (**)	3.15 (***)	Authorization to protect wildlife
HS52	-0.23	0.91	0.27	0.61	
HS53	-0.39	0.49	0.02	0.17	

Sources: A.C. Disdier's simulations and TRAINS database

Significance at the 1% (***), 5% (**) and 10% (*) levels.

The next step was to look at the structure of European imports of the various products falling under chapter 06 at the HS-6 level, in order to identify important exporters and volumes of non-EU imports of ornamental plants. Europe is the largest market for cut flowers, and the Netherlands the main exporter. Cut flowers are also imported from South America (228 M US\$), Africa (196 M\$), Asia (196 M\$) and North America (65 M\$). Imports of potted plants account for smaller values, where Asia (47M\$) is the main exporter, followed by Africa and South America. The largest exporting outside Europe are Colombia, Israel, Kenya and Zimbabwe. Volumes of European imports in 2005 (Comext data for 2005) of live plants are displayed in table 2-a, while table 2-b contains the same information for cut flowers and parts of plants. We specify the share of imports from non-EU countries⁵ and the main non-EU trading partners for each product. Finally, we added two information regarding SPS and TBT requirements applied to imported products at the HS-6 level: *(i)* whether the UNCTAD database contains a notification for this product (in this case, we highlight the column of the corresponding HS-6 code in grey), and *(ii)* whether the CEC displays import requirements on its website⁶. Surprisingly, both informations do not always match, as plant health requirements and various marketing requirements are said to be applied on all product categories, while notifications in the UNCTAD database seem to concern less products.

Tables 2-a and 2-b show that EU mainly imports cut flowers, foliage and unrooted cutting and slips from other continents. The share of non-EU imports in total imports is negligible in several categories of live plants and plant propagating material (flowering bulbs, cuttings of live plants such as rhododendron) while it is significant (above 25%) for almost all categories of parts of plants (fresh cut flowers, moses, fresh foliage, etc). Kenya has a significant market share in fresh cut flowers (first partner of the Netherlands, in 2nd position with the UK, the 5th partner of Germany), Costa Rica in fresh foliage, and China in unrooted cuttings and slips.

⁵ Although intra-EU trade flows are prevailing, it is not illustrative of the trade-restrictiveness of EU import requirements since regulations within the EU are harmonized.

⁶ EU Export helpdesk for developing countries: <http://export-help.cec.eu.int> (Tab on 'Requirements and taxes')

Table 2-a: European structure of imports of live plants in 2005 (main exporters in blue):

HS6 code :	060110	060120	060210	060220	060230	060240	060290
Label :	Bulbs, tubers, rhizomes (dormant vs. in growth/flower)		Unrooted cuttings and slips	Edible fruit/nut trees or bushes	Rhododendrons/ Azaleas	Roses	Other
SPS/TBT notification (UNCTAD database)	Yes	Yes	Yes	No	No	No	Yes
Specific Requirements* (CEC website)	Yes (PH+MR)*	Yes (PH+MR)	Yes (PH+MR)	Yes (PH+MR)	Yes (PH+MR)	Yes (PH+MR)	Yes (PH+MR)
Volume of imports to the EU (100 Kg)	1 219 279	430 627	317 833	504 203	173 732	169 551	16 121 807
Share of non-EU in imports :	8,86%	2,12%	68,73%	16,05%	0,15%	4,38%	6,48%
...of which :							
Africa	8,61% [South Africa]	3,02%	22,96% [Kenya, Uganda]	72,16% [Egypt]	0,00%	24,35% [South Africa]	22,43% [Egypt]
South America	46,05% [Brazil, Chile]	1,87%	3,66%	1,05%	0,00%	0,16%	5,02%
Central America	0,14%	0,46%	22,78% [Costa Rica]	11,70% [Cuba]	0,00%	0,00%	41,90% [Costa Rica, Guatemala]
Asia	16,07%	86,00%	45,03% [China]	0,40%	56,06%	42,73% [China, Uzbekistan]	22,66% [China]

Table 2-b : European structure of imports flowers, foliage and part of plants in 2005:

	060310	060390	060410	060491	060499
Label	Cut flowers (fresh)	Cut flowers (other)	Moses and lichens	Other (christmas trees...), fresh	Other (Foliage...), dried
SPS/TBT notification (TRAINS)	Yes	Yes	No	Yes	Yes
Specific Requirements * (CEC)	Yes (PH+MR)*	Yes (PH)*	Yes (PH+MR)*	Yes (PH+MR)*	Yes (PH+MR)*
Imports to the EU (100 Kg):	7 080 719	184 655	55 538	2 054 634	300 268
Part of extra-european imports in total imports:	26,39%	14,31%	29,27%	43,19%	50,28%
... of which:					
Africa	59,49% [Kenya]	17,60%	0,01%	5,67%	11,37%
South America	21,91% [Colombia, Ecuador]	6,69%	7,26%	4,41%	4,25%
Central America	0,49%	0,17%	0,05%	36,20% [Costa Rica]	0,28%
Asia	5,49% [Turkey, Thailand]	59,64% [India]	46,64% [China, Turkey]	2,39%	80,52% [India, China]

* **Specific requirements** : Plant health (PH) + Marketing requirements (MR). For some species, add international convention on trade in endangered species (CITES). Additional requirements for organic products.

Sources: ComExt (EuroStat), TRAINS (UNCTAD), WTO.

Tables 2-a and 2-b do not show a negative correlation between the market share of non-European countries and European SPS/TBT notifications as they appear in the UNCTAD database: imports from other continents represent a greater share in total imports in products affected by plant health measures.

The next step in the analysis was to understand what kind of SPS and TBT measures are implemented in the EU, and whether private standards could be an important barrier to the European market of live plants and cut flowers. This is briefly described in the next section.

Finally, we have conducted a survey among exporters of flowers in developing countries. The questionnaire (available at: <http://tradeag.free.fr>) consisted of four sections. The first aimed at collecting data on exporters' characteristics (country, activity, exported products by HS-6 code, details on export destinations). As the chapter 6 of the HS nomenclature distinguishes between live plants (0601 to 0602) and cut flowers and foliage (0603 to 0604) we have also conducted our analysis with respect to that distinction. Section 2 was devoted to the nature and stringency of EU Plant health requirements (PHR) concerning their exports (frequency of random inspections) and their perceived efficiency and trade-restrictiveness. The third section focused on their perception of EU marketing requirements and private standards. Finally, section 4 focused on a comparison of NTBs in the EU and other developed countries.

3 SPS measures, Technical regulations and Private Sector Requirements

3.1 EU Import requirements

SPS regulations: Plant health control

The EU has notified one measure to the SPS committee, namely the Directive 2000/29/CE of the Council on “Protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community”. In 2002, the procedures and formalities to which plants and plant products are subjected have been updated (Directive 2002/89/CE of the Council).

Box 1 : Plant health requirements in the EU

Outline of the legislation

The essence of the legislation is that the Member States have to ban the introduction into their territory of:

- Harmful organisms,
- Plants and plants products where they are contaminated by the relevant harmful organisms,
- Introduction into relevant protected zones of certain harmful organisms and certain plants and plant products.

Harmful organisms can, for instance, relate to certain insects, mites and nematodes, bacteria, fungi and viruses and virus-like organisms.

The Annexes of the Directive provide information on the harmful organisms which are banned, the harmful organisms which are banned if they are present on certain plants or plant products. And the plants and plant products which are not allowed to be marketed if they originate from a specific area, or if they are contaminated with specific organisms.

Source: CBI Market Information Database. URL www.cbi.nl

In practice, the main characteristics of the Plant Health Requirements are the following:

- Phytosanitary Import Permits are not required for plants or plant products to enter the EU
- Imports of soil, and of some plant species (e.g. trees like Chestnut, Cedar, Citrus; plants of the family *Gramineae* except some ornamentals like Bamboos, etc.) are prohibited.
- Phytosanitary Certificates are required for plants and parts of plants for propagation (other than seeds), some cut flowers and fresh foliage; for some species⁷, an additional declaration is required, stating that the products “Originate in a country free from (*name of the pest*)⁸” or “Immediately prior to their export, have been officially inspected and found free from (*name of the pest*)”.
- For all commodities exported to the EU requiring phytosanitary certificates, there is a Maximum Pest Limit (MPL) which is
 - 0.5% for quarantine pests
 - 25g/600 units for soil
- All consignments may be subject to inspection, performed on arrival at the point of entry into the EU at the proper Member State’s border inspection post (BIP). However, identity checks and plant health checks may be carried out at the place of destination

⁷ Rosa, Orchidaceae, Solidago, Lisianthus, Aster, Dianthus, Dendrothema, Eryngium, Gypsophila, Hypericum, and Trachelium.

⁸ That is, *Bemisia tabaci* Genn. (Non-European Populations), *Thrips palmi*, *Liriomyza sativae* and *Amauromyza maculosa*.

provided that there is satisfaction of specific guarantees and documents regarding transport of plants and plant products determined for each particular case.

- The Directive allows for inspection fees (even though their actual implementation depends upon individual countries).

It is important to notice that European Plant Health requirements are the simple **transcription of international standards of the IPPC** (International Plant Protection Convention), and therefore not subject to challenges by trading partners.

Technical regulations: marketing standards

In addition to Plant health measures, imports have to comply with the marketing standards prevailing in the EU. These legislative requirements relate to quality standards fixed by EEC regulations 315/68⁹ and 316/68¹⁰ setting quality standards for flowering bulbs, corms and tubers and for fresh cut flowers and fresh ornamental foliage. Accordingly, if produce does not conform the quality standards, it may not be held or transported with a view to sale, offered for sale, imported or exported. Marketing standards include:

- Minimum quality requirements
- Minimum size and size grading
- Packaging and presentation
- Marking (identification, nature and origin of product, commercial specifications, etc.)

These marketing standards apply to both domestic and imported products, and are in line with international standards.

3.2 Private sector requirements

Private standards are independent from official import requirements, and may be imposed by retailers, importers, processors and pressure groups. According to Van Uffelen and de Groot (2005), direct sales of ornamental products to supermarkets and specialized wholesalers are strongly increasing (while flowers from all over the world used to be sold through auctions), and more and more floricultural products sold in Europe are offered in supermarkets¹¹ requiring product specifications on quality, diversity and quality assurances schemes to be met. Moreover, there is an increasing focus on “sustainability” of production, that is, combining

⁹ <http://eur-lex.europa.eu/LexUriServ/site/en/consleg/1968/R/01968R0315-19850101-en.pdf>

¹⁰ <http://eur-lex.europa.eu/LexUriServ/site/en/consleg/1968/R/01968R0316-19781224-en.pdf>

¹¹ This is especially true in the UK, where a few retailers account for main sales of flowers.

profits, care for the environment and for workers' health. Indeed the increased participation of developing countries in the trade of live plants and cut flowers has resulted in growing concerns among the civil society in developed countries about the flowers' growing conditions. The wide use of dangerous chemicals in this sector and the less stringent regulations of those countries have put pressure on retailers to engage into a more responsible commerce. TV reports on Colombian women working in Greenhouses and facing "poverty wages, health problems such as repetitive strain injuries and risk miscarriages through exposure to pesticides" (War on Want, 2007) have had a considerable impact on consumers in some European countries. This pressure has not resulted in new legislations or mandatory labelling or packaging regulations. But they have resulted in the proliferation of private environmental labels being proposed by a variety of organizations. The proliferation of private labels in the market for ornamental products is illustrated in Box 2.

Box 2 : Private certifications schemes for flowers and plants

Standards developed within the European private sector :

- **Milieu Programma Sierteelt (MPS)** has been established by the Dutch floricultural sector and EUREGAP with support from the flower auctions and several flower trading organizations. Is is one of the earliest programs of certification created in 1993. The standards are applicable to growers, traders and florists all over the world. Presently, twenty- four countries from across the world have linked up to the project. The most important standards are MPS A, B or C which are concerned with the reduction of the use of fertilizers, energy and waste as much as possible. MPS has certified 85% of the flowers sold at the Dutch auctions. Recently, was created MPS-GAP (Good Agricultural Practice) to include some social standards in the MPS certification.
- The Euro Retailers Produce Working group (including leading supermarkets in Europe) launched its protocol on Good Agricultural Practice for horticultural products in 1999. The **EUREPGAP Control Points and Compliance Criteria for Flowers and Ornamentals** was strongly pushed by leading supermarkets in the UK. EUREGAP F&O certificate is a business-to- business scheme used in horticultural production. It seeks to provide a framework for independent verification of minimum social, environmental, and food safety standards. It is a private standard and is applicable to flowers production within Europe and worldwide. The EUREPGAP standard is about to become the global benchmark for assuring food safety and consistently high quality for horticultural produce (UNCTAD, 2004; Graffham et al., 2006).
- A number of private sector requirements in the European flowers and live plants sector sprang from an outreach campaign launched in Switzerland in 1990 (prior to Mother's Day) to denounce the poor working conditions in the Colombian flower industry. What was at the beginning a joint initiative by a Swiss-Colombian working group, Greenpeace and the World Wildlife Fund became the Flower Coordination Switzerland. Its concern spread contagiously to other parts of Europe and led in 1998 to the creation of **the International Code of Conduct for the Production of Cut Flowers (ICC)** based on *international human rights standards, basic environmental standards and International Labour Conventions* (Cox, 2001). The ICC was launched in August 1998 by the International Union of Food Workers (IUF) and unions and NGOs in Germany, Holland and Switzerland. The code aims at respecting labour rights by

employers as well as an environment-friendly way of production.

- The **Flower Label Program** (FLP) is a business-to-business code created in 1996 in Germany between the BGI (German importer's association) and EXPOFLORES (the Association of Flowers Producers and Exporters of Ecuador). Primarily designed to control the environmental conditions of flower production, it now has a social section as it has included the ICC standards in 1999.

Other international labels :

- **Fair Flowers & Plants** (FFP) is an international alliance of trade unions, non governmental organisations and international flower trade organisations that have all reached an agreement on the standards and procedures in the flower industry. In March 2007 FFP had 534 members (200 growers, 100 traders and 234 retailers).
- **The Fair Trade Labelling Organisation** (FLO) which is an association of 20 initiatives of fair trade labelling certified roses from February 2004.
- The **Max Havelaar Foundation** certifies agricultural products that are products and sold in accordance with international criteria of fair trade. It labels flowers from Ecuador, Kenya, Tanzania, Zambia and Zimbabwe complying with the ICC standards.

According to the Colombian lawyer Santiago Rojas Arroyo (WTO, 2003), the main concerns for exporters with regard to private labelling are:

- The lack of supervision or compliance with internationally accepted standards guaranteeing transparency, impartiality and objectiveness in the demands made and the absence of monitoring to allow for self-correction.
- The absence of any common minimum parameters, which means that the consumer does not receive comparable and intelligible information.
- The impossibility of complying simultaneously with the different requirements and checklists issued by each organization for each country.

However, in response to the increasing demand for certified products, flower exporters associations in Colombia, Kenya, Uganda, Zambia and Zimbabwe have developed codes of practice. Some of these initiatives are described in Box 3.

Box 3: Exporters associations certification initiatives

- **Florverde ("Green Flower")** is a Colombian labelling initiative for flowers. It aims at achieving economic, social, and environmental sustainability in flower production while maintaining a competitive market position. Florverde was born due to "the proliferation of unjustified environmental labels and campaigns" aimed at Colombian flowers and the importance of developing or participating in international labelling schemes (to facilitate mutual acceptance or recognition) so as to guarantee exports. Despite the efforts made to improve environmental protection, the lack of legitimacy and transparency of the Florverde initiative lead the Colombian flower-growing sector to encounter restrictions on its exports by means of environmental measures. Colombia then submitted in 1998 a claim under the CTE and TBT committee. The response to Colombian's concerns has been mixed. Unable to reach a deal with ASOCOLFLORES, the BGI

agreed to help in the creation of an Office of the Colombian Flower Council in Germany in order to promote the local conception of Colombian flowers (WTO, 2003)¹²

- The **Kenya Flower Council** (KFC) set up in 1994 by six of the largest Kenya's flower producers. In collaboration with the Kenya's Ministry of Agriculture, the Ministry of Labor, the Horticulture Crops Development Authority, and the Pest Control Products Board, the KFC developed a code of practice with both labour and environmental standards.

4 Results of the Survey

In order to get qualitative understanding of the perceived trade-restrictiveness of SPS, TBT regulations and private standards among non-European exporters, a questionnaire¹³ was sent to more than a hundred firms involved in international trade of ornamental plants. Twenty nine companies exporting live plants and/or cut flowers to the EU over 16 countries in 3 continents have answered (See list below).

Countries	Continents	Nb. of exporters	Main products
Brazil	America	2	Begonias, orchids,
Chile	America	1	Chilean palms
China	Asia	1	Bamboos, Acer, magnolias, various trees
Colombia	America	1	Cut flowers
Costa Rica	America	1	Plant propagating materiel
Ecuador	America	5	Cut flowers (roses)
Guatemala	America	1	Cut flowers, Yucca sp.
Honduras	America	1	Ferns
India	Asia	2	Cut flowers
Israel	Asia	1	Water lilies
Kenya	Africa	3	Cut Roses, live plants, tomato seeds
Mauritius	Africa	1	Anthurium andraenum
South Africa	Africa	3	Indigenous greens, Protea, cut roses
Sri Lanka	Asia	1	Rooted cuttings
Tanzania	Africa	1	Roses
Thailand	Asia	1	Orchids, Foliage
Zimbabwe	Africa	3	Roses, Hypericums

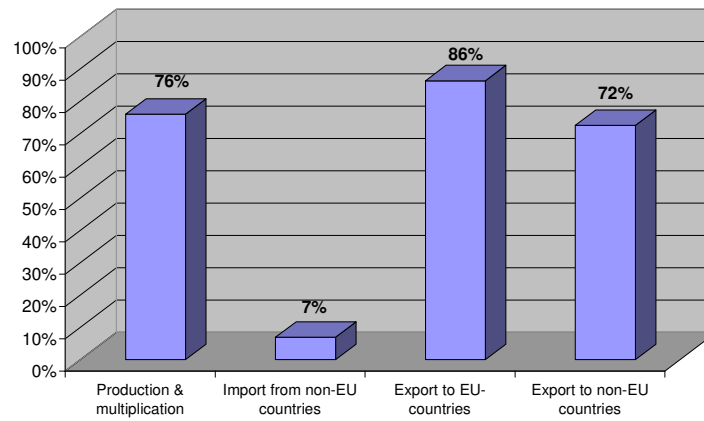
Among the surveyed firms, 7 declared to export only live plants, 14 to export only cut flowers and 8 to export both classes of products. 24 of them export also to other destinations, while 5 of them have the EU as only market (80% of them are African exporters).

Their main activity is export, but most of them (76%) are also growers. Products exported are mainly cut flowers. Exporters of “only live plants” are quite marginal in each region. Most cut flowers are roses. Details on participants' characteristics are illustrated below.

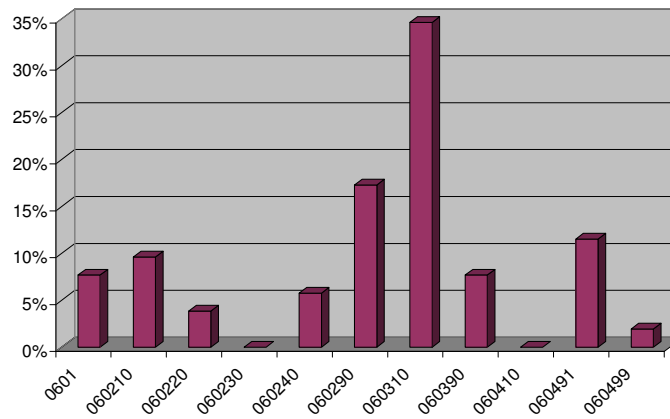
¹² http://www.wto.org/English/tratop_e/tbt_e/event_oct03_e/labelling_oct03_prog_e.htm

¹³ Or a link to the online questionnaire: <http://tradeag.free.fr> (also available in spanish and portuguese).

Activities of survey participants

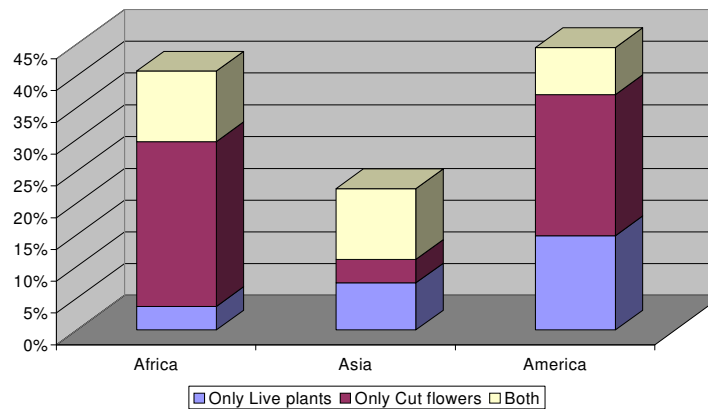


Product categories exported by survey participants



0601 and 0602: live plants/ plant propagating material;
0603 and 0604: cut flowers and other parts of plants. See Table 2 for details.

Activity by product and origin

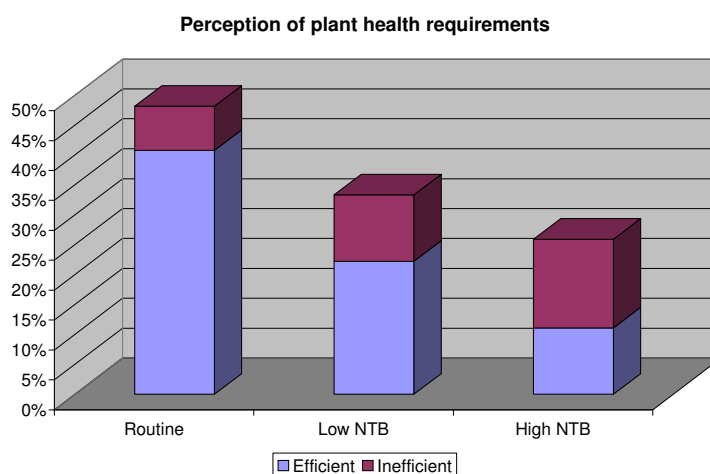


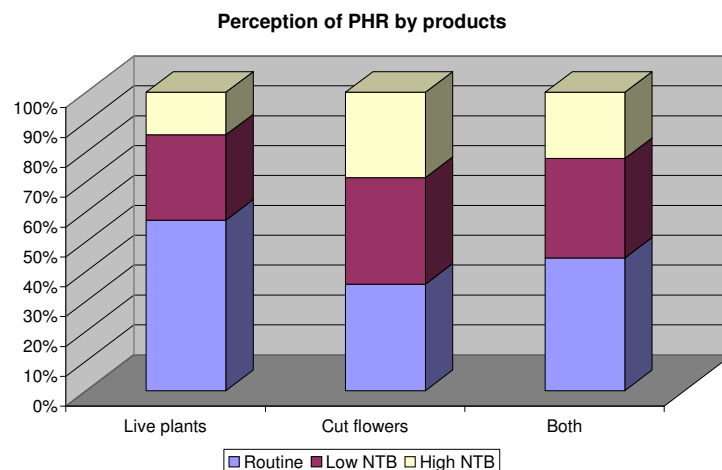
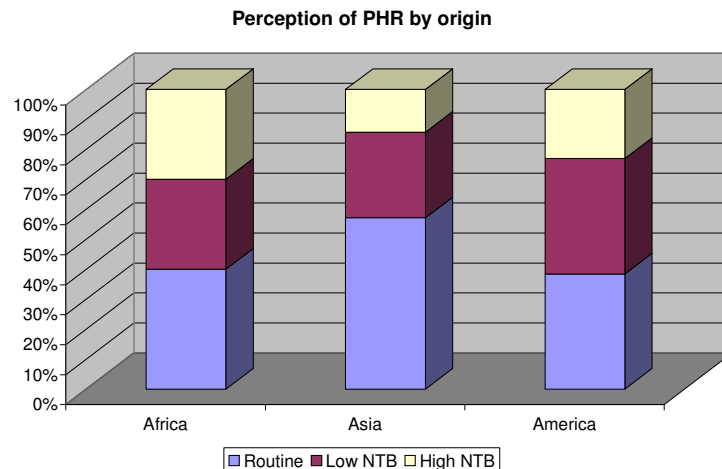
4.1 Plant health requirements as a barrier to trade

The first part of the questionnaire focused on the nature, the stringency and the perception of plant health requirements, with regard to their trade-restrictiveness and to their efficiency in preventing the introduction of harmful organisms within the EU.

All participants are subject to plant health requirements. The phytosanitary certificate is required for all of them. 57% of exporters of “live plants only”, 71% of exporters of “cut flowers only” and 87.5% of exporters of both products declare to be subject to additional phytosanitary inspections.

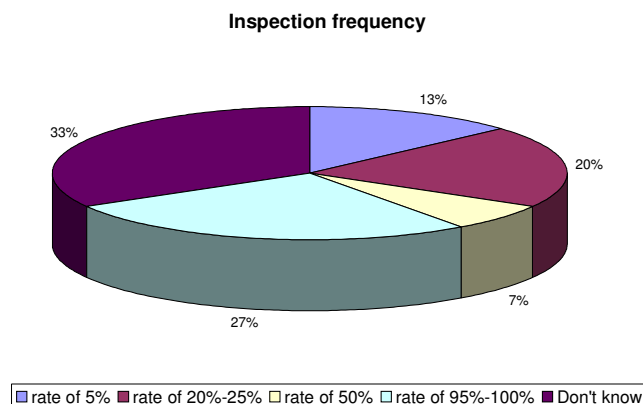
The majority of participants (79%) consider plant health requirements as routine or a low NTB, i.e. of lower concern for regular exporters. Furthermore, 71% think that European plant health requirements are efficient in preventing the introduction of harmful organisms. But the more they consider PHR a high NTB, the more they think it is inefficient. Exporters in Asia are those who declare more often that PHR are routine, maybe because they are used to more stringent markets of Asia or Australia. Similarly, exporters of live plants think it is more a routine than those of cut flowers. One exporter complains about the lack of coherence of the EU regulation arguing that *“import requirements are more stringent than domestic requirements”*, while another complains that *“the cost of treatment sometimes exceeds the value of the plants”*. But, in most cases (86%) they did not give up exporting to the EU because of those phytosanitary requirements.





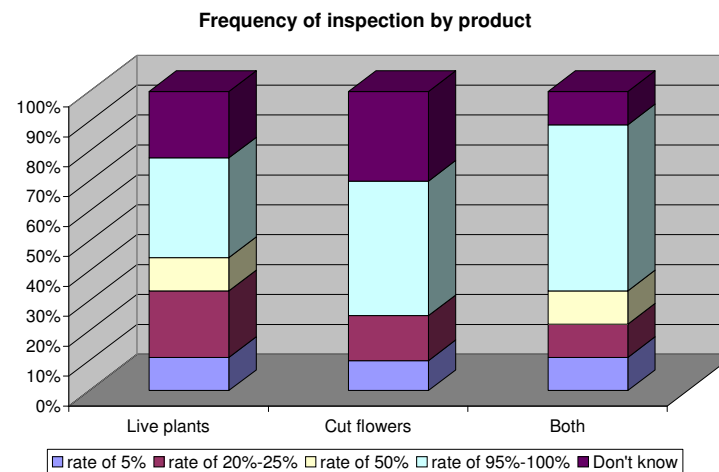
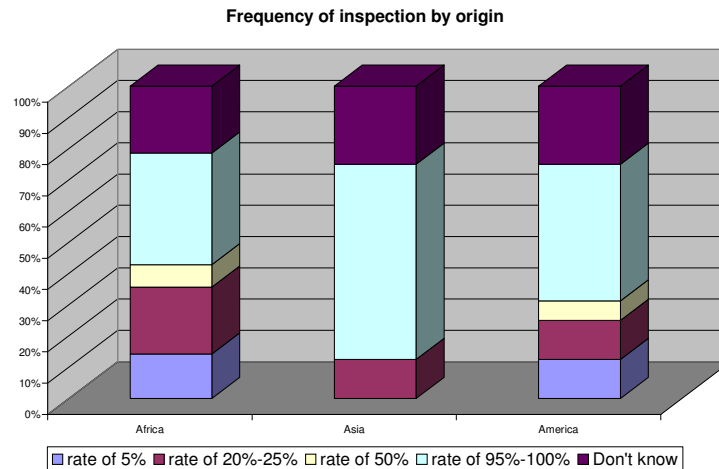
While phytosanitary certificates are required for all the surveyed exporters, many of them declare that they are subject to inspections when entering the EU. The rate of inspections varies widely from exporters to others. But 27% of exporters surveyed see their exports systematically inspected even if they have comply with the requirements necessary to obtain the certificate. One third of exporters surveyed do not know the frequency of inspections of their shipment when crossing the EU's borders. Many surveyed exporters regret that there is no distinction between exporters, based on their individual records. A regular, reputable and reliable exporter from a pest-free country does not benefit from any downgrading. They suggest the EU should harmonise its system and give more recognition to local offices in order to not duplicate paperwork and administrative bothersome.

“The necessity of inspection is not really taken away, but it has to be arranged so that it does not affect the cost of doing business. We are of the opinion that the objectives of inspections can still be met through different less costly and less intrusive ways to the exporters and importers. Governments of importing countries/trade blocs should engage with the EU to find solutions to this predicament”



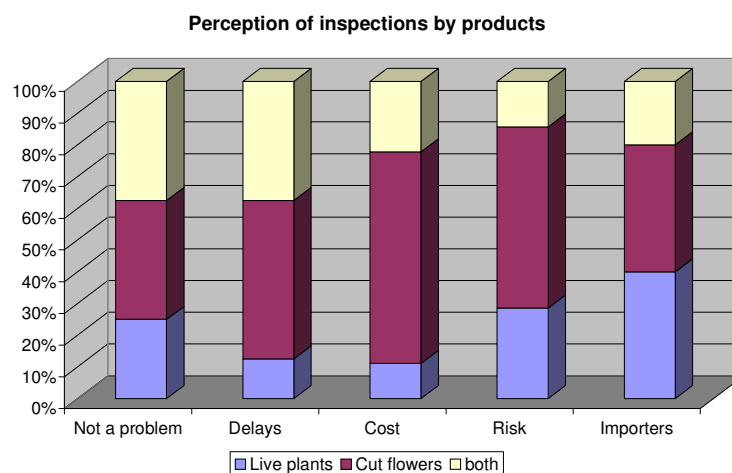
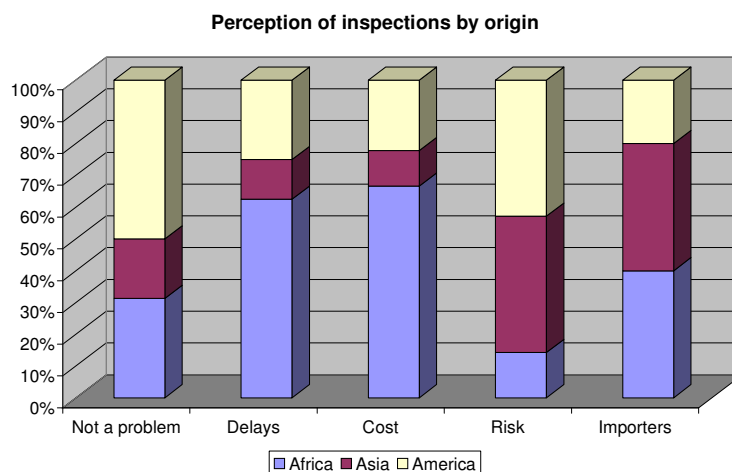
Exporters from Asia are those who declare the highest frequency in inspections. They also are those who have more often declared not knowing the frequency of inspections. Cut flowers are more frequently inspected than live plants.

Our repondents complain about the lack of homogeneity in the administrative procedures at the various EU's points of entry leading to some opacity to the whole process: *“different ports or different staffs have their different inspections standards, even in the EU. Generally more quickly in Rotterdam than in Le Havre”* or *“there are not enough inspectors and the various competent bodies themselves are unclear on what needs to be done. Furthermore the inspectors are not necessarily clear on beneficials and pests”*.



When asking the exporters how they perceive EU phytosanitary inspections, 45% consider them as a major barrier to trade. The main justification is the additional cost and delays they imply for one third of people surveyed, while the risk of plants being destroyed is cited by 25%. The Americans seem less affected than Africans or Asians by inspections. They are 50% answering that inspections are not really a problem as long as exports are not infected. Exporters from Asia or America are the most afraid of the destruction of their shipment. One explanation could be that their transportation costs are greater than those of African exporters. Moreover it seems that the cost increases with the level of inspections, a rate of 25% can be considered as a threshold beyond which costs increase dramatically. *“Inspection levels of 25% and above impact significantly on margins and viability”*.

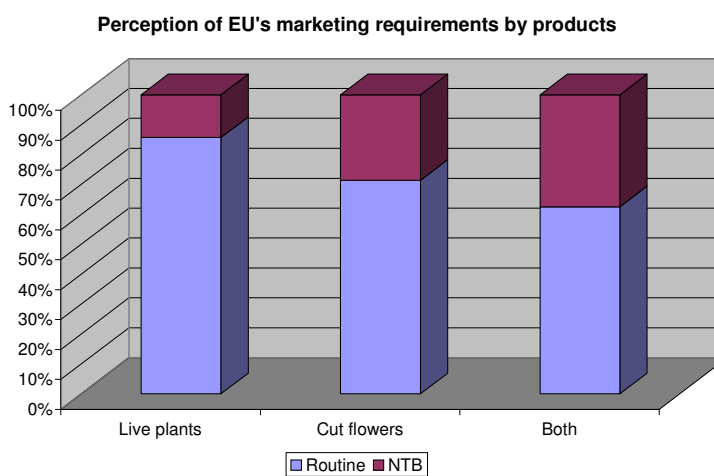
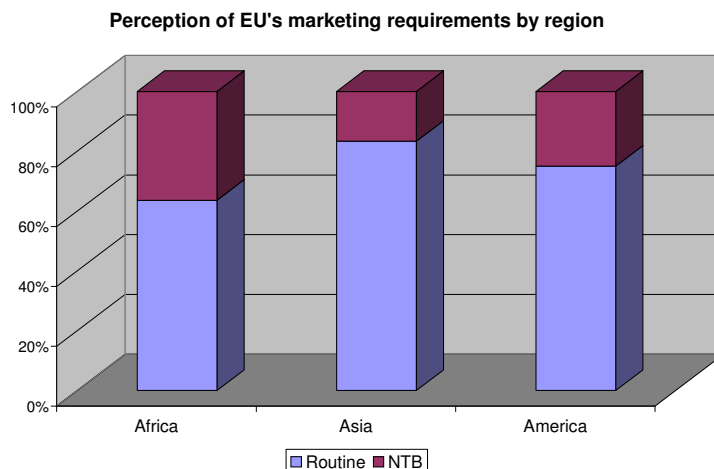
Some exporters deplore that inspections are more frequent at pick events like Valentine's Day. They suggest that it is done at purpose, but it can be put together with the other comment on the lack of inspectors at a period of higher arrivals of flowers.



4.2 Marketing standards / private sector requirements

The next section in the questionnaire focused on technical standards, both mandatory (EU marketing standards) and from the private sector. All surveyed exporters are subject to EU's mandatory marketing requirements. As expected the most cited marketing requirements are the "marketing standards for fresh cut flowers". For most exporters (72%) these marketing requirements are "routine". Among those who consider them as an obstacle to their business,

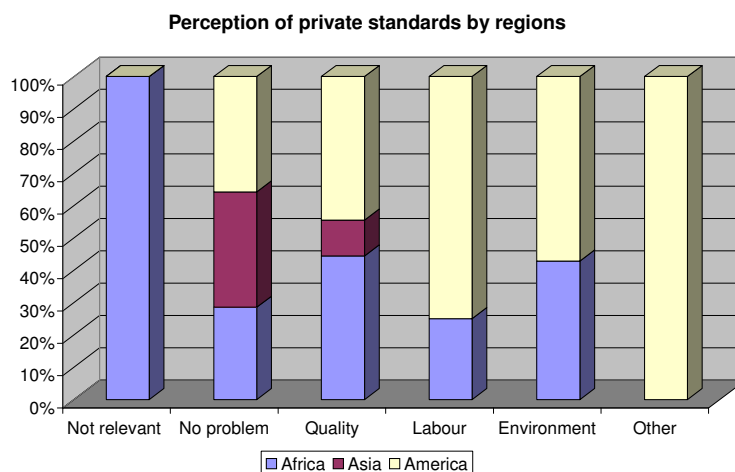
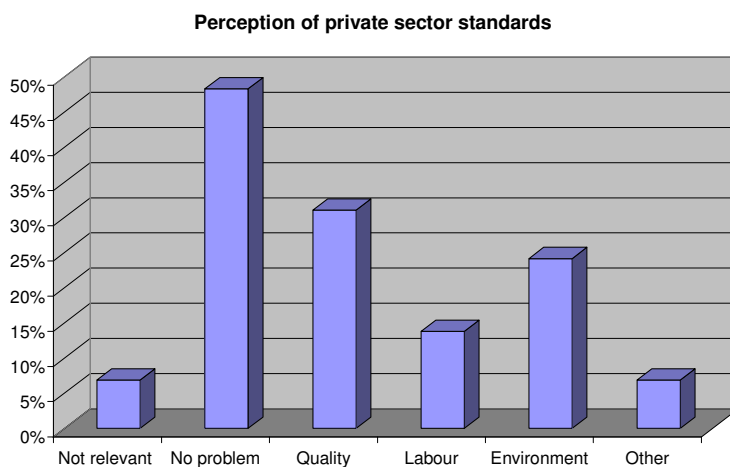
African exporters are the more affected. *“Head size requirements are often impossible to achieve with Zimbabwe’s climate. Bans on certain chemicals, in particular nematicides such as Methyl Bromide, make planting of new crops very difficult. In the absence of proper lobbying by those interested in bringing about change, this is effectively the equivalent of a trade embargo, as nematicides have to be used, but none of the ones available in Zimbabwe are accepted on the WHO list.”*

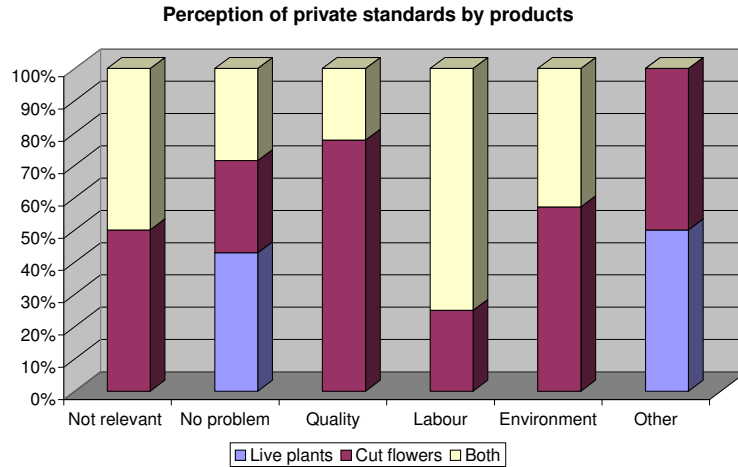


Private standards prove to be a rougher matter as they are becoming more stringent and expensive to comply with. The problem of additional costs induced by the label imposed by importers and totally borne by the exporters is often cited, others complain about the rigidity or

the diversity of the existing labels. Despite that, they are 54% to declare that they had not experienced problems with those standards.

But when they have some difficulties to comply with requirements from the private sector it is more often with quality requirements than labour or environmental ones. Private standards do not discourage them to export to the EU in 96% of cases.

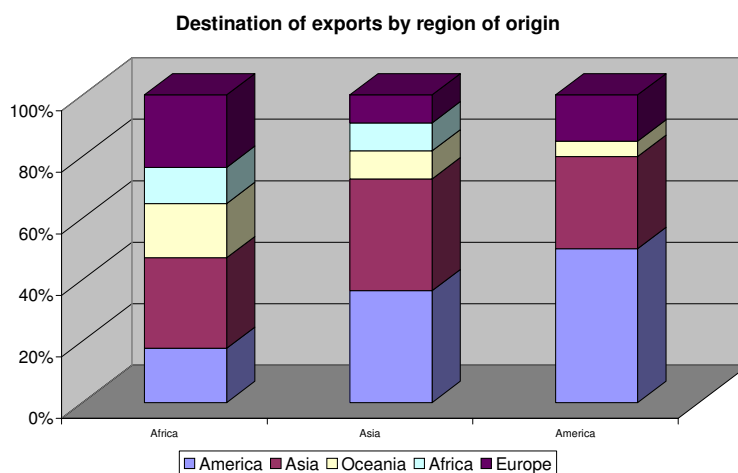




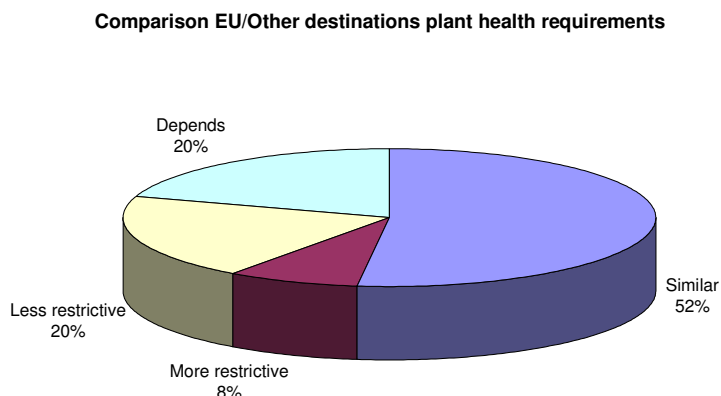
“Probably the biggest constraints are the commercial standards that are required by the supermarket rather than the EU regulations. Our company has seven farms (Units) all of them have to have at least twelve external audits per year with a minimum cost of UK £ 1500 per audit it's expensive and time consuming and much duplication”

4.3 Comparison with other destinations

When analyzing the other exports markets of survey participants we notice that 70% of African exporters also sell in Asia, Asians export either to America or to Asia and exporters in Latin America are mostly turned towards North America.



We have then asked them to compare European requirements to other destinations requirements. Most of them (72%) answered that they consider EU requirements as similar as or even less restrictive than the latter.



5 Conclusion

Because of the limited number of participants in our survey, quantitative results should be taken carefully. However, the questionnaire allowed for free remarks on each issue (plant health requirements in general, inspections in particular, marketing requirements, private standards and comparison with other export destinations), and we received many instructive comments allowing for a qualitative analysis of the respective trade restrictiveness of SPS, TBT measures and private sector requirements.

Concerning the impact of European SPS measures, answers differed when focusing on Plant health requirements in general or on phytosanitary inspections in particular: while the PHR does not seem to be considered a major barrier to trade for regular exporters, those subject to frequent inspections at the border have voiced concern about the added costs, the risks borne by exporters, and some inefficiencies in the procedures.

Similarly, although marketing standard requirements are generally perceived as routine (72% of respondents), they seem to be more difficult to comply with for some African exporters of cut flowers (several have voiced concern about their inability to meet “head size” requirements because of climatic reasons).

Finally, one third of the surveyed firms declared that they had ever encountered difficulties due to requirements from the private sector, with respect to quality (31%), environment (24%)

and/or labour conditions (14%). Answers suggest that private sector standards do not generally impede access to the European market (even though some complain about the frequency and the costs of audits required by supermarkets), but might act as a major barrier to trade in some rewarding niche markets (organic, fair-trade, eco-labelled products). African exporters mentioned the ban in certain chemicals such as Methyl Bromide (nematicide widely used for soil fumigation) required for the Fair Trade Label as “equivalent of a trade embargo” since there are no safe alternatives available to them. Latin American exporters also complain about the “proliferation of environmental labels”. Moreover, private initiatives in the UK with regard to “airmiles” (fresh products shipped by airplane), could become a serious concern for East-African exporters. These results suggest that the qualitative composition of trade could be as important to consider as the volume of trade for further quantitative analysis of NTBs.

6 References

- Cox, S. (2001), 'Fair Flowers, Fair Trade and Informed Consumers: Building on European Strategies for Public Engagement', *Victoria International Development Education Association* (VIDEA) December, 2001.
- Disdier, A.; Fontagne, L. & Mimouni, M. (2006), 'The Impact of Regulations on Agricultural Trade: Evidence from SPS and TBT Agreements', *TradeAG Working Paper* **06/22**, 1--35.
- Fulponi, L. (2006), 'Private Voluntary Standards in the Food System: The Perspective of Major Food Retailers in OECD Countries', *Food Policy* **31**(1), 1--13.
- Graffham, A.; Karehu, E. & MacGregor, J. (2006), 'Impact of EurepGAP on small scale vegetable growers in Kenya', *IIED Fresh insights*, N°6.
<http://www.agrifoodstandards.net/en/filemanager/active?fid=81>
- Henson, S., (2006). 'The Role of Public and Private Standards in Regulating International Food Markets. ' *Paper presented at Summer Symposium of International Agricultural Trade Research Consortium*. May 2006, University of Bonn.
- Otsuki, T.; Wilson, J. & Sewadeh, M. (2001), 'Saving two in a billion:-quantifying the trade effect of European food safety standards on African exports', *Food Policy* **26**(5), 495--514.
- Van Uffelen, R. and de Groot, N. (2005) 'Floriculture World Wide: production, trade and consumption patterns show market opportunities and challenges', *LEI, Wageningen University Working Paper*.
- UNCTAD (2004), 'Draft Proposal on Sector-focused Activities to be Launched under the Umbrella of the CTF: Assisting Interested Developing Countries in Developing National or Sub-regional Codes on Good Agricultural Practice for Horticultural Products that are Benchmarked by EurepGAP'.
http://www.unctad.org/trade_env/test1/projects/ctf/Draft%20Proposal%20on%20EurepGAP.pdf
- Want on War (2007), 'Growing pains: the human cost of cut flowers in British supermarkets', Technical report, War on Want.
- WTO (2003), 'TBT Learning Event on Labelling', WTO, Switzerland, 21-22 October 2003,
http://www.wto.org/English/tratop_e/tbt_e/event_oct03_e/labelling_oct03_prog_e.htm
- WTO (2007), 'Private standards and the SPS agreement', *Note by the secretariat of the Committee on Sanitary and Phytosanitary Measures*, G/SPS/GEN/746, 24 January.

APPENDIX

List of HS chapters in Table 1

Chapter 1	Live animals
Chapter 2	Meat and edible meat offal
Chapter 3	Fish and crustaceans, molluscs and other aquatic invertebrates
Chapter 4	Dairy produce; birds'eggs; natural honey; edible products of animal origin,not elsewhere specified or included
Chapter 5	Products of animal origin, not elsewhere specified or included
Chapter 6	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage
Chapter 7	Edible vegetables and certain roots and tubers
Chapter 8	Edible fruit and nuts; peel of citrus fruit or melons
Chapter 9	Coffee, tea, mate and spices
Chapter 10	Cereals
Chapter 11	Products of the milling industry; malt; starches; inulin; wheat gluten
Chapter 12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder
Chapter 13	Lac; gums, resins and other vegetable saps and extracts
Chapter 14	Vegetable plaiting materials; vegetable products not elsewhere specified or included
Chapter 15	Animal or vegetable fats and oils and their cleavage products; preparededible fats; animal or vegetable waxes
Chapter 16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates
Chapter 17	Sugars and sugar confectionery
Chapter 18	Cocoa and cocoa preparations
Chapter 19	Preparations of cereals, flour, starch of milk, pastry; cook's products
Chapter 20	Preparations of vegetables, fruit, nuts or other parts of plants
Chapter 21	Miscellaneous edible preparations
Chapter 22	Beverages, spirits and vinegar
Chapter 23	Residues and waste from the food industries; prepared animal fodder
Chapter 24	Tobacco and manufactured tobacco substitutes
Chapter 33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations
Chapter 35	Albuminoidal substances; modified starches; glues; enzymes
Chapter 41	Raw hides and skins (other than furskins) and leather
Chapter 43	Furskins and artificial fur; manufactures thereof
Chapter 51	Wool ,fine or coarse animal hair; horsehair yarn and woven fabric
Chapter 52	cotton
Chapter 53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn