



REPORT

Output 2

STUDY ON SANITARY PHYTOSANITARY MEASURES (SPS) AND TECHNICAL BARRIERS TO TRADE (TBT) FACED BY VIETNAMESE EXPORTERS IN MAJOR EXPORT MARKETS

ACTIVITY CODE: ICB-8

Support the preparation for FTA negotiations, including “new generation” trade issues, and including future ASEAN FTAs per TOR

Version: Final

Ha Noi, (December/2014)

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This document has been prepared with financial assistance from the Commission of the European Union. The views expressed herein are those of the author and therefore in no way reflect the official opinion of the Commission nor the Ministry of Industry and Trade

Acronyms

ASEAN	Association of Southeast Asian Nations
ACCSQ	ASEAN Consultative Committee on Standards and Quality
AQSIQ	China's General Administration for Quality Supervision, Inspection and Quarantine
CCC	The China Compulsory Certification
CLMV	Cambodia-Lao PDR-Myanmar-Viet Nam
CS	Cambodia Standard
DB	Local Standards of China
GB	Guobiao Standard
ISO	International Organization for Standardization
IEC	International Electrotechnical Commission
JAS	Japan Agricultural Standards
JIS	Japanese Industrial Standards
KS	Korean Industrial Standards
LS	Laos Standard
MS	Malaysia Standard
MRA	Mutual Recognition Agreement
NTMs	Non-Tariff Measures
NTBs	Non-Tariff Barriers
PS	Philippines Standard
SPS	Sanitary and phytosanitary measures
SNI	Standard National Indonesia
TIS	Thailand Industrial Standard
TBT	Technical barriers to trade
UNCTAD	The United Nations Conference on Trade and Development
USA	The United States of America
WTO	The World Trade Organization

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EXECUTIVE SUMMARY

ASEAN and ASEAN + 6 are the main export markets of Vietnam. Vietnam export on those markets is increasing on turnover and type of commodities.

According to Vietnamese Ministry of Industry and Trade, the bilateral trade turn-over between Viet Nam and ASEAN has increased by four folds, from nine billion USD in 2003 to nearly 40 billion USD in 2013. In which, total export turnover of Vietnam to ASEAN countries reaches 18.47 \$ billion, an increase of 4.4% in comparison with that of 2012. ASEAN is the third largest export market of Vietnam, only after the U.S and EU. Five largest export markets of Vietnam in ASEAN are Malaysia, Thailand, Cambodia, Singapore and Indonesia. Export turnover to Malaysia is the highest (\$ 4.9 billion), followed by Thailand (\$ 3.1 billion), Cambodia, Singapore and Indonesia respectively have turnover from 2.9 to 2.7 and 2.5 billion USD, the Philippines, Laos, Myanmar and Brunei have lower exports from \$ 1.7 billion to less than \$ 1 billion. With the similarities in the consumption of goods and products, Vietnamese products exported to other ASEAN countries are various. Major export commodities in those markets are computers, electronic products and components; telephones and accessories; iron and steel; vehicles and tool; machinery, equipment and tool; crude oil. Export agricultural products are rice and some processed agricultural and fishery products.

China, Japan and South of Korea are three biggest partners on trade of Vietnam. On 2013, exports of Vietnam to those markets reach respectively \$ 13.3, 13.7 and 6.6 billion. Major export commodities to Chinese market are: (1) the group of agricultural-forest-aqua products, accounting for 31.2% of the total export turnover of Vietnam to China and 20.9% of the total export turnover of this group of commodities nationwide; (2) the group of computers, electronic products and components, 15.9%; (3) the group of textiles and garments, footwear, approx.13.0%; (3) the group of fuels and minerals, approx.10.0%. Major export commodities to Japan are: textiles and garments, USD 2.4 billion; crude oil, USD 2.1 billion; motor vehicle components USD 1.8 billion; machinery and equipment, accessories, USD 2.1 billion. Major export commodities to South Korea are: textiles and garments, USD 1.6 billion; crude oil, USD 725 million; aqua products, USD 512 million.

Nevertheless, the export turnover of some potential commodities of Vietnam to this market is still low. One of the main causes of this is the trade barriers, including SPS and TBT.

This report studies about SPS and TBTs which Vietnam's exports were faced in ASEAN and ASEAN + 6 markets. On the basis of Vietnam export turnover and in consultation with some exporters, the researcher group select commodities to study. There are textile and footwear; agricultural goods and food; and machines, equipment, tool (with ASEAN countries) and textile, footwear; agricultural goods and food (with Japan, South Korea and China).

It generalizes main contents of SPS and TBT, such as definitions, distinguish the deference, situation applies SPS and TBT in the world. It shows that, SPS and TBT are used increasingly common in international trade when taxes measures gradually are eliminated.

It reviews the policies and law of ASEAN and ASEAN + 6 countries (focus on Japan, South of Korea and China) related SPS and TBT such as system of law and standards which were

built and used. It indicates that more and more technical standards were built and used in ASEAN countries, but most standard based on regular international standards. Whereas, in development countries as Japan and South of Korea, technical standards were built professionally and in high level, even higher than EU standard in some cases. China is a developing country, so it seems a “ease” market with export commodities of Vietnam. In fact, this country has a more complicated and detail technical standard system than regular international standard.

This report mention SPS and TBT which export businesses of Vietnam were faced on ASEAN countries, Japan, China and South of Korea. It appreciates the impact of those SPS and TBT to businesses.

This report shows that:

+ With ASEAN countries:

Phones and components, computer,... are the main export commodities of Vietnam. But, most of them were produced by FDI companies. They always comply with standards of international or import companies. So that, those business has not met with difficult on satisfying the standards of markets.

Standards of Vietnam steel products equal to China standards (GB). Some products were applied new technologies, so they reach standards of big and prissy markets such as JIS (Japan), KS (South of Korea), API, ASTM (American), BS (England), DIN (German). Therefore, steel bussiness has not meet technical standards problems with partner in ASEAN countries. Non-taxes barriers which Vietnam businesses always meet on those markets are administrative formalities, anti-dumping, etc.

Vietnam companies mainly processed textile and garment, footwear and leather products. It means that raw materials, chemicals, labels,... were supplied by import-partners, so all of them satisfy high standards of main export markets with Vietnam textile and footwear products (such as America, Japan, South of Korea and EU). However, this report still assesses and analyzes main standards of above markets to provide the information to business. And then, businesses can raise the sense of initiative on production and exporting.

With agricultural and food products, standards that Vietnam exporters always meet are Halal (with Muslim-markets), packaging and labeling. Beside this, this report also learn about rice, one of main export commodities of Vietnam in Philippines, Malaysia, and Indonesia market.

+ With Japan, South of Korea and China market, this report shows that:

China technical standard system is a diversified, complex and detailed system. In fact, China market only eases with Vietnam commodities on unofficial cross-border trade. So that, if products of Vietnam want to officially export to China, they face on many difficulties.

Japan and South of Korea are strict markets. Standards of those market which this report selects to analyze are standards of agricultural product, textile and footwear.

Japan is one of the most important markets for Vietnam’s exporters. However, this market always requires very high quality standards and strict product examination. This is expressed through the law system applied in importing to and sales in Japan as well as procedures of SPS control. Such stringent SPS regulations raise difficulties for Vietnam’s exporters to meet the requirements. Therefore, the number of rejection cases and the rate of rejection per

US\$ billion of Vietnam are relatively high and as a result, Vietnam ranks 3rd of the most rejected in the Japanese market. Information on import rejections shows that Vietnam's exporters face big challenges in meeting standards relating to veterinary drugs residues, bacterial contamination and pesticide residues. Fishery products, especially shrimp, squid, tilapia are the most often rejected with a common reason relating to excess of standard value of a certain antibiotics (e.g. Ethoxyquin) or appearance of prohibited antibiotics (e.g. Enrofloxacin, Chloramphenicol, Furazolidone). Bacterial contamination including Coliform bacteria, E.Coli and Bateria Count are also frequent violation of Vietnam's frozen fishery products import in Japan. In comparison, Vietnam's exporters seem to deal with not quite the same problems in the EU and US markets. In US, bacterial contamination, hygienic condition/control, labeling are the most common reasons of import rejections of Vietnam's products. Meanwhile, in EU, bacterial contamination, veterinary drugs residues, additive and heavy metal are really big problems to Vietnam's exporters. The reasons of import refusals vary across these markets; however, fishery products are the most rejected at the borders of the all three. The high incidence as well as the most common reasons of rejections also indicates a poor SPS control throughout all stages of the supply chain of Vietnam's agricultural product. Integrated solutions to ensure good control and management in all stages of the value chain, therefore, are required to improve the situation.

Finally, this report provide conclusions and recommendations with government, associational and businesses of Vietnam.

Source of data:

TBT and SPS data sources of ASEAN are collected chiefly from ASEAN NTMs database and the websites of the standard agencies of ASEAN member countries, in addition to the websites of SPS and TBT centers in Vietnam as well as in consultation with the experts of these centers. Japan's TBT and SPS data sources are fairly rich while those of China and South Korea are collected from the websites of national standard agencies; however, the language barrier is rather remarkable in approaching and accessing data. Some websites of the United States and WTO also publish their annual reports on this matter. Nonetheless, researches as such are mainly on TBT and SPS of the countries above towards the export commodities of the United States.

Research methodology:

+ Identification of products:

The study has identified products that are likely to face TBT and SPS. The products have been identified on the basis of products in which Vietnam has potential in exporting to ASEAN, Japan, China and South Korea. An analysis of Vietnam's export to there markets was done using time series data from 2005-06 to 2012-13.

+ Extent of TBT and SPS faced by Vietnam Exporter

Business consultation: Organize workshop to collecting opinions and ideas of export business about TBT and SPS which they always meet in above markets. Workshop have the participating of representative from associations (Vietnam Association of Seafood Exporters, Vietnam Leather, Footwear and Handbag Association, Vietnam Tea Association, Vietnam Cassava Association), Vietnam Steel Corporation and some steel manufacturers

and traders, garment, electronic firms, etc. Besides the direct consultation of enterprises, the researchers took the results of other studies and synthesized the publicized reports of enterprise representatives on relevant issues, especially the solutions to TBT and SPS, in the official materials.

+ Expert consultation: The research group consulted the experts from the SPS and TBT centers in Vietnam about the relevant matters.

Conclusions and recommendations:

* SPS and TBT in ASEAN countries towards Vietnam's export commodities are not many and not high. Whereas, SPS and TBT in such fastidious markets as Japan, South Korea...are complicated and higher than that of Vietnam's export commodities, particularly SPS related to agricultural products.

* To meet SPS and TBTs is necessary, and is both opportunity and challenge to Vietnamese firms to renovate and make progress.

* In order to meet SPS and TBTs, there should be changes from the State, associations, sector and the firms themselves.

1. Overview of SPS and TBT

1.1. Definition and classification of NTMs and NTBs

1.1.1. Definition

Definition of NTMs (Non-tariff measures)

NTMs are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both.

Non-tariff measures (NTMs) are generally defined as policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both (UNCTAD/DITC/TAB/2009/3).

Definition of NTBs (Non-tariff barriers)

NTBs refer to restrictions that result from prohibitions, conditions, or specific market requirements that make importation or exportation of products difficult and/or costly. NTBs also include unjustified and/or improper application of Non-Tariff Measures (NTMs) such as sanitary and phytosanitary (SPS) measures and other technical barriers to Trade (TBT).

NTBs arise from different measures taken by governments and authorities in the form of government laws, regulations, policies, conditions, restriction or specific requirements, and private sector business practices, or prohibitions that's protect the domestic industries from foreign competition

In the framework of WTO, non-tariff measures are defined as follows: "Non-tariff measures are measures irrelevant to tariffs but related to or may affect the goods transfer among the countries." Meanwhile "non-tariff barriers are non-tariff measures that hinder the trade without basing on legal, scientific and equal foundation." So that, NTBs are a subset of NTMs.¹

¹ MAST (Multi-Agency Support Team for GNTB – UNCTAD)

1.1.2. Classification NTMs and NTBs

According to the latest category of UNCTAD, NTMs were divided into several groups of measures as shown in the table below.

Table 1: NTMs by type

Non-tariff measures	Import measures	Technical measures	a. Sanitary and phytosanitary measures
			b. Technical barriers to trade
			c. Pre-shipment inspection and other formalities
		Non-technical measures	d. Contingent trade-protective measures
			e. Non-automatic licensing, quotas, prohibitions and quality control measures other than for SPS or TBT reasons
			f. Price-control measures, including additional taxes and charges
			g. Finance measures
			h. Measures affecting competition
			i. Trade-related investment measures
			k. Restriction on post-sales services
			l. Subsidies
			m. Government procurement restrictions
			n. Intellectual property
			o. Rules of origin
	Export measure	p. Export-related measures	

Source: UNCTAD Secretariat

This report focuses on TBT and SPS, which are most utilized as the barriers in international trade. In WTO, there are two agreements regulated these issues, namely Technical Barriers to Trade Agreement and Sanitary and Phyto-sanitary Agreement.

1.2. Definition and conceptual issues of TBT and SPS

1.2.1. TBT

- In World Trade Organization terminology, standards-related trade measures are known as “technical barriers to trade” (TBT). TBTs are measures referring to technical regulation, and procedures for assessment of conformity with technical regulations and standards, excluding measures covered by the SPS Agreement

They exist in the form of product standards, technical regulations and testing, certification, and other procedures involved in determining whether products conform to standards and technical regulations. They act as barriers to trade and play a critical role in shaping the flow of global trade.

They are covered by the Technical Barriers to Trade Agreement (TBT) of the World Trade Organization. So, in order to understand TBT, a comprehensive understanding of this agreement is needed and it is introduced as follows:

- Scope of the TBT Agreement

This agreement covers:

Technical regulations: which lay down product characteristics or their related processes and production methods, with which compliance is mandatory.

Standards: which, approved by a recognized body which provide for common and repeated use, rules guidelines or characteristics for products or related processes and production methods, with which compliance is voluntary.

Conformity assessment procedures, which are used, directly or indirectly, to determine the fulfillment of relevant requirements contained in technical regulation or standards (e.g. testing, verification, inspection and certification).

The TBT Agreement does NOT cover sanitary or phytosanitary (SPS) measures as defined in Annex A of the SPS Agreement

- Main objective of the TBT Agreement

The main objective of the TBT Agreement is to ensure that technical regulations, standards and conformity assessment procedures do not create unnecessary obstacles to international trade.

For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfill a legitimate objective; taking account of the risks non-fulfillment would create. Such legitimate objectives are, inter alia: national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment (Article 2.2 of the TBT Agreement). However, measures adopted to fulfill such legitimate objectives shall comply with the provisions of the TBT Agreement, including not be applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or a disguised restriction on international trade (Preamble and Article 2.1 of the TBT Agreement).

Harmonization takes place in the TBT Agreement when WTO Members base their regulations, standards or conformity assessment procedures on the relevant international standards, guidelines or recommendations; or, when a Member recognizes another Member's measure as equivalent, provided that the measure adequately fulfils the objectives of its own regulation (Articles 2.4 and 2.7 of the TBT Agreement). Members shall use international standards as a basis for their technical regulations except when such international standards would be an effective or inappropriate means for the fulfillment of the legitimate objectives pursued (Article 4 of the TBT Agreement).

- Other provisions contained in the TBT Agreement

The TBT Agreement set transparency obligations. These obligations include the notification of proposed (draft) SPS measures, technical regulations, conformity assessment procedures, and emergency measures. Except for emergency measures, Members shall allow a reasonable interval of time between the publication of the measure and its entry into force so as to enable interested parties in other Members to adapt to the new measure. The Agreements also provide for the publication of adopted measures and the creation of "enquiry points" or information offices (Articles 2.9 -2.12 & 5.6 - 5.9 & 10 of the TBT Agreement).

The TBT Agreement contain several provisions on special and differential treatment for developing and LDC Members. These provisions are aimed at assisting these countries with

difficulties and challenges that they may face which are related to the implementation of the Agreements (Articles 11 & 12 of the TBT Agreement).

The Committee on Technical Barriers to Trade is the body in charge of the administration of the Agreement. It provides a regular forum for consultations among Members on any matters relating to the operation of each Agreement.

1.2.2. SPS

UNCTAD defined that SPS are measures that are applied to protect human or animal life from risks arising from additives, contaminants, toxins or diseases; to protect animal or plant life from pests, diseases, or diseases-causing organism; to prevent or limit other damage to a country from the entry, establishment or spread of pests; and to protect biodiversity. These include measures taken to protect the health of fish and wild fauna, as well as of forest and wild flora. Measures for environmental protection (other than as defines above), to protect consumer interest, or for the welfare of animals are not cover by SPS.

According to Annex A of SPS Agreement of WTO, SPS measures include all relevant laws, decrees, regulations, requirements and procedures that governments apply to protect human, animal, or plant life or health from risks arising from the entry or spread of plant- or animal-borne pests or diseases, or from additives, contaminants, toxins, or disease-causing organisms in foods, beverages, or feedstuffs. Many countries also have established the main residues limits (MRLs) for pesticide residues in food to promote the safe use of pesticides on food, as well as requirements that imported fruits, vegetables, and feed products be treated to eliminate a particular pest to protect plant health. In addition, governments often require live animals to be subject to veterinary health examinations, disease testing, and sometimes pre- or post-entry quarantine.

Box 1: Definition of a SPS Measure

Annex A of the agreement defines a SPS measure as any measure applied to:

- protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms;
- protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs;
- protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or
- Prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.

Source: www.wto.org/English/tratop_e/sps_e/spsagr_e.htm

The SPS Agreement applies only to measures covering food safety, animal and plant life and human health.

The SPS Agreement has 14 Articles, containing the rights and obligations that WTO members have agreed to. The SPS Agreement also has three annexes giving definitions of various terms, and elaborating on certain obligations in the body of the SPS Agreement.

The SPS Agreement has a two-fold objective. It aims to both (1) recognize the sovereign right of Members to provide the level of health protection they deem appropriate; and (2) ensure that SPS measures do not represent unnecessary, arbitrary, scientifically unjustifiable, or disguised restrictions on international trade (WTO).

Indeed, the SPS Agreement allows countries to set their own food safety and animal and plant health standards. At the same time, however, the SPS Agreement requires that such regulations be **based on science**, that they are applied only to the extent necessary to protect health, and that they not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail.

In order to achieve its objective, the SPS Agreement encourages Members to use international standards, guidelines and recommendations where they exist. Members may adopt SPS measures which result in higher levels of health protection or measures for health concerns for which international standards do not exist provided that they are scientifically justified.

Other technical measures outside this area come within the scope of the Agreement on Technical Barriers to Trade (TBT Agreement). The SPS and TBT Agreements are thus complementary and mutually reinforcing.

1.2.3. Distinguishing SPS and TBT

Table 2: Comparison between SPS and TBT

	SPS AGREEMENT	TBT AGREEMENT
SIMILARITIES	<ul style="list-style-type: none"> - Requirement that a measure shall not be more trade-restrictive than necessary to fulfil a legitimate objective (according to each Agreement, see below objectives) - Basic obligations of non-discrimination - Encourage the use of international standards in order to promote harmonization - Requirements for the advance notification of proposed measures and the creation of information offices or "enquiry points" (transparency requirements) - Special and differential treatment for developing and least-developed country Members 	
DIFFERENCES	SCOPE OF COVERAGE	
	All measures, whose purpose is to protect human or animal life or health from food-borne risks; human health from animal or plant-carried diseases; animals and plants from pests or diseases, or disease-causing organisms; and, Members' territories from pests.	All technical regulations, standards and conformity assessment procedures that apply to trade in goods –i.e. to all agricultural and industrial products. Sanitary and phytosanitary measures, as defined by the SPS Agreement, are expressly excluded from its scope of application.
	OBJECTIVES	
	Exhaustive list of objectives: only be applied to the extent necessary to protect human, animal or plant life or health from food-borne risks, animal or plant-carried	Non-exhaustive list of legitimate objectives: may be applied and maintained to fulfil a legitimate objective, including the protection of human health or safety, the protection of the environment or the prevention of

	SPS AGREEMENT	TBT AGREEMENT
	diseases, pests.	deceptive practices.
	DEFERENCE TO INTERNATIONAL STANDARDS	
	WTO Members are obliged to use international standards unless they can show a specific scientific justification based on a risk assessment.	WTO Members have the obligation to base their technical regulations on international standards, unless the relevant international standard is an inappropriate or ineffective means to fulfil a legitimate objective.

Source: WTO, Reports on TBT

As mentioned in WTO website:

The SPS Agreement applies to a narrowly defined range of health protection measures, but it places quite strict requirements on these measures, for example that they always be based on scientific principles.

On the other hand, the TBT Agreement applies to a wide range of technical requirements, and solely notes that available scientific information is one of the relevant elements of consideration in assessing risks. Some of these technical requirements are introduced for health or safety purposes, but others are introduced to standardize products, ensure quality, or to avoid consumer deception.

Distinguishing whether a certain requirement for goods is TBT or SPS measure is critical for enterprises because firms have to know to comply different system of rules and regulations governing each measure.

1.3. Effects of TBT and SPS measures on trade

From an economic standpoint, not all SPS measures and TBTs have a negative effect on trade. Some may reduce trade cost by streamlining information regarding the safety, quality and specifications of products between trading partners and ultimately the information provided to consumers. (*Non-tariff measures to trade: Economic and Policy issues for Developing countries – Unctad 2013*). They serve an important function in facilitating international trade, including by enabling small and medium-sized enterprises (SMEs) to obtain greater access to foreign markets. TBT also enable governments to pursue legitimate objectives such as protecting human health and the environment and preventing deceptive practices.

However, TBT and SPS that are non-transparent, discriminatory, or otherwise unwarranted can act as significant barriers to trade. SPS of this type prevent trade liberalization as they act as a barrier to agricultural products. This is contrary to the objective of trade liberalization of the Agreement on Agriculture. Also, SPS and TBT of this type can pose a lot of costs to enterprises. For example, a company has tried to meet SPS or TBT regulations of a country, but when it exports its products to another country, this country can refuse these products with the reason that those regulations have been replaced by new ones. This is the cost of non-transparent regulations. Such measures can pose a particular problem for SMEs, which often do not have the resources to address these problems on their own. The affects not only how much two countries trade but also the number of countries with whom they trade. There is also some evidence that conformity assessment is particularly burdensome. Negative

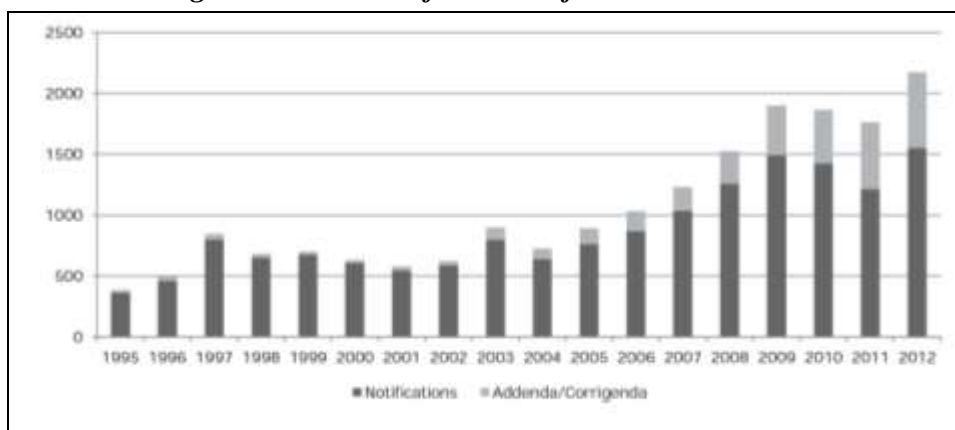
effects on trade are mitigated by a reduction in policy divergence, whether through convergence to international standards, harmonization or mutual recognition. If harmonization and mutual recognition of standards occur at the regional level, there may be significant trade-diverting effects on outsiders and regulatory “lock-in”. This appears to be the case especially for developing countries.

1.4. Trend of applications of SPS and TBT in the world

1.4.1. TBTs

Since entry into force of the Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement) on January 1, 1995, up to December 31, 2012, 15,736 notifications along with 2,684 addenda and 485 corrigenda to these notifications have been made by 116 members. The trend of using TBTs increases continuously over time. In 2012 alone, WTO Members notified 1,550 new or revised technical regulations and conformity assessment procedures, as well as submitted 575 addenda and 45 corrigenda to previous notifications. A vast majority of these regulations and procedures have been introduced by developed members such as the US, EU and Japan.

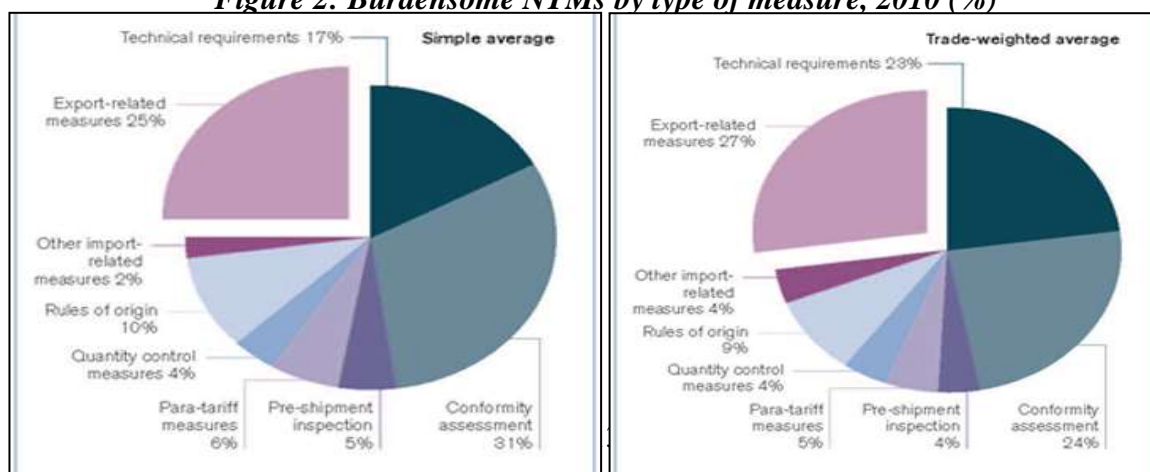
Figure 1: Number of TBT notification since 1995



Source: WTO, Reports on TBT

Evidence from ITC business surveys suggests that TBT measures are among the most burdensome for developing countries’ exporters. In 2010, almost half (48 per cent) of the NTMs perceived as burdensome by exporting firms were TBT/SPS measures. The figure is comparable for the EU. It shows that 29 per cent of specific trade concerns regarding TBT are related to agriculture. ITC business surveys show that, for exporters, more than 70 per cent of burdensome NTMs also create a procedural obstacle.

Figure 2: Burdensome NTMs by type of measure, 2010 (%)

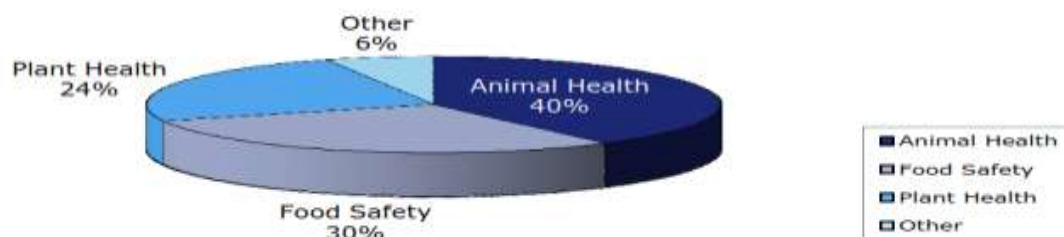


Source: ITC business surveys on NTMs from 11 developing and LDC countries

1.4.2. SPSs

Over the world, the trade concerns raised over the 18 years into food safety (30%), animal health (40%) and plant health (24%). 40% of concerns raised relate to animal health and zoonoses

Figure 3: Trade concerns by subjects

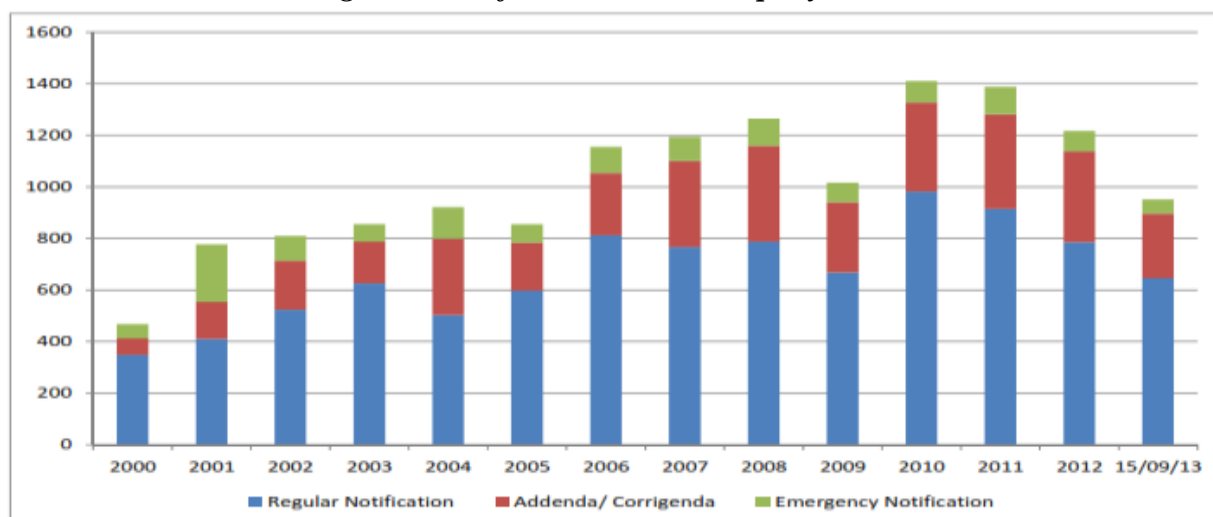


Source: WTO (2013) G/SPS/GEN/204/Rev.13.

In addition, the animal health and zoonoses category is further divided into foot-and-mouth disease (FMD), transmissible spongiform encephalopathy (TSEs), avian influenza (AI) and other animal health concerns (OAH). Of total animal health concerns, TSEs account for 33%, while issues related to foot-and mouth disease and to avian influenza account for 24% and 9%, respectively. The remaining 34% relate to other animal health concerns.

As the high rate of trade concerns in food safety, animal and plant health, there is an overall increase in the number of SPS notifications in the world from 2000 to 2013. However, as can be seen from Figure 3, after the world economic and financial crisis in 2008-2009, the number of SPS suddenly rose from over 1000 notifications in 2009 to almost 1400 notifications in 2010 as a way of forming the protection for domestic production. In recent years, the number of SPS tends to decline.

Figure 4: Notifications submitted per year



Source: WTO (2013), G/SPS/GEN/804/Rev.6

In addition, developing countries are the main source of notification in recent years, accounting for around 55% - 70% of total number of SPS notifications since 2008. This suggests the higher protection for domestic products of these countries in comparison with developed ones.

Specifically, United States accounts for 24% of total regular notifications and Albania accounts for 10% of emergency notifications (Table 3). Among top 15 countries has the largest number of SPS notifications, there are many ASEAN+6 countries such as China, Korea, Japan, Thailand for regular ones, and Philippines, New Zealand, Thailand, China for the emergency ones.

Table 3: Members which have submitted the most notifications since 1995r

Regular Notifications			Emergency Notifications		
Member	Number of notifications	Share of Total	Member	Number of notifications	Share of Total
United States	2,506	24%	Albania	143	10%
Brazil	912	9%	Philippines	139	9%
China	742	7%	New Zealand	107	7%
Canada	735	7%	United States	84	6%
Korea	435	4%	Colombia	74	5%
Peru	431	4%	Ukraine	67	4%
European Union	416	4%	Peru	64	4%
Chile	413	4%	European Union	54	4%
New Zealand	394	4%	Thailand	41	3%
Japan	308	3%	Mexico	37	2%
Chinese Taipei	305	3%	Chile	33	2%
Australia	302	3%	Canada	31	2%
Mexico	201	2%	China	28	2%
Thailand	192	2%	Australia	28	2%
Colombia	178	2%	Kenya	27	2%

Source: WTO (2013), G/SPS/GEN/804/Rev.6

1.4.3. SPS and TBT frequently faced by Vietnam's exporters in major markets

Although Vietnam has been an official member of WTO since 2007, many corporate or governmental entities are not familiar to non-tariff measures such as TBT and SPS measures in WTO agreements. Ngoc Thuy Ho et al (2013) implement a corporate survey with 314 Vietnamese enterprises to determine the critical target products, markets and current impediments to implementation of TBT and SPS measures. This study discovered that both agricultural and plastics exports and critical emerging industries are suffering from trade measures.

Table 4: Market with TBT and SPS measures

Markets with TBT and SPS measures relevant for enterprises in survey	Frequency	Percent (%) / Total choices
EU	161	28
United States	153	27
Japan	106	19
China	50	9
ASEAN market	44	8
Others	53	9
Total	567	100.0

Source: *Ngoc Thuy Ho et al (2013)*

Table 5: Comparison of TBT and SPS-related problems before and after Vietnam joins WTO

When did your enterprise face such technical barriers	Frequency	Percent (%) / Total answer
Prior to Vietnam's accession to the WTO	67	27
After Vietnam's accession to the WTO	185	73
Total	252	100.0

Source: *Ngoc Thuy Ho et al (2013)* 2. TBT faced by Vietnam's exporters in major market

2.1. Legislation of TBT in Vietnam's major markets

2.1.1. Legislation of TBT in ASEAN countries

In ASEAN, the general objectives are degression and eliminate non-tariff barriers. Since 1997, this group has established the ASEAN Consultative Committee on Standards and Quality (ACCSQ) with the goal of "One Standard, One Test, Accepted Everywhere", which promotes the removal of trade barriers between ASEAN countries to expand the volume of trade in and out through the following main measures: set standards and technical regulations that conform to the international norms; construct and apply Mutual Recognition Agreements (MRAs) on conformity assessment; improve technical infrastructure and enhance capacity of testing, certification and accreditation based on the recognized internationally guidelines and procedures; promote the information network of Standards and Technical Regulations to meet the requirements of Agreement of WTO/ TBT and SPS. However, each country in ASEAN is establishing national standards and technical regulations on trade, including some standards designed to restrict imports and thus they have become technical barriers. Legal basis for the technical standard system of ASEAN countries are Act of commodity standards and consumer protection law.

The goals of the Law on Standards of ASEAN countries are to improve the quality of products, services and management, to raise and rationalize production efficiency, to ensure fair and simplified trade, to rationalize product use, and to enhance consumer protection and public welfare. The scope of the law covers all the activities related to standardization, quality assurance and related activities within the countries. According to Consumer Protection Act, the fundamental rights of Consumers are: The right to basic needs; the right to safety; the right to be informed; the right to choose; the right to represent; the right to redress; the right to consumer education; the right to a healthy environment.

Table 6: Status of Law of standards and Principal Consumer Protection Laws in AMSs

No	Country	Law of Standard	Principal Consumer Protection Act
1	Brunei	The National Standards Act (the draft)	Consultation in progress
2	Cambodia	The Law on Standards of Cambodia (the "Standards Law") – 2007	Being drafted

3	Indonesia		Consumer Protection Act No 8/1999
4	Laos	Standards Law No.13/NA 2007	Law on Consumer Protection 2010
5	Malaysia	Law of Malaysia, Act 549, Standard of Malaysia Act – 1996	Consumer Protection Act 1999
6	Myanmar	National standards law (The draft law is in final stage of enactment)	Preliminary discussions in place
7	Philippines	Philippines Standardization Law REPUBLIC ACT NO. 4109 – 1964	Republic Act No. 7394 - The Consumer Act of 1992
8	Singapore		Consumer Protection (Fair Trading) Act 2009
9	Thailand		The Consumer Protection Act 1979
10	Vietnam	Law on standards and technical regulations– No 68/2006/QH2011 – 2006	Ordinance of Protection of Consumer’s Interests 1999

Source:http://aadcp2.org/uploads/user/6/technicalReports/consumerProtection/CPcapbldg_plcbrief.pdf

Up to now, five to ten ASEAN countries have had standards law while Brunei and Myanmar are drafting their own ones. Most nations have had consumer protection law; Brunei, Myanmar and Cambodia are collecting or synthesizing opinions about this act.

Based on the principles above, each country continues to develop standard law for each field such as Law on industrial standards, Agricultural standard act or with specific products listed like law on electrical product standards, Law on food safety ...

With this legal basis, each nation has established exclusive system of technical standards.

Table 7: Number of technical standard by country and by year

No	Country	Code Standards	Number of TBT by year		
			2009	2010	2013
1	Brunei		(130)		
2	Cambodia	CS	27		
3	Indonesia	SNI		6500	9817 (271)
4	Laos	LS		218 (77)	
5	Malaysia	MSI		6260 (328)	6548
6	Myanmar				
7	Philippines	PSI	265	(85)	8663
8	Singapore	SNI	26 (16)		
9	Thailand	TIS	58		(120)

Source: NTMs ASEAN database: Thailand, Singapore, Cambodia: data update to 2009.

Note: data in () is the number of mandatory technical regulations

Table 7 can be clearly seen that the number of standards developed in ASEAN countries vary. While some ASEAN 6 countries (except Brunei) possess a large number of technical standards, from 6,000 to nearly 10,000, the others have much lower number of standards. Standards also cover many sectors.

Table 8: Technical Regulations by product category (2006)

Country	Total	living animals, meat, fish, dairy, plants (edible and inedible)	Cereal, seeds, oil, preps. foodstuffs	processed foodstuffs, alcoholic and non-alcoholic beverages, tobacco, organic chemicals	pharmaceuticals, cosmetics, fertilizers, explosives,	rubber, leather, paper and paperboard, books and newspapers, plywood and processed wood	woven fabrics of wool, cotton, flax, synthetic fibers	fabric, textiles, footwear	iron and steel, base metal and metal articles, electronics and parts	electronics and parts, computers and parts, motor vehicles, tools, household appliances, machinery parts and equipment	misc. manufacturing (optics, clocks, arms & ammunition, toys, art)
Cambodia	74	20	29	15	9	0	1	0	0	0	0
China	1113	2	39	47	47	148	178	9	288	306	49
Indonesia	482	112	155	159	26	4	1	0	0	8	17
Laos	2	1	0	0	0	0	0	0	0	1	0
Malaysia	217	92	61	27	7	4	0	4	4	9	9
Philippines	339	201	63	24	23	2	10	0	6	6	4
Thailand	600	105	277	122	51	3	0	0	2	25	15
Vietnam	144	23	29	35	33	2	0	0	0	18	4

Source: UNCTAD TRAINS database

However, from 2006 until now, UNCTAD do not divide technical regulations by country. Therefore, technical standards data were collected from websites of each country as presented in the following tables:

Table 9: Number of technical standards by sector and by type of some ASEAN countries - Indonesia: SNI (update April 2014)

No	SNI by sector	Total SNI	Rate (%)
1	General, infrastructure and science	511	5.2
2	Health, safety and environment	793	8.1
3	Technique, technology	1592	16.2
4	Electronics, information technology and communication	264	2.7
5	Transport and distribution of food	666	6.8
6	Material technology	2804	28.6
7	Agricultural and technical goods	2004	20.4
8	Construction	922	9.4
9	Special technology	291	3.0
	Total	9817	

Source: http://www.bsn.or.id/main/sni/isi_sni/25

The government is to impose mandatory SNI on 544 products, of which 521 are textile products, 21 products of child toys, and 2 electronic products. This will effectively cover 400 HS tariff codes.

- Malaysia: List of MS by sector

No	MS by sector	Year	
		2010	2014
1	Agriculture	593	203

2	Chemicals and materials	776	707
3	Consumer interest	0	9
4	Building, Construction and civil engineering	316	255
5	Generation, transmission and distribution of energy	875	626
6	Mechanical Engineering	342	347
7	Information technology, communication and multimedia	727	698
8	Petroleum and gas	221	188
9	Halal standard	9	14
10	Plastics and plastic products	393	374
11	Packaging and logistics	115	131
12	Vehicles	212	248
13	Fire safety and prevention	93	81
14	Rubber and rubber products	191	180
15	Organizational management	7	12
16	Metallic materials and semi-finished products	177	258
17	Textiles and apparels	293	316
18	Medical Devices and facilities for healthcare	310	376
19	Electrical and electronics equipments and accessories	120	456
20	Tourism, exhibition and hospitality services	10	
21	Food and Foodstuff	74	462
22	Occupational safety and health	195	
23	Quality management and quality assurance	130	
24	Environmental management	81	
	Total	6260	6548

Source: 2010: annual report 2010, Department of standard Malaysia

2013: <http://www.standardsmalaysia.gov.my/ms-implementation>

- Thailand: List of compulsory standards (update June 2014)

No	TISI by sector	Total of TISI	Rate (%)
1	Civil and construction material	24	20.0
2	Consumer products	12	10.0
3	Electrical/electronic engineering	42	35.0
4	Fluid, engineering	3	2.5
5	Food	1	0.8
6	Heat transfer, engineering	2	1.7
7	Medicine, science	6	5.0
8	Paints, color and varnish	3	2.5
9	Mechanical Engineering and vehicles	16	13.3
10	Chemicals	1	0.8
	Total	120	

Source: tisi.gov.th

Most standards are necessary and highly evaluated and a few ones which hinder trade are called trade barriers. These barriers are mainly derived from international regulations which are mandatory. Optional standards are not enforced to be implemented. However, if the market favored the products meeting these principles and enterprises do not comply with them, then the market will be narrowed.

In general, for the group of 6 ASEAN countries, goods are subjected to great competition regarding standards of quality and design and rigorous standards for consumers especially Islamic Malaysia, Indonesia and Brunei. Mechanisms and management policies of CLMV group still have many shortcomings.

2.1.2. Legislation of TBT in Japan

Almost all domestic and exported products in Japan must be checked and will not be sold in this market if they do not have the certificate given to products that meet the set standards. Some standards are compulsory while others optional. Currently, there are two trends in the product standards in Japan. One is to loosen these standards and another is to integrate them with international standards. Despite the state authorities' efforts to improve the regulations and standards, there remain those that have negative effects on the compulsory standards. Therefore, enterprises that export products to Japan have to have a good insight into these legal documents.

Japan's technical regulations and conformity assessment procedures are governed by various laws and regulations, including: the Pharmaceutical Affairs Law, the Industrial Standardization Law, and the Law on Standardization and Proper Labeling of Agricultural and Forestry Products (JAS Law).² Furthermore, these laws form the legal basis for implementing the TBT Agreement in Japan. Japan has identified the Standards Information Service within the International Trade Division of the Ministry of Foreign Affairs and the Standards Information Service within the Business Service Department of the Japan External Trade Organization (JETRO), as the enquiry points under the TBT Agreement. The Ministry of Foreign Affairs is Japan's notification authority under the Agreement.

While assessments about the impacts of technical regulations are conducted by each ministry, no cost-benefit analyses are made available to the secretariat. However, according to the authorities, the Implementation Guidelines for ex-ante Evaluation of Regulations state that it is desirable to quantify or express the costs and benefits in monetary terms to the certain extent. The Guidelines also state that cost-benefit analysis whereby costs and benefits are defined in monetary terms is the major technique of "Regulatory ex-ante Evaluation". As part of the process for the adoption of technical regulations and conformity assessment procedures, the agency in charge must publish proposed regulations and provide any interested persons with an opportunity for comment. Since October 2007, based on the MIC's Implementation Guidelines for ex-ante Evaluation of Regulations, the assessments

² Other relevant laws and regulations include the Building Standard Law, the Food Sanitation Law, the Electrical Appliance and Material Safety Law, the Consumer Product Safety Law, the High Pressure Gas Safety Law, the Road Vehicle Law, the Safety Regulations for Road Vehicles, the Rational Use of Energy Law, and the Fire Service Law, the Law concerning the Safety Assurance and Quality Improvement of Feed, the Law concerning Examination and Regulation of Chemical Substances and Regulation of their Manufacture, the Industrial Safety and Health Law, the Telecommunications Business Law, the Radio Law, and the Fertilizer Control Law.

have been made compulsory for the adoption of regulations through a law or a cabinet order (as well as for amendments or abolition). Analyses of **regulations impacts** have not been conducted when some regulations are adopted through an ordinance, which is inferior to a cabinet order. Since July 2010, Japan has made 66 notifications of technical regulation to the WTO.

- Voluntary standards

In 2011, voluntary standards are comprised of 10,339 Japanese Industrial Standards (JIS) and 214 Japan Agricultural Standards (JAS). To ensure the compliance with the TBT Agreement, Japan has been aligning JIS to international standards if international counterparts exist. In 2011, approximately 56% of JIS were comparable to international standards (48% in 2009); 97% of these were aligned with international standards in 2011 (96% in 2009). As a result in 2011, about 54% of all JIS were aligned with international standards. Between April 2010 and February 2012, 755 JIS items were revised, 277 were withdrawn, and 347 were newly established.

The authorities note that it is impossible for ISO or IEC standards to match with every product in every country. In case a product is not traded internationally, or when the nature of the product is dependent on the culture, history or climate of the country, exclusive standards need to be developed. In the case of Japan, the authorities state that many products have no international equivalent, such as tatami (traditional floor covering), futon (Japanese mattress), Japanese rice cooker, Japanese electric fan, pocket warmers, and Japanese low tables with a heat source. These products require domestic standards.

The authorities also state that standards for building materials and processes are much higher in Japan because the country is located in an earthquake-prone area. If these standards were presented to the ISO, they would not be adopted, as other countries do not need such high standards. Therefore, in regard to the JIS, the METI considers it necessary to develop its own industrial standards, which may not necessarily be aligned with international standards (Chart III.4).

Table 10: Main standards and technical regulations in Japan, 2011 (%)³

	Number of standards/regulations	Corresponding to international standards ^a	Equivalent to international standards	Acceptance of overseas certification ^b	Acceptance of overseas test data ^b
A. Mandatory technical regulations					
Pharmaceutical Affairs	2,043	..	..	..	..

³ .. Not available.

a Defined as "primary aspects sharing a common scope".

b Where applicable.

c Building Act Code.

d According to the authorities, the number of mandatory technical regulations is not available because the scope and definition of mandatory technical regulations are ambiguous; the technical conditions of terminal equipment in Japan generally comply with ITU-T/ITU-R Recommendations and Radio Regulations, and international harmonization is given consideration.

e According to the authorities, the number of mandatory technical regulations is not available because the scope and definition of mandatory technical regulations are ambiguous; the technical conditions of radio stations in Japan generally comply with ITU-R Recommendations and Radio Regulations, and international harmonization is given consideration. Regarding the system for the certification of radio equipment, the Radio Law was amended to establish the system for accepting foreign test results and foreign certification (promulgated in 1998, entered into effect in 1999).

	Number of standards/regulations	Corresponding to international standards ^a	Equivalent to international standards	Acceptance of overseas certification ^b	Acceptance of overseas test data ^b
Law					
Food Sanitation Law	647	..	..	..	..
Electrical Appliance and Material Safety Law	454	..	..	..	..
Consumer Product Safety Law	10	..	..	..	..
High Pressure Gas Safety Law	2	..	..	..	100
Building Standard Law ^c	..	..	..	..	..
Safety Regulations for Road Vehicles	84	..	46	46	..
Law on the Safety Assurance and Quality Improvement of Feed	..	..	..	..	..
Law on Examination and Regulation of Chemical Substances and Regulation of their Manufacture	4	..	..	..	100
Industrial Safety and Health Law	181				
Telecommunications Business Law ^d	..	..	..	..	..
Radio Law ^e	..	..	..	..	..
Fertilizer Control Law	..	..	..	..	..
B. Voluntary standards					
Japan Industrial Standards (JIS)	10,339	56	97	..	..
Japan Agricultural Standards (JAS)	214	34	75	..	..

Source: Information provided by the Japanese authorities.

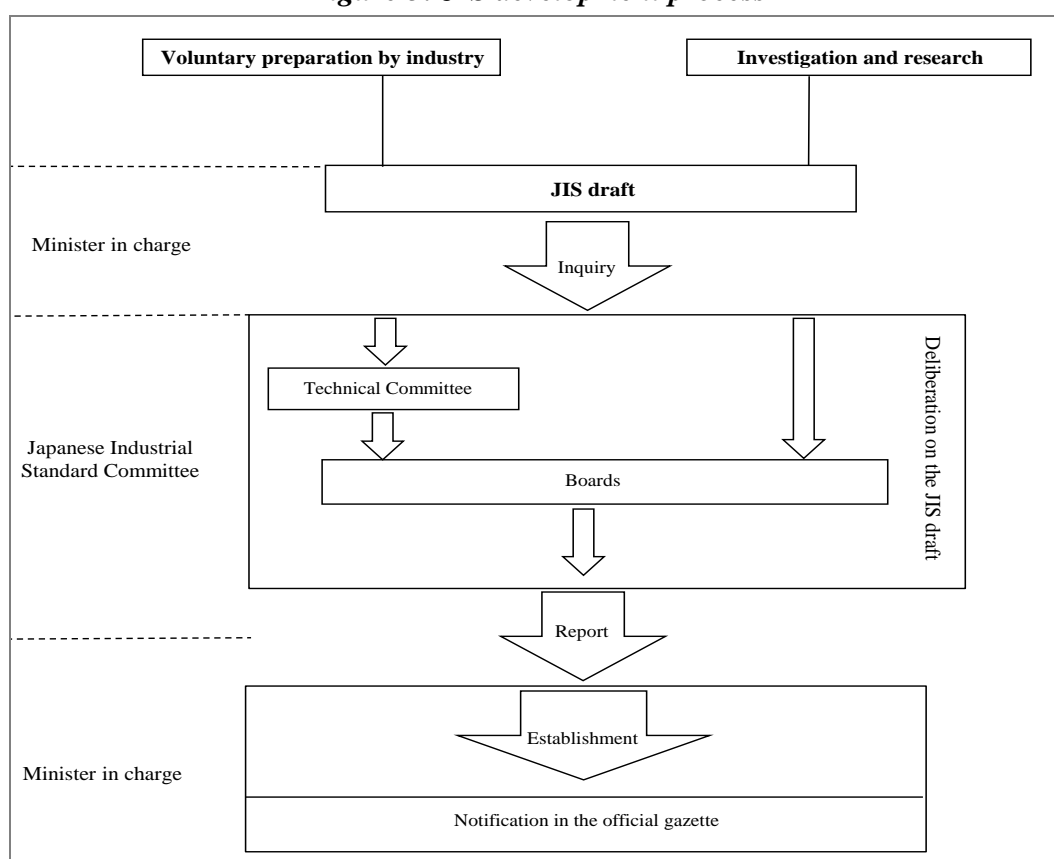
Under the provisions of the Japan Agricultural Standards Law, international standards (such as Codex) must be "taken into account" before establishing or revising JAS. As a result the authorities do refer to relevant international standards when establishing or revising JAS. Furthermore, under the JAS Law, there are mandatory technical standards, such as quality labeling standards and JAS for organically produced products, as well as optional standards. During the reviewing period, quality labeling standards (mandatory standards) for 44 products were revised, while 19 optional standards have been revised since 2010. The JAS for organic plants and processed organic foods, which are mandatory standards, were revised in March 2012.

About 8,000 domestic and 700 foreign factories in 21 countries and economies are certified to affix JIS marks (JIS label scheme). The JIS label scheme is optional unless relevant

regulations require JIS for domestic sales. The authorities state that domestic and foreign factories are treated in the same manner with regard to certification of the JIS marks, and the JIS label scheme is internationally uniformed, based on ISO/IEC 17065. Currently, 25 organizations are accredited as JIS label certification bodies.

Compliance with the JAS is not necessary for imports into Japan. The JAS Law allows third parties to certify the operators (e.g. manufacturers) to affix JAS marks. The Minister of Agriculture, Forestry and Fisheries as well as Registered Certifying Bodies (RCBs) and Registered Overseas Certifying Bodies (ROCBs) are responsible for monitoring and managing JAS marks. Foreign producers or manufacturers that are certified by RCBs and ROCBs may conduct their own grading and affix the JAS marks to their products. At present, there are 30 ROCBs (20 for organic products and 10 for forestry products). Under the JAS Law, foreign enterprises certifying operators that produce, process, and/or distribute agricultural or forestry products in conformity with the JAS may be accredited as ROCBs.

Figure 5: JIS development process



Source: Information provided by Japanese authorities

Apart from JIS and JAS, there are many other quality marks used in Japan.

Table 11: The meanings of marks related to quality and safety of the Japanese goods

Meanings	Scope of use
Label Q: quality and consistency of the products	For textile products, including: child clothes and other types of clothing and bedspreads
Label G: Design, after- sales services and quality	For electronics products such as cameras, machines, glassware, pottery, office appliances, garments and furniture.
Label S: Safety level	For various types of products for children, household appliances and sports equipment.

Meanings	Scope of use
Label S.G: Safety level (compulsory)	For walkers, strollers, pressure cookers, bike helmets and baseball caps and other goods.
Label Len	For pure wool fibers, woolen clothes, wool ware, carpets, knitware with over 99% new wool.
Label SIF: good quality textile garment goods	For garment products such as clothes for men and women, umbrella, jackets, bags and other equipment for sports

Source: Information Center of American Department of Commerce Smenet, EXIMPRO

- Mandatory technical regulations

Technical requirements for the registration of pharmaceuticals were changed during the reviewing period. The changes included the minimum requirements for biological products being added to and changed; for public safety, poisonous and deleterious substances and substances that would affect the central nervous system were newly designated, and the criteria for the containers used to transport such substances were changed.

Changes to the Industrial Safety and Health Law amended the manufacturing code for elevators in the workplace. New items were added to the list of products subjected to the Consumer Product Safety Act and the Electrical Appliances and Material Safety Act. New standards relating to product safety were also established.

The authorities stated that Japan has amended its safety and environmental regulations for road vehicles to align them with regulations under the UN Agreement on the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles (1958 Agreement). As a result, Japan has amended technical requirements for, inter alia, seatbelts and headlights since 2010.

Regulations on product labeling: The products that are required to have labels are classified into 4 groups: textile products, plastic products, electric appliances and equipment, other products such as umbrellas, sunglasses, etc. Pursuant to Japanese law, there are about 100 products required to have quality labels.

Textile products include: clothing, trousers, dresses, shirts, sweatshirts, cravat, bedspreads, vacuums, fans, televisions.

Plastic products include bowls, plates, washing pots.

Other products including detergents, leather gloves, and toothbrushes are required to have quality label to inform consumers about the product's quality and notice for usage.

c) Conformity assessment

Overseas manufacturers of electric and consumer products may undergo conformity assessment and certification conducted in foreign countries by foreign registered conformity assessment bodies, in accordance with relevant laws (e.g. the Electrical Appliance and Material Safety Law and the Consumer Product Safety Law). Additionally, under the provisions of the High Pressure Gas Safety Law, some cylinders and designated equipment for high pressure gas made by foreign manufacturers are allowed to skip some inspections if the manufacturers are registered with the Government. Japan accepts test data on chemical products developed in other countries based on OECD Test Guidelines and OECD GLP

principles and the Decision of the OECD Council concerning the Mutual Acceptance of Data in the Assessment of Chemicals.⁴

2.1.3. Legislation of TBT in China and South Korea

2.1.3.1. China

China's technical regulations and conformity assessment procedures are governed by various laws and regulations, including: Standards Law of People's Republic of China; Law of the People's Republic of China on Quality and Safety of Agricultural Products; Law of the People's Republic of China on Product Quality; Law of the People's Republic of China on the Protection of Consumer Rights and Interests.

Chinese standards are divided into mandatory and voluntary standards. Mandatory standards have the legal enforcement like other technical regulations in China. They are enforced by laws and administrative regulations and are mainly related to the protection of human health, personal property and safety. They remain the key tools for ensuring the safety of products and services provided on the Chinese market and are treated accordingly. Standards that do not possess such characteristics are considered optional standards.

According to the Chinese Standardization Law, Chinese standards are categorized into 4 different groups, namely: National Standards, Sector Standards, Provincial Standards and Enterprise Standards.

National Standards

National Standards (referred to as "GB" standards) are developed for technical requirements that need to be unified nationwide. They make up the core of relevant standardization and technical regulations in China. About 15% of GB is compulsory; compliance with these is a prerequisite for selling products and services on the Chinese market. In addition, and unlike in Europe, compliance with such standards is also required for the export of products and services from China. GB is being developed under the supervision of AQSIQ and requires SAC approval. Chinese national GB standards can be identified as mandatory or optional depending on their prefix code, as indicated below:

The prefix of each standard indicates its mandatory or voluntary nature:

<i>Code</i>	<i>Meaning</i>
GB	Mandatory National Standard
GB/T	Optional National Standard
GB/Z	National Standardization Guiding Technical Document

Many Chinese national GB standards are adopted from ISO, IEC or other international standards developers. (As of 2006, nearly half of all Chinese national GB standards were adopted from international standards and "advanced foreign standards".) China has also expressed a goal of significantly increasing the number of standards adopted from international or advanced foreign standards. The database of Chinese national GB standards provides information on which standards have been adopted.

National standards (GB - include GB/T, GB/Z) – update

Sector	Comprehensive	Agricultural	Medical	Mining	oil	Chemical	Energy	Metallurgical	Total

⁴ Based on the Chemical Substances Control Law.

					& gas				
Number of standard	2080	1700	420	665	480	2446	520	2103	10414

Source: *codeofchina.com*

Sector Standards

Sector Standards (often also referred to as “Industry Standards” or Professional Standards) are developed when no National Standard exists, but unified technical requirements are nonetheless needed in a certain industrial sector throughout the country. They have similar functions to National Standards, but are usually under supervision of a single ministry and as such not centrally controlled or supervised. Sector Standards can be either optional or compulsory. The law on standardization states that Sector Standards in conflict with National Standards shall be withdrawn. There is no rule; however, on how to handle conflicting Sector Standards, issued by different standardization bodies.

Professional standards are coded by industry sector (such as: BB: Packaging,). The codes of mandatory standards are shown in Appendix and the codes of optional standards have "/T" added after the mandatory codes. For example, the code for agricultural optional standards is "NY/T".

Professional standards

Sector	safety (AQ)	packaging (BB)	watercraft (CB)	mapping (CH)	Urban Construction (CJ)	Publication (CY)	Construction (CECS)	Geological (DZ)	Total
Number of standard	21	43	543	44	860	25	307	13	1856

Source: *codeofchina.com*

Provincial Standards

Provincial Standards (also called Local Standards) are developed when neither National Standards nor Sector Standards exist, but unified requirements for safety and hygiene of industrial products are needed within a certain local area. These standards can be understood in a similar way to “National Standards” in Europe, since they are applicable to only one single province. Provincial Standards are often used as a testing ground for future National and Sector Standards; successful Provincial Standards are thus regularly replaced by new National Standards. Provincial Standards should be withdrawn if they are not consistent with national regulations and/or applicable National and Sector Standards.

Local Standards are delineated with either “DB + *” (mandatory) or “DB + */T” (optional). The codes for local standards are shown below. The * represents the provincial code as defined by the ISO 3166-2: CN and GB 2260/T, so a local optional standard in Sichuan Province would be DB + 51/T.

Province/ city	Beijing	Shanghai	Shandong	Guangdong	Hubei	Tianjin	Zhejiang	Sichuan	Total
Number of standard	120	13	1	3	3	1	129	8	278

Source: codeofchina.com

Enterprise Standards

Enterprise Standards are developed within an enterprise where relevant National Standards, Sector Standards and Provincial Standards do not exist. They can be considered a part of the quality control system of individual enterprises. As such, these standards are not usually public. Nevertheless, they often fulfill a legal requirement for companies operating in areas of high risk for employees or third parties. However, companies doing business in China are encouraged to use/adopt National Standards, Professional Standards and Local Standards if they are available. The formula for determining an enterprise standards code is below, where the * represents the Enterprise code.

China has taken many actions to observe WTO obligations under all the WTO Agreements, including over 850 TBT notifications, and numerous improvements in its procedures. The country is said to continue to follow the obligations and work within the committee. China has made many of its regulations and policies more transparent and predictable.

But these improvements are not applied consistently across all agencies and by few local authorities. They called for improvements in transparency, including the publication of rules, regulations and procedures, and in China's notifications to the WTO. Some standards, certification procedures and conformity assessments are too complex, sometimes too strict in consideration of the risks involved; likely to be made compulsory without warning or publication, and maybe inadequate opportunities for foreign companies or governments to comment or provide other input, and can involve too many agencies. Among the issues causing the greatest concern were information technology products, wireless (wifi) and security technology, cosmetics, medical devices and motor vehicles.

2.1.3.2. South Korea

The Korean Government adopted the ISO 9000 system (modified as the KSA 9000) as the official standard system in April 1992 and published related regulations in September 1993. In 1997, Korean companies also adopted the ISO 14000 environment management system. However, there are still concerns over Korea's implementation of the commitments that were made when the GATT Agreement on Technical Barriers to Trade (the "Standards Code") was signed in 1980.

Korea seems to develop standards that effectively block imported goods by affecting only imported goods or in other words, these standards are not equally applied to domestic products. In addition, the Korean government sometimes issues new regulations without adequate public consultation procedures. The absence of a comment period and adequate time for industries to adjust can be a significant barrier to trade. Finally, the short periods before the new regulations come into effect sometimes do not give foreign exporters sufficient time to be familiar with them, which often leads to unnecessary and costly interruptions in trade. In light of the fact that Korean firms consider compliance with the ISO 9000 necessary to compete in international markets, the Korean government has committed to address such problems and reduce barriers.

The Korean Agency for Technology and Standards (KATS), under the Ministry of Commerce, Industry and Energy (MOCIE), is undertaking a program to make Korean

standards consistent with international standards. Better awareness of this necessity has rooted from the need to protect global consumers (i.e. electrical products safety), to facilitate trade for small and medium sized Korean companies, to increase overall efficiency of production as well as limit unnecessary barriers to legitimate trade. The Korean Industrial Standardization Act requires 60 days' notice before implementing any new standards. Whenever there is a change in standards, the government is required to notify the WTO's Committee on Technical Barriers to Trade (TBT).

The Korean Food and Drug Administration (KFDA) generally accept international standards, or equivalents, of advanced countries or consensus standards. Included in this list of standards recognized by Korea are those of the International Standard Organizations (ISO), the American Society for Testing and Materials (ASTM), the International Electro-technical Commission (IEC), the U.S. Pharmacopoeia (USP), the British Pharmacopoeia (BP), the European Pharmacopoeia (EP), and the Japanese Pharmacopoeia (JP).

Korea has loosened some barriers in the automotive industry. The Korean government has promised not only to lower Korea's WTO tariffs on motor vehicles and to actively participate in future multilateral tariff reducing negotiations, but also to adjust standards and certification procedures that contribute to increased costs and delays to market entry due to excessive documentation and testing.

Despite the improvements, some Korean standards are still inconsistent with international standards and different from Vietnam's standards and a lack of clear standards guidelines persists. KFDA has established standards for only 76 out of its 950 device classifications. These few standards serve as the lower limit criteria for product approval. With many KFDA standards yet to be established, a product may meet other non-KFDA standards but not fit into KFDA's existing standards, causing delays in some cases.

The Korean Agency for Technology and Standards (KATS), under the Ministry of Commerce, Industry and Energy (MOCIE), develops standards for capital goods, including construction materials and consumer goods, as well as products for logistics operations.

Standards Organizations

Korean Industrial Standards (KS) is the national standards in Korea based on the Industrial Standardization Act. Development of KS has to be notified by Administrator of KATS after getting approval from Korea Industrial Standards Commission. KS may be divided into 21 sectors ranging from the Basic standards (A) to the Information (X), or into 3 types of standards as following:

*"Product Standard" that specifies improvement, measurement and quality of product

*"Procedure Standard" that stipulates testing/analysis/inspection/measurement method and process standard, etc.

*"Horizontal Standard" that specifies terminology, technical characteristics, unit and numerical progression, etc.

Optional standard: Korean Industrial Standards (KS), etc. Technical criteria: about 16,000 criteria based on 86 kinds of laws and regulations for each government ministries.

KS consists of measurement standards, reference standards and documentary standards.

Figure 6: Number of KS

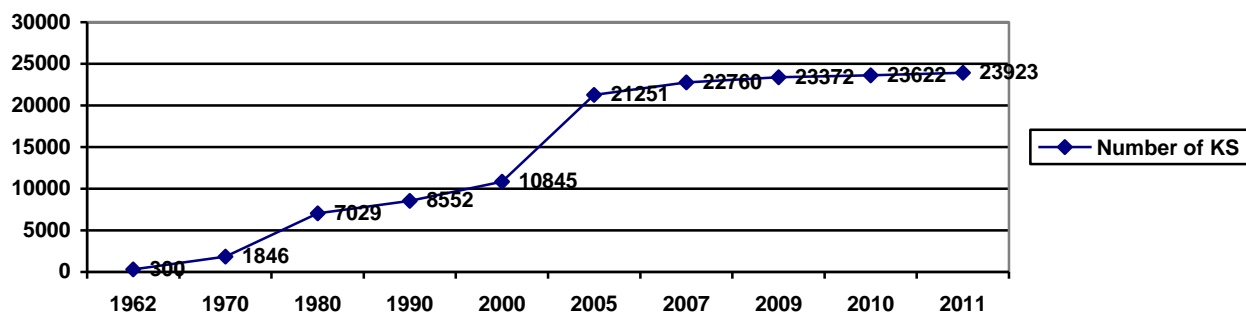


Table 12: Portfolio of KS (As of December, 2011)

Sector	No. of Standards	Sector	No. of Standards
Total			23,923
Basic Standards(A)	744	Ceramics (L)	475
Mechanical Engineering(B)	4,149	Chemistry (M)	3,465
Electrical & Electronic engineering (C)	3,832	Medical (P)	760
Metals (D)	1,633	Quality management (Q)	123
Mine (E)	440	Transportation machine (R)	1,067
Construction (F)	858	Service (S)	113
Necessities (G)	383	Logistics (T)	319
Foodstuffs (H)	526	Shipbuilding (V)	834
Environment (I)	672	Aerospace (W)	522
Organism(J)	78	Information (X)	2,039
Fiber (K)	891		

Source: http://www.kats.go.kr/en_kats/standard/KAEU03_1.asp

- Conformity assessment

KATS establishes guidelines for state and private institutes to perform reliability assessment and certification. It also performs market surveillance on KS-labeled products and penalizes products that do not meet KS requirements.

Korea has a fairly extensive regulatory system for biotechnology products. The Ministry of Agriculture & Forestry (MAF) regulates labeling of unprocessed biotech products and conducts environmental risk assessments (ERAs) of biotech crops. The Korea Food & Drug Administration (KFDA) regulates food safety of biotech crops and labeling of processed food products containing biotech components. The National Plant Quarantine Service conducts post-entry quarantine inspection of plants and plant products. Regulated products are required to have locally based (pharmacists/chemists/Korean pharmaceutical trade associations/etc.) tests on every batch of all shipments. Products tested outside Korea are

frequently not accepted. Electro Magnetic Interference (EMI) product testing must be done by government-approved testing companies. Modems and monitors require homologation approval even if already approved in their home country.

The Korea Toy Industry Cooperative (KTIC) Inspection Team tests moving toys. Currently it is the only officially designated toy-testing agency. The Cooperative was incorporated in 1967 as a national nonprofit organization for toy manufacturers and traders.

The Korea Environment & Merchandise Testing Institute (KEMTI) has been accredited under the Korea Laboratory Accreditation Scheme (KOLAS) to conduct tests on hardliner products, footwear, textiles, packaging and testing equipment. This qualification is granted only to laboratories that meet certain quality and technical laboratory requirements based on ISO 17025. The Korea Testing & Research Institute for Chemical Industry (KOTRIC), Quality Assurance Department tests batteries, tires and protective glasses. It was accredited under the Korea Laboratory Accreditation Scheme in 1994. KOTRIC is an affiliated institute under the Ministry of Commerce, Industry and Energy. The Korea Machinery-Meter and Petrochemical Testing & Research Institute (MPI), Quality Assurance Team tests motor brake fluids, engine coolants and washer fluids.

The Fabric Inspection Testing Institute (FITI) - Testing & Research Institute tests fabrics. It was designated as a reliability assessment organization by MOCIE in 2001 and is accredited by KOLAS for a range of tests.

+ Product Certification: Generally, private industrial organizations oversea import certification procedures. KATS, however, also issues certification labels for new technologies and recognizes quality products manufactured by Korean companies mainly to promote exports. The Korea Standards Quality Certification Association offers consultation and preparation for ISO 9000, ISO14000, KS, TS16949, HACCP, UL, and CE.

+ Accreditation: the Korea Laboratory Accreditation Scheme (KOLAS) is a state accreditation body under the KATS Department of Technology and Standards Planning. KOLAS signed the Asia-Pacific Laboratory Accreditation Cooperation Multilateral Recognition Agreement (MRA) on testing in 1998 and on calibration in 2001. In 2000, KOLAS also signed the International Laboratory Accreditation Cooperation Multilateral Recognition Agreement on testing and calibration. As a result, tests carried out in laboratories of ILAC member countries are recognized by the other 44 member economies. There are local testing laboratories authorized to certify firms under the ISO 9000 system.

2.2. TBT frequently faced by Vietnam's exporters in major markets with main exporting-products and business's measures

Experts consulted some enterprises that produce and export Vietnamese main exports as well as the representative experts of industry associations, Vietnam's TBT center. The following are assessments on TBT facing Vietnamese exporters and their solutions.

2.2.1. Steel and other construction materials

- Vietnam's steel exports

At present, Vietnamese steel products are exported to 26 countries around the world such Brazil, the US, ASEAN countries ... ASEAN is one of its most important export markets. In 2012, the steel exports of Vietnam into ASEAN countries were 1.74 million tons, reaching

1.4 billion USD and equal to 70% the total exports of these products.⁵ However, Vietnamese steel is considered of low quality but expensive, and thus it cannot compete with the imported steel from other countries. In 2013, Vietnam imported about 10 million tons of steel with the total value of 7 billion USD while the turn-over of steel exports was only 2 billion USD.

According to Vietnam Steel Association, by June, 2014 Vietnam has exported about 1.34 million tons of steel with the value of 1.44 billion USD, in which: Black steel sheet: 265,642 tons; construction steel: 277,119 tons, steel sheet: 390,000 tons, other types of steel: 415,748 tons.

- Technical standards that enterprises have to follow

+ ASEAN countries, especially Thailand, Indonesia and Malaysia have been developing and applying non-tariff barriers to reduce steel imports from Vietnam. SNI (Indonesia), TISI (Thailand) and SIRIM (Malaysia) have given processes to limit the imports of steel products. These processes require steel products to be registered and certified in some complicated procedures before being imported. That is to protect domestic manufacturers and improve quality of imported steel products. Some examples are:

* Malaysia: requires enterprises to present application form for approval, product lists, certificate of quality inspection with one-year maturity, reports of examination and product licenses.

* Thailand: requires that besides application for approval, sellers have to show in detail their production process, lists of machinery and equipment involved, quality controlling process, monthly and annual manufacturing reports, technical characteristics of imported products... In licensing procedures, authorized agencies of this country will carry out on-site inspections on the manufacturers of shipments which will be imported into their country with a fee of 300 USD/day. Moreover, exporters will be subjected to product testing charges by authorized agencies collecting samples and conduct testing.

Furthermore, these nations also apply other non-tariff barriers such as: long administrative procedures for issuance of permission, from 40 to 60 days; or lawsuits of opposing price collapse, opposing subsidies and trade protectionism measures.

+ Technical standards on imported steel of developed countries such as the US, Germany and Japan was built a long time ago and have been increasingly advanced and far exceeded Vietnam's steel production level.

Consultation from enterprises show that Vietnamese steel exporters have paid attention to produce steel types that meet JIS even when there is no domestic order. Therefore, steel product exporters of Vietnam have faced almost no obstacles in satisfying quality standards of ASEAN countries. However, the above mentioned barriers have caused many difficulties and damages. The long extension of licensing procedures makes clients hardly wait. On the other hand, after licensing procedures and import approval, costs during this long period raise the price of product shipments higher than the initial agreed one.

⁵ <http://www.iavietnam.net/detailnews/M48/N1244/cong-dong-kinh-te-asean-nam-2015-co-hoi-lon-tham-gia-cac-chuoi-cung-ung-toan-cau.htm>

For technical obstacles, with some steel types requiring higher technology, Vietnam is not able to satisfy or cannot afford the technology. This means that Vietnamese exporters lack the capacity and technology to meet the standards. This does not indicate the prevalence of an NTB but is a clear case of inadequate technology and capacity. **According to the Steel Association**, it is estimated that there are 400 enterprises in steel industry in Vietnam by the end of 2013. However, they are mostly small and medium sized enterprises with low technology.

Steel production technology in Vietnam can be classified into 3 groups as follows:

- Group of outdated technology: It accounts for about 30% the total steel producers. They are small scaled steel factories that use the domestically manufactured equipment. Outdated technology together with their small scale makes low quality products with high consumption of energy and greatly negative influence on the environment while their prices are not competitive in the market.
- Group of average technology: this group makes up for about 40%, including such old factories.
- Group of modern factories: this group accounts for 30%, including such ventures as Posco, Vinakyoei, Vietnam-Korea Steel, VSP and newly built factories like Hoa Phat, Vietnam-Italy, Pomina, Phu My Steel, Phu My flat steel company, etc.

Vietnam's steel products are not varied, mostly construction steel such as steel bars, steel coil, steel section. Vietnam still has to import such types of steel as hot roll steel, alloy steel, hot rolled alloy steel for mechanical application, flat steel, etc. For construction steel, Vietnam now faces the surplus production as well as pressures from the products imported from China.

- Solutions for steel manufacturers to overcome and meet the technical requirements as well as to compete in terms of prices:

Consultation from enterprises can be carried out in two ways: one is directly in conference and another is via collecting information and speech of enterprise representatives in mass media. Three enterprises Vietnam-Italy Company, Hoa Phat and Hoa Sen JSC are of modern technology while Southern Steel Corporation is of average technology. The number of employees range from 600 to over 3.000.

Of all the consulted enterprises, Hoa Sen Joint Stock Company and Hoa Phat Joint Stock Company are the two fastest growth and most sustainable ones, especially in export field, while the domestic and international steel markets are facing difficulties and many steel manufacturers are suffering from losses, pausing the operation or reducing the production scale. Enterprises, such as Hoa Phat or Hoa Sen Company, have taken many measures to meet the technical requirements together with lowering the prices to increase their products' competitiveness and thus survive and even earn considerable profits. Some of their main methods are as follows:

+ *Apply modern technology to meet the technical requirements of such large markets as the US, Australia, the UK and Germany*

Modern technology often requires a large capital and is imported from countries with advanced technology. Enterprises can improve labor productivity and save energy if

applying modern technology. However, due to the high price, modern technology can only be invested in by large enterprises. Modern technology and technological solutions help big steel manufacturers continue to earn money thanks to their scale and reduced costs. Meanwhile, small sized enterprises have to depend on outdated steel rolling mill production line (usually imported from China) which consumes a great amount of energy.

According to the assessment of importers, Hoa Phat steel billet is of good quality and stable due to blast furnace technology and their delivery time is shorter than those in China or Russia.

+ *Integrate production phases to create the advantage in terms of price:*

At present, many large-scale and great-potential manufacturers of hot rolled steel tend to establish industry complexes to save costs because in that way, they only import scrap iron to cast the billet instead of import the finished product and also don't have to melt the billet for direct rolling. In the context of increasingly high input costs, small manufacturers with a little capital and experience will never be able to compete with the big ones.

In the same way, Hoa Phat Steel Joint Stock Company has got the competitive edge in terms of prices and quality inside and outside the country, even over Chinese steel. The company produces in a large scale with domestic sources of iron ore and a close production process in Hoa Phat Steel Complex located in Kinh Mon District, Hai Duong Province. Therefore, the production costs of the company is about 6-7% lower the average cost of the industry.

Similarly, Hoa Sen Group built a nearly close production process of the entire corrugated iron industry in Vietnam. This helps the company to strictly control the production process, minimize costs to reach a competitive price as well as control the products' quality to protect their brand name

+ *Create competitive edge via scale-based economic effectiveness:* Steel industry requires quite an amount of investment into production line and thus a big fixed cost. That's why steel manufacturers have to take a large market section if they want to lower their product prices. Therefore, such big companies as Pomina Steel, Hoa Phat Steel and Thai Nguyen Steel often offer lower prices than their rivals. The representative of Vietnam-Italy Steel Company stated that it is necessary for steel manufacturers to increase their advantage based on scale. On average, a steel factory in Vietnam produces 200 to 400 tons/year, which is about 5-10 times lower than their Chinese counterparts.

Almost all steel manufacturers agree that if they want to win foreign rivals, they need to produce products that meet international standards, for example The US's ASTM, Australia's AS and Japan's JIS, together with lower their prices and improve goods delivery services. In addition, according to the representative of Dong A Corrugated Iron JSC, only when Vietnamese steel manufacturers tap into advanced markets will the steel export industry be really profitable. They will be unable to produce high quality and reasonably priced products with only outdated technology and low capacity.

In summary, to overcome China's dominance in domestic market as well as in the tradition market of ASEAN, steel manufacturers need to enter new markets and offer competitive prices. To do so, they have to meet the higher standards in such markets as Japan, the US and Australia and also integrate production phases and create a close production process to

reduce costs. This can only be realized when the enterprises have considerable capital and good technology, which are great challenges to Vietnamese steel manufacturers.

2.2.2. Textile

a. Vietnam's textile exports

- Since 1996, textile industry has reached an export turnover of 1 billion USD. Between 2009 and 2012, this type of goods continued to be the leader in terms of export turnover with the annual growth of 21.8%. In 2013, textile export brought about approximately 18 billion USD equal to an 18.9% increase in comparison with that of 2012.

Vietnam's textile products are present in more than 50 countries and territories, earning the turnover of 100 million USD in 16 countries and territories. The major markets include the US, South Korea, Japan, Germany, the UK, China, Spain, Taiwan and France, etc.

The largest importer of Vietnamese textile in 2013 was the US with the total value of 8.61 billion USD, accounting for 48% the total export turnover of the industry. The second was Japan with 2.38 billion USD, equal to 13.3% and textile products earned the largest revenue among Vietnamese exports to Japan. The next one was South Korea: in 2008 South Korea was the sixth largest importer of Vietnam's textile products with the turnover of 139 million USD⁶. But in 2013, the country ranked the third with 1.64 billion USD.

- The main export forms: Vietnam textile products mainly include the outsourced ones for foreign companies and the ones made from imported materials. These two forms account for 96.5% the total textile export revenue of the country, in which 75.3% comes to outsourced products and 21.2% to the other. Hence, the import of textile materials and sub-materials is also very high (up to 90%)⁷.

In outsourcing form, foreign companies provide the products' designs and the main materials for Vietnamese enterprises and the latter's task is to use their own labor force and facilities to produce in accordance with the requirements from the ordering party and receive payment according to price unit and accepted output.

In the value chain of textile industry, the final production stage has the lowest added value and its return margin is only 5-10%. Meanwhile the research and development phase and trade (selling, delivery to the final consumers) which have the highest added value is the weakest activity of Vietnam's textile industry. Although there emerge some well known clothing makers in Vietnam, they are dominant only in domestic market and their selling and delivery in foreign markets remain inadequate.

b. Vietnamese textile products exported to Japan and South Korea

Vietnamese textile products exported to Japan and South Korea are mostly made of cotton and knitwear, including T-shirts, pullovers, singlets, sweaters, suits, windbreakers, sport clothes and jackets, etc.

For Japanese market, T-shirts, singlets and other undershirts made from cotton, knitwear (HS 610910) had the biggest turnover, about 133 million USD, increasing by 45.2% compared to the same period of 2012. The second most popular products were towels used

⁶ <http://thuongmai.khatoco.com/Default.aspx?TabId=1907&id=760>

⁷ According to annual report on Vietnamese enterprises 2013 by Vietnam Chamber of Commerce and Industry (VCCI)

in the bathroom, kitchens made from terry-circled woven cloth or similar types of cloth (HS 630260), reaching 132 million USD, equal to a 12.7 increase compared to the last period. Pullovers, sweaters and similar items made from artificial fibers and knitwear (HS 611030) came the third position regarding turnover with 112 million USD, increasing by 42.3% in comparison with the same period in 2012.

In Korea, frockcoats, jackets, sleeveless jackets and capuchins, winbreakers and other similar types for males and boys (HS 620193) had the revenue of 273 million USD, increasing by 50.7% compared to the same period in the previous year. HS 620293 is the second one (frockcoats, jackets, sleeveless jackets and capuchins, winbreakers and other similar types for females and girls) obtained 170 million USD, by 69.7% compared to that of the previous period. Other types of clothes for males and boys (HS 621040) came the third with the total value of 165.93 million USD, by 113.2% compared to the same period of 2012.

c) Technical standards applied to textile products in Japan and South Korea

- Technical requirements and standards applied to textile products in Japan

Textile and clothing sold on Japanese market must comply with the Law on Labels, the Law on controlling hazardous substances in consumer goods, the Law prohibiting false information in advertisements, the Law on reusable packaging and packaging as well as the Law on the Promotion of efficient use of resources.

* *General provisions on labels:* products exported into Japan must be labeled in accordance with commercial practices; products which have already labeled still have to have Japanese labels on easily recognized places. The required information on labels includes product components, standards regulated by government, warning information, guidance, origins, due date and other information⁸

Textile products are required to have labels pursuant to “Regulations on labeling textile product quality” in Law on labeling consumer goods quality for such products as fiber components, usage and laundry requirements (by images), name and address of the labeling person.

Required information on the label of garment products consists of type of fibers, proportion, laundry requirements and usage; skin types intended; size in meters, name, address and telephone number of the manufacturers or suppliers. For garment products with outside cover (except for raincoats) the label must clearly state the products are waterproof (See the Appendix ...)

* *The Law on controlling harmful* substances in consumer goods provides a list of substances which can be harmful when exposed to skin (including formalin and dieldrin). Textile products with formalin of 75 ppm or over are not allowed in the Japanese market.

Table 13: Level of chemicals allowed in textile products in Japan

Name of compound	Limit allowed	Relevant products
Hg and its compound Tributyltin	None	All of textile products
Formaldehyde	None	babies of under 24 months

⁸ <http://tiengiang.tbvn.org/default.asp?action=article&ID=3946&category=2>

	20ppm	products for kids
	75ppm	products exposing directly to skin
	300ppm	decoration products
Dieldrin	30ppm	all of garment products
2,3-dibromopropyl, phosphate	None	all of textile products

Source: the Law on controlling harmful substances in consumer goods

As for trademarks, the Law on Commodity requires textile products to have the following information:

1. Type and content of yarn
2. Washing and use instructions
3. Waterproof
4. leather of the types which are allowed to use
5. Labels must indicate their name, address and phone number

** Regulations on imports of knitted garments, woven fabrics and textiles.*

1) Includes: knitted fabrics, knitted, woven fabric with elastic thread, rubber thread, etc and crocheted fabrics. Importers must:

1. Present customs declarations about the country of origin.
2. Follow the regulations on the import bill.
3. Follow labeling regulations under the Act distinguishing textile fiber products (TFPIA) and the Law on labels of wool products (WPLA).
4. Consistent with standards of fire protection issued by Consumer Safety Commission (CPSC) in line with the Flammable Fabrics Act (FFA)

2) Includes knitted clothing for adults and children, including coats, jackets, suits, pants, shirts, dresses, sportswear, swimwear, socks, sweaters, woven gloves, underwear, T - shirt, etc. .. Importers must:

Present the customs of the country the odeclaration of origin.

Follow the regulations on the import bill.

Follow labeling regulations under the Law on distinguishing fiber products (TFPIA) and the Care Labeling Rule.

Be consistent with standards of fire protection issued by the Consumer Safety Commission (CPSC) under the Flammable Fabrics Act (FFA).

Follow the requirements of the export license (if imported from Hong Kong).

Follow the procedures of special import (Special Access) or conditional Imports (Entry Regime) on apparel which are made, bleached, dyed by inputs in the US

Textile and apparel products are considered sensitive.

The shipments which are inconsistent with the above regulations will be confiscated and subject to fine. Regulations on the country of origin must be met.

Table 14: Legal documents concerning clothing imports

HS	Commodity	Regulations
6010	Knitted clothing	1. Law on labeling for quality household goods
6114		The Act to prevent sales with unreasonable

		commission and misleading presentation 2. The Act controlling household appliances with toxic ingredients
6201 6221	Fabrics for knitting and weaving	3. The Law on labeling for quality household goods The Act to prevent sales with unreasonable commission and misleading presentation 4. The Act controlling household appliances with toxic ingredients

Source: *Relevant laws of Japan*

* *Regulations on silk imports*

Silk clothing is allowed to be imported into Japan. However, if it has details made by leather or fur, it is subject to the Washington Convention. Silk imports must comply with the requirements of trademark in the Trademark Law, the Law on Prevention of unreasonable charges and explain nations misleading the country of origin and the Law of consumer products containing toxic, including foocmalin and dieldrin.

Table 15: Legal documents concerning silk imports

HS	Commodity	Relevant regulations
6206	Thin silk jacket, underwear, shirts	1. The Law on labeling for quality household goods The Act to prevent sales with unreasonable commission and misleading presentation 2. The Act controlling household appliances with toxic ingredients 3. The Import and Export Law 4. Washington Convention
6101 6114 6201	Other silk clothing	1. The Law on labeling for quality household goods The Act to prevent sales with unreasonable commission and misleading presentation 2. The Act controlling household appliances with toxic ingredients 3. The Import and Export Law 4. Washington Convention

Source: *Relevant laws of Japan*

Trademarks: Silk trademark is a standardized international symbol approved by the International Silk Association for products of 100% silk. The Japanese Silk Association is responsible for this nationwide.

The Trademark Law requires the clear writing of labels of ingredients, instructions for cleaning and maintenance, name of places for the label name and contact address (address, phone number). Products with special coating on the label must clearly be written with “waterproof”. The law also provides for the clear labeling of imported goods in order to avoid confusion concerning the origin of goods.

The Japanese Law on Industrial Standards (JIS) provides for standards concerning the labels and size f women’s clothing

Tax Regulations

Codes of goods

6206.10 -100, 10-210, 10-220 ladies' silk blouses, shirts...

6101 to 6114, 6201 to 6211 other silk clothing

Import duties: silk clothes are mainly subject to the tax rate of 9-12%. Tax exemption applies only to the LDCs.

- South Korea's regulations on textile products

Textile product labeling: According to the regulation of quality management of Ministry of Trade, Industry and Energy of Korea, textile labels must include following information: textile materials, sizes, washing instructions, manufacturer's name, trademarks, importers, address and telephone numbers, and the country of origin.

d) Textile enterprises and their measures to meet TBTs

Through talks with export enterprises at the workshop on common technical barriers to trade and the responses of enterprises as well as through interviews with experts after that, the main points are as followed:

- Enterprises in general and textile enterprises in particular are more and more adaptive to the technical requirements by such import country as South Korea and Japan, which is proved with the total export turnover of Vietnam and the increasing values of textile products in the export turnover of Vietnam and in the import turnover of main trade partners (such as the USA, Japan, and South Korea). However, 80% of textile enterprises are small and medium size. . A majority of Vietnam textile enterprises do business in the form of processing and rely on bank loans, of which the interest rate is extremely high. Therefore, their profits remain tiny compared to the turnover. The rate of processing is also high among the consulted enterprises: Dong Xuan Knitting Company at 95% and Ho Guom Garments Company at 70%, etc. Moreover, of 5,982 textile companies, the number of companies producing materials only accounts for 0.7%, synthesized fiber 0.1%, cotton 0.2%, thread 4.3% and the ones performing final dyeing is only 3%. The dependence on materials makes Vietnam's enterprises less competitive in the global market. ⁹

- Problems in common TBT faced by enterprises:

Pham Thi Lua (2013) implement a corporate survey with 45 Vietnamese textile enterprises to determine the critical target products, markets and current impediments to implementation of TBT and SPS measures.

Among 45 textile enterprises surveyed, the proportion of joint stock and limited liability companies, state enterprises, private companies and foreign funded enterprises is 44.4%, 26.7%, 22.2% and 6.7% respectively. Accordingly, 26 enterprises (about 57.8%) have exported goods to the US, then to EU (about 42.2%), to Japan (26.7%) and South Korea (20%). A few enterprises choose other countries such as Canada, New Zealand, Switzerland and India as their export markets. The results of investigation are as follows:

+ Positive results:

* Enterprises are more aware of the importance in understanding and meeting the TBT and of the necessary changes to overcome barriers.

⁹ <http://garco10.vn/home/news/intrang/1130-ODm-thach-thuc-moi-cua-nganh-Det-may-viet-nam.html>

Over 72.5% of enterprises say they pay attention to study TBT as they realize their responsibility; 70% believe it roots in their customers' demand; 75% say they understand the necessity of these regulations while only 27.5% say it is because their goods were once rejected.

Overall, enterprises have good insight into basic principles about labeling, goods origin and safety standards.

* Vietnamese textile exporters highly appreciate the importance of management bodies of textile industry. Information in written documents sent from Ministries and state agencies is significant for enterprises. Furthermore, in the past few years, many enterprises have acknowledged the importance of Vietnam textile and garment Association. They say the government and trade supporting institutions have given great initiatives for them overcome trade barriers, from international integration policy, widened market access, facilitating trade, improving investment climate to support in financing, technique, market information, trade promotion and human resources training.

* Specific standards about labeling: Vietnamese enterprises basically know special standards on textile, wool and fur products. The labels of Vietnamese textile and garment meet the standards. For example, 100% exports have information in English on them together with codes under the US and international standards.

+ Negative results:

* Enterprises' knowledge about TBT of some main export markets remains inadequate: Many enterprises especially small and medium sized ones are not aware of trade barriers of the main importers. Up to 53.4% enterprises surveyed have low or average understanding about the US trade barriers, 55.5% and 78.8% for EU's and Japanese ones respectively.

* Enterprises remain unable to satisfactorily meet TBT:

Talking about the difficulties in meeting TBT in general, enterprises are mostly of average level (from 20% to 44.4%). 42.2% enterprises say that they suffer from the severe lack of technique, which is now the most inextricable problem. Regarding capital: a few years ago, lack of capital was considered the biggest challenge for enterprises but nowadays, only 33.3% enterprises state that they relatively encounter the lack of capital. Some big enterprises are short of labor force in solving problems related to the situation that Vietnamese regulations and standards do not match the international ones. In addition, weak policies and mechanism are the most outstanding problems for them.

For major markets such as the US, EU, Japan and South Korea, few enterprises consider the challenges here to be normal. The majority of small enterprises say they have difficulties in meeting the demand of the customers, especially the traditional major customers of Vietnam. For Japanese market, up to 80% enterprises surveyed are of "difficult" to "very difficult" for them to face TBT. That comes to 51% for South Korean market. This proves that enterprise scale greatly affects their ability to overcome barriers. Large enterprises have more resources to come over technical barriers than small and medium sized ones.

* In terms of the ability to meet specific TBT, quite a number of enterprises think they only meet them at low and average levels.

In terms of quality standards: Only a certain number of enterprises have registered to apply ISO in quality management and few enterprises have got this certificate. Data also shows that the proportion of enterprises recognized of high standards remains low (21%).

In terms of product safety standards:

There are a high proportion of enterprises that meet these requirements at average level. In addition, according to Institute of textile economics and technique, quite a lot equipment used for testing and studying the quality of textile and garment products was invested in 1990s and thus now becomes old and outdated. At present, Vietnam has not got any ecological laboratory qualified to grant certificate of safety for products that are safe for users in Vietnam and in import markets. Therefore, this kind of certificate is given for Vietnamese textile and garment products by laboratories of the importers. This costs Vietnamese enterprises quite much money and time as well as poses them difficulties in administrative procedure.

Regarding labeling requirements for textile and garment products: At present Vietnamese enterprises face challenges due to the lack or wrong statement of components of textile and wool products. Despite being clearly regulated, the proportions stated in the label such as the percentage of cotton, spandex, etc remain under standards when being checked. This situation is due to the fact that the testing and measurement of enterprises are inaccurate and disqualified.

* To meet TBT of the importers, enterprises have taken some measures as follows:

+ Be active in studying the requirements of importers and building management system to check the quality, safety, pro-environment characters, social responsibilities and labeling of the products to make sure that they meet the requirements. More specifically:

+ Invest in the innovation and modernization of technology and assembly line. Vietnamese textile and garment exporters are aware of the necessity to transform traditional technology and equipment into advanced and suitable machines and equipment for sustainable exports in the large and demanding import markets.

According to the reports of Vietnam textile and garment group, many advanced and modern machines and equipment have been intensively invested, for example Monsforts stenter, Continuous dyeing machines of Viet Thang Textile Company, Stork rotary printer, Buser flat screen printing machine of Thang Loi Textile and garment company and 8-3 textile company, “aerodynamic” dyeing machines (Air Jet) manufactured in Dong Xuan Knitwear Company and 8-3 company; modern machines for hot-axis dislodging of Nam Dinh Textile Company, water treatment system – machines for the final processing of the cloth- wool mixture of Nam Dinh Silk Textile Company and Company 28 (Ministry of National Defense), etc.

In order to reduce prices and costs and sharpen their competitive edge, Viet Tien garment Company and Garment Company 10 have continuously updated their equipment and technology with advanced technology bought or transferred from the US, Japan, Singapore, etc. such as Grading Patten Design System, marking system, automatic spreading and cutting system They also simultaneously improve their management and working process to reduce wastes and increase labor productivity. They emphasize on improving production by

applying productivity-enhancing software IEES and CLEAN OFFICE, EDOCMAN across the company. Since they first applied lean production model (lean), Garment Company 10's productivity has increased by 52%; their defective products has reduced by 8%, working hours by 1 hour/day, and production costs by 5-10%/year while employees' income has increased by over 10%. Accordingly, the company manages data for each phase of work, assigns the work and integrates tasks appropriately.

Furthermore, many textile and garment enterprises invest in and widen their factories. The projects to increase autonomy in production from spinning, weaving to dyeing have set a long term and sustainable direction for Vietnamese textile and garment industry to integrate into the global textile and garment industrial value chain.

- *Emphasizing on building and consolidating quality standards system to conform to international standards*

A large number of textile and garment enterprises such as Viet Tien Garment Company, Phong Phu Textile Company, Garment Company 10, Textile joint stock company 10/10, Saigon wool and trading corporation, Saigon 3 Garment Joint Stock Company, Vietnam Sacvi Company, Nha Be Garment Company, Hung Yen Garment Company, Thanh Cong Textile Garment Company, Ha Noi Textile Garment Company, etc., adopt advanced quality management system ISO 9001:2000; environment management ISO 14001; inner management; process control, material changes, equipment improvement and new technology in production. In that way, enterprises have management systems that are well-designed, cost-effective, material saving as well as can minimize waste released into the environment, help to ensure effective and environment friendly production, better match the standards and technical requirements of the importers and improve the effectiveness of production and exports.

**Beside investment in factories, production widening, some textile and garment enterprises continue to develop their partnership and exploit new markets.*

Large enterprises are extensively investing in market enhancement, research on new markets, trademark building, new technology, and product design and development. For example, Dong Tien Joint Stock Company not only sustains their traditional customers but also taps into new markets with specific products of less severe competition such as ski wear, T-shirt, underwear, etc. Thanh Cong Garment Company with great support from their big shareholder E-Land, is active in exploiting new markets and focuses on first class clothing. The company started producing high quality clothing to export to Japan. At present, the company supplies a big Japanese textile and garment enterprise namely Nomura Trading with 25% their clothing demand. The design and production of this type of clothing requires advanced technology, especially the ability to combine high quality yarns in different ways, therefore, the profit from exporting it to Japan is quite considerable, about 25%. In this way, the company can take full use of their technology and be prepared to enter higher value added phases in the value chain of textile and garment production.

- *Priority for trademark development*

Enterprises concentrate on building and consolidating their trademark and pay great attention to labeling the products. Enterprises with well-known trademarks prove that they

are prestigious ones and their products must overcome economic barriers as well as high demand of customers.

For Viet Tien Company, such products as Viet Tien, Vee Sendy, T-up, Vie Laross are all registered for trademark protection in potential markets. The company has also built up good reputation in the ASEAN markets and are promoting the trademark registration in European countries as well as together with Lawyer Association of Hanoi try to prevent fake goods that would severely affect the company's trademark. Besides preventing methods, the company especially pays attention to increase their advanced equipment and technology to produce distinct products by creating quality and technical features that meet ISO 9001-2000 thanks to the most updated equipment to ensure the high accuracy along the clothing dimension, create straight, even and strong seams for the products ... and create appearance features: only bear the trademark of "Viettien" shown on the package, main label and hangtags of the products. Plastic buttons are engraved with the letters "Viettien" or "Vtec". Premium products have anti-counterfeiting features that are easily recognizable.

Garment Company 10 spends 3% their revenue on trademark promotion and development. The company registered for trademark copyright in 1992 and now has the marketing department specialized in market research and promotion, labels "anti-counterfeiting stamps" on the token and put "anti-counterfeiting yarns" into the main textile of the products. These are effective ways to protect consumers.

The company has built up standards, registered and declared the requirements for each product as well as committed that the products meet the set requirements; standardized their image from units to agents, logo, trademark, and other publications.

* Many big textile and garment enterprises have their interests closely associated with the importers', which is one of the measures taken by Vietnamese enterprises to minimize the effects of economic barriers posed on foreign textile and garment enterprises by the import nations. Vietnamese enterprises have cooperated with enterprises from the US, EU and Japan in production and distribution of textile and garment products, which helps them to avoid some barriers. For instance, Group 28 (Agtex) together with a leading wool maker of Japan invested in building factories in Vietnam. Saigon garment company (Garmex) has opened branches in the US for the direct distribution of goods in this market.

* *Determined to be more active in material finding*

Enterprises have proposed strategies to advance in the textile and garment value chain. Phong Phu Corporation declared an investment of 1,000 billion VND/year to improve their production and the ability to supply material sources for the textile and garment industry in which the project of widen the knitwear production assembly line in Nha Trang costs 400 billion VND and the project of denim production of about 860 billion VND in Le Minh Xuan. In 2015-2016, Phong Phu Corporation will invest in a spinning line of 20,000 production spots with the estimated productivity of 3,200 tons a year and a spinning factory with 20,000 spots exclusively for premium knitwear.

Thien Nam company also cooperates with a Hongkong partner to invest 75 million USD in building a yarn factory of 30,000 spots in the North to produce premium yarns for exports.

Gia Dinh textile and garment Corporation is constructing a yarn producing factory of 40,000 spots with 400 billion VND invested in Tan Tao Industrial Park.

In summary, to meet TBT of import markets, many textile and garment enterprises have actively transformed and modernized their equipment, diversified their products and improved the product quality. However, this process requires a large amount of capital as well as a highly qualified labor force, which poses difficulties for small and medium sized enterprises.

2.2.3. Footwear industry

- Vietnam's footwear exports

Footwear is one of the major Vietnamese exports with an increasing turnover. In 2013, it reached 8,400.6 million USD, making up 6.4% the total export turnover of the country. Vietnam is now one of the ten leading footwear exporters in the world.

Japan and South Korea are the two biggest footwear importers. (see appendix...) Vietnam's exports of footwear and handbags into Japan increase in both turnover and proportion in comparison with the total imports of this market. In 2012 and 2013, Vietnam was second only to China in terms of export turnover into Japanese market.

Table 16: Leather, footwear and handbag exports to Japan

Year	2012	2013
Vietnam's Export turnover to Japan (Unit: 1000 JPY)		
- Leather	50,049	73,311
- Footwear	36,135,623	46,923,626
- handbags	20,200,381	31,892,472
The proportion in relation to the total imports of Japan		
- Leather	0.2	0,2
- Footwear	7,7	8,1
- handbags	4	5,6
Ranking among big exporters to Japan		
- Leather	9	9
- Footwear	2	2
- handbags	4	4

Source: Japan Customs

However, the development of Vietnam's footwear industry remains unsustainable.

- Main form of export:

Similar to textile products, footwear products of Vietnam are mainly exported under the form of processing, which results in low added values. The CEO of Lien Phat Co.,Ltd (Binh Duong) specializing in processing female shoes to the order of large foreign brands such as Bata, and Oliver, etc. says, the price of processing only accounts for 10% of retail price and only 2-2.5% for some products. According to Vietnam Leather, Footwear and Handbag Association (Lefasco), currently, most exported products of Vietnam are not labeled with Vietnamese brand names because they are processed to the orders of foreigners and over

70% of exports are in the form of processing activities by domestic enterprises. In terms of footwear, according to President of Lefasco Nguyen Duc Thuan, the cost of materials often takes up 50%-60 % FOB price while only 50% of materials are bought from domestic enterprises and the remaining material needs are met by importing.

- Commonly faced technical barriers to trade

It is a fact that the export turnover of Vietnam's footwear to Japan and Korea are less than EU and Japan often imposes tougher requirements than EU. However, in EU market, Vietnam's enterprises, especially small and medium sized ones face numerous difficulties meeting the technical requirements. It is the result of a survey with 130 small and medium sized enterprises conducted by the Academy of Garments, Textiles and Fashion, Hanoi University of Science and Technology on Vietnam's footwear enterprises. Currently there are about 800 enterprises in leather and footwear industry and out of that, 70% are small and medium sized.

According to the survey, some problems in technical barriers to trade commonly faced by Vietnam's enterprises are as followed:

* *Lack of information and thorough understanding about private and legal standards of the import markets*, especially, the lack of safety standards of the products (the standard that shows the safety degree when the products are manufactured and consumed), the ecology standards (the figure revealing to which degree the manufacture and consumption of a product will affect the environment), etc. The ecology safety standard is proved unfamiliar to the enterprises that traditionally serve the domestic market. The survey reveals that the percentage of enterprises that pays little attention to the ecology safety is rather high and most of them manufacture materials and footwear for the domestic market.

This is partly because the enterprises do not have any concerns or they lack resources to thoroughly learn about the systems of standards for this industry. The reason also lies in that no management bodies systematically provide and update the standards of import markets.

* *High cost of quality evaluation and control leading to high cost*: The fact that Vietnam does not have any established brand names and Vietnam's certificates are not globally recognized increases high cost of export because of repeated revaluation. Vietnam's leather does not set any safety standards (the standards of chemicals available in a product), which leads to the failure to control the quality of imported materials. Enterprises themselves have to check the quality of materials and control the quality of their outputs. Ms. Nguyen Bich Thuy-Representative of the state-owned Thuong Dinh Shoes Co.,Ltd-says, depending on each orders, the company has to have sample checked and sometimes the sample products are required to send to Germany to be checked. In case the sample does not meet the requirements, it is compulsory to change materials. According to Ladoda Company, the annual expenditure on product quality check of the company is about 10,000 USD.

* *Being passive in approaching the standards of the industry*: The reality is that a majority of leather and shoe enterprises manufacture and export following CMC models, in which the customer provides designs, materials and documents on instructions and technical requirements. Therefore, the requirements are mostly passively conformed to. According to Ms. Phan Thi Thanh Xuan, Secretary General of Lefasco, 70% of the enterprises in the

industry conduct processing activities for big global brands such as Adidas and Nike, etc, which leads the processing enterprises to the quality conformation following requirements of the import markets. Moreover, enterprises in the industry have no independence in materials and they have to import the materials through recommendations and requirements of their partners.

2.2.4. Agricultural products and processed foods

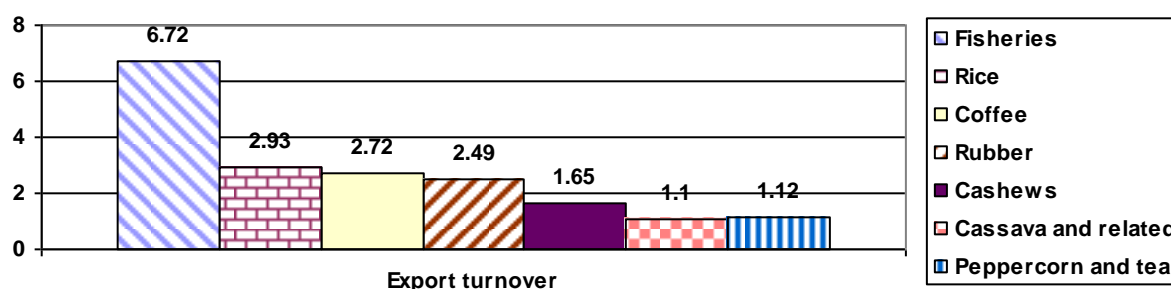
- The export of agricultural products and processed foods of Vietnam

+ Turnover: According to the General Department of Vietnam Customs, the export turnover of agricultural and fishery products in 2013 reached 19.8 billion USD, which was 3.3% decrease in weights and 5.5% in turnover compared to that of 2012. In spite of the decrease, the export of agricultural and fishery products in 2013 still play an important role in the export of Vietnam accounting for 15%.

+ Products: Some agricultural products of Vietnam have high positions on the global market such as cashews, peppercorn, rice, coffee, and tea, etc. Products with export potentials to increase are fresh vegetables and fruits, etc. In 2001, only fishery products reached the point of over 1 billion USD in export turnover. In 2013, Vietnam had 7 products of more than 1 billion USD in turnover with the total export turnover of 18.7 billion USD accounting for 94.6% of the agricultural and fishery export revenue.

Figure 7: Groups of agricultural exports of over 1 billion USD in 2013

Figure in Billion USD



Source: General Department of Vietnam Customs

+ Markets: The number of markets for these products is quickly expanding from 107 in 2008 to 117 in 2010 and to 129 in 2013. China, the USA, Japan and EU are respectively Vietnam's biggest export markets.

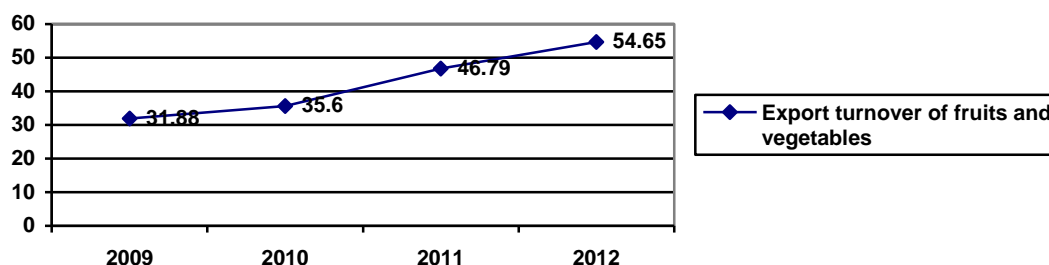
* China serves as the biggest export market for agricultural products of Vietnam. In 2013, the turnover of export of agricultural and fishery products to China (including rice) reached 4.14 billion USD, decreasing by 4.7% compared to 2012 accounting for 31.2% in total export turnover of Vietnam to China and 20.9% of total export revenue of Vietnam to the global market. Major exports are fisheries, vegetables, cashews, coffee, cassava and cassava related products, rubber and tea, etc.

* The export turnover to Japanese markets in 2013 valued at 1.4 billion USD, a 2.2% increase compared to 2012. Major exports to Japan include fisheries (a 2.9% increase), peppercorn (a 30% increase), and vegetables (a 13% increase). Although agricultural and fishery products are considered strengths of Vietnam, the export of this group to Japan remains limited. The export of this kind of product to Japan only took up 1.7% in 2012

compare to 21.3% of Chinese products. The percentage of exporting products from other ASEAN countries were not considerably higher than that of Vietnam. Thai products accounted for 2.7% and Indonesian and Malaysian production took up 3.6 and 3.7% respectively.

Figure 8: Export turnover of vegetables and fruits to Japan

Figure in Million USD



Source: General Department of Vietnam Customs¹⁰

Despite the continuous increase in the export turnover of fruits and vegetables of Vietnam to Japan, its percentage in the total fruit and vegetable import turnover of Japan remains tiny. Compared to Vietnam's export rivals in Japan, products made in Vietnam are only more competitive than those made in Indonesia and Myanmar but are far less competitive than Thai products. The weight of Vietnam's products in the import turnover of Japan for fruits and vegetables only accounts for 0.6-0.9% while the figure ranges from 4.8-5.3% for products imported from Thailand. Moreover, the competitive power and the position of products made in China are quickly increasing.

* Regarding ASEAN countries including Brunei, Indonesia, Malaysia, Singapore, Thailand, Vietnam's enterprises have exported agricultural, forestry and fishery products and via these countries exported to a third country. However, the drawback is that products from Vietnam will face tough competition regarding quality standards and designs and the difficulties in approaching distribution networks.

* South Korea is a big export market for Vietnam. However, it is impossible for a number of agricultural products to enter this market because of numerous barriers. Currently, many products of Vietnam have been exported to South Korea such as coconuts, dragon fruits, mangoes, mangosteens, bananas, guavas, grapefruits, carrots, onions, broccolis, lettuce and Chinese cabbage, etc. Vietnam's foodstuffs exported to South Korea include fisheries, coffee, processed fruits and vegetables, candies and products of cereals, etc.

Regarding fisheries, the products with code HS 030617 has the highest turnover reaching 122.66 million USD, increasing 10.92% compared to the same period of previous year. Vietnam has the largest export turnover of all countries exporting this product to South Korea accounting for 40.2%. Other exporters to this market are China (17.3%), Ecuador (10.8%), and Thailand (9.7%). However, the percentage of products imported from Vietnam in the total import turnover of South Korea only accounted for less than 5%.

¹⁰ <http://lamdong.tbvvn.org/default.asp?action=article&ID=2221&category=207>

+ Form of export: Regarding agricultural products that Vietnam has potentials, Vietnam has not succeeded in building brand names in the market. Therefore, 90% of exports are under the form of raw materials and after processing, foreign firms print their brand names on the package.

Besides, the quality of the agricultural products is high so the target markets are the easy ones such as China and mostly through unofficial channels. According to reports by Vietnam's Food Association (VFA), by June 2014, its member enterprises have exported approximately 3 tons of rice with the value estimated at 1.3 billion USD with FOB price. However, a large amount of rice is exported to China, which does not demand high quality. Similarly, about 80-90% of sweet potatoes and 75% of dragon fruits are exported to China through unofficial channels.

- Common technical standards faced by enterprises and their solutions

Regarding agricultural products and processed foods, TBTs faced by enterprises in major markets involve labeling and packaging. The rest are SPS that will be presented in the following parts. Among the markets, Japan and South Korea are imposing extremely tough quality and safety standards on food sanitation in order to protect public health. Particularly, standards adopted by Japan are similar or even higher than the global standards.

+ Labeling and packaging

* Japan:

Food and foodstuffs sold in Japan, regardless of imported or domestically made ones, are required to be labeled following the Law of Foodstuff Sanitation, JAS Laws, Law of measurement, Laws of Health Promotion, etc. Foodstuffs that do not follow the laws are not sold and even prohibited to be presented as samples. Beside laws listed in the Appendix...: Japan's Regulations of required labeling for foodstuffs, more laws adopted by provinces, cities, and laws on sale products, laws on pharmacy, and laws on special commercial transactions.

General provisions on labels: products exported into Japan must be labeled complying with commercial practices; products which have already been labeled still have to bear labels in Japanese put on easily recognized places. The required information on labels is: product components, food safety, standards regulated by government, warning information, directory information, origins, expired date and other information.¹¹

Box 2 : Japan's packaging standards on imported dragon fruits

Standards on packaging methods and packages for dragon fruits

For packages that have ventilation openings: (1) before packaged, fruits must be wrapped with airy materials (ventilation openings, if any, must have diameter no more than 1.6mm) (2) The ventilation openings must be covered by nets (the vents' diameter must be less than 1.66mm and the same for the followings). (3) Package or papers for wrapping must be totally covered by nets.

Requirements for place of packaging

The place of packaging must meet the following requirements: (1) The contact face of the equipment must have heated steam and have open air such as windows and necessary equipment to prevent the intrusion of mibe bacteria, for example, by using nets (2) It is compulsory to separate the place of packaging dragon fruits after being detoxified. (3) Every year, before using, it is necessary to remove toxics or conduct sterilization if necessary.

¹¹ <http://tiengiang.tbtvn.org/default.asp?action=article&ID=3946&category=2>

Checks on hot steam equipment and place of packaging

Every year, Vietnam's Phytosanitation body and experts for Japan perform checks on hot steam equipment and places of packaging to make sure that all requirements applied to equipment and places of packaging are met. However, if necessary, checks must also be timely conducted during operation.

Based on JAS (Japanese Agricultural Standards)- Laws on suitable standards on agricultural and forestry products, rationalization of production, consumption and usage, labeling and packaging that require manufacturers and sellers to follow all the standards on quality labeling.

Two types of signs:

(1) Signs of passing phytosanitary check for exports: large font sizes are required in order to be easily noticed on the side of the package.

(2) Signs of arrival: **FOR JAPAN**

To have more information, please access: <http://www.maff.go.jp/e/index.html>.

References:

- web: ttnn.com.vn

- Vietnamese standards 7523-2005: Standards on dragon fruits for export

- web: xttm.agroviet.gov.vn

- web: maff.go.jp

Source: <http://rignonfruit.vn/tin-tuc/tieu-chuan-nhap-khau-thanh-long-vao-thi-truong-nhat-ban-12.html>

*** South of Korea:**

Country of origin labeling is required for commercial shipments entering Korea. The Korean Customs Service (KCS) publishes a list of requirements set for the label of country of origin by Harmonized System Code number.

Further labeling and marking requirements for specific products, such as pharmaceutical and food products, are covered by specific regulations from the Korean Government agencies responsible for these items. Korean language labels, except for country of origin markings that must be shown at the time of customs clearance, can be attached locally on products in the bonded area either before or after clearance. The Korea Food & Drug Administration (KFDA) is responsible for setting and enforcing Korean labels for food products other than livestock products. The Ministry of Agriculture and Forestry (MAF) regulates livestock products. The MAF also has its own set of standards for markings for the country of origin labeling on agricultural products. Local importers usually print Korean language labels when the quantity of imports is not large and consult with KCS about where they can be attached to the product.

All imported foods must be labeled in Korean and be clear and easy to read. Stickers can be used and translated into Korean; however, paper pasted on labels must not be easy to peel or cover the original one. On food labels in Korea must include: product name, product type, name and address of the recipient, manufacture date, content (calories), ingredient names and content, composite ingredients, additives, allergens. (Detail information on Appendix ...).

- Package: Japanese and South Korean consumers place a very high importance on packages and packaging. However, the packaging of products made in Vietnam is less competitive than those made in Thailand, China and the USA, etc. That is the reason why South Korea still imports from China instead of Vietnam. Besides, the appearance of soil, hair or leaves in packages is responsible for the return of some shipments.

To compete with other providers of the same products, Vietnam’s enterprises must struggle to lower their prices but at the same time meet the quality requirement of the import partners from Japan. Besides, Vietnam’s manufacturers must have talks with their partners on measures to improve manufacturing conditions, which will help Vietnam’s foodstuffs to overcome barriers to enter the market of Japan.

* Common standards set by China

Labeling/Packaging Requirements: China has a range of labeling and packaging requirements in force that are particularly important for consumer goods. In some cases, goods that do not meet these requirements will be refused entry to China.

Table 17: Main GB on food labeling

GB 10344-2005	General standard for the labeling of prepackaged alcoholic beverage
GB 7718-2004	General standard for the labeling of prepackaged foods
GB 13432-2004	General STANDARD for the labeling of prepackaged foods for special dietary uses
GB 7718-1994	General standard for the labeling of foods
GB 10648 – 1999 Amended 2013	Feed Label Standard

Source: http://www.cn-standard.net/eword/G/79/EDBA31F1_30.shtml

According to the Chinese Law, all of product sold in China must have Chinese language label with relevant information. All food packages must have Chinese labels and these labels must clearly show the types of foods, trademarks, manufacturers’ addresses, countries of origin, components, processing date and expiry date. This provision is applied to packages of domestically produced and imported food.

On October 10, 2013, China's General Administration for Quality Supervision, Inspection and Quarantine (AQSIQ) published amended Feed Label Standard (GB 10648-2013), which will come into effect on July 1, 2014. The Standard was notified to the World Trade Organization on April 10, 2013 as G/TBT/N/CHN/955. Preliminary review of this Standard show some changes were made from the previous version GB 10648-1999, but these changes shall not significantly affect feed trade. The industry of Vietnam is recommended to study this Standard, particularly the main technical changes in this standard compared with GB 10648-1999 in the Forward Part and consult with the China's importers for detailed requirements for feed label.

In April, 2011, AQSIQ released its “Specification for Import and Export of Food Additives Inspection, Quarantine and Supervision (2011 No. 52)” (“Specification”) The Specification, coming in force on July 1, 2011, appears to require other foreign food producers to disclose their proprietary food additive formulas by mandating that food product labels list the precise percentage of each food additive. As a result of this requirement, a competitor would have access to information that it can use to replicate proprietary formulas and compromise an innovator’s legitimate commercial interests. The requirement to disclose product formulas appears to apply only to imported food additives. In addition, China developed and implemented the Specification without notifying the TBT or SPS Committees in advance. As a result, other countries were neither aware of nor provided the opportunity to comment

on the proposed Specification before AQSIQ issued it. Finally, the measure appears to have taken effect in less than six weeks after AQSIQ 's announcement, which did not provide suppliers with adequate time to comply.

* ASEAN countries

Most countries have regulations on food labeling defined in the standard law or food law ...

They are divided into a number of standards, for example:

+ Language in label: This is the standard form of TBT. Besides English, some ASEAN countries have specific requirements for their national language on the label of agricultural and imported foods, such as Indonesia or Cambodia. This increases time and costs for importers.

+ Information in label:

* Indonesia: Labels of food and beverage products must include: brand and product name, country of origin, name and address of importer or manufacturer.

All imported consumer goods must identify: importing agent (label to be affixed after Customs clearance). Information regarding product safety, care, and content is also required. Labeling requirements issued by the Ministry of Trade do not allow: claims on effects of product on health, no matter preventative and/or curative; incorrect or misleading information; comparisons to other products; promotion of certain similar products; and any additional information that has not been approved of.

Additional product packaging and/or labeling requirements may apply to particular types of products. Refer to the product-based information herein for the product under consideration of importing or exporting. An exporter should also verify with its prospective importer in the destination country as to requirements for a specific product to be shipped.

* Singapore:

Food pack must have a label showing ingredients in Alphabet, regardless of blending foods, synthetic or flavored; stating clearly net weight; name and address of manufacturer, sales and origin. Description of actual capacity is also exhibited on the label. Food products complying with the set standards must have consistent labels.

Packaging of food described as "enriched", "tonic" ... with the intent that the goods contain vitamins or minerals must specify the amount of vitamins or minerals added per unit of measure.

Special labels are required for foods, pharmaceuticals and animal products such as edible fats and inedible, paints and solvents.

Processed foods and pharmaceuticals have been tested and approved by the Food Control Department of the Ministry of Environment and Health Agency.

* Cambodia: According to Regulation No. 1045 on Cambodian Standard CS 001-2000 related to Labeling of Food Product, there are a lot of mandatory labeling of prepackaged food, such as: The Name of the Food (The name shall indicate the true nature of the food, A name of the product shall be written in bold letter and the size of letter shall be appropriate to the size of paper or surface, which will be written on,...) Trade Mark; List of Ingredients (Except for single ingredient foods, a list of ingredients shall be declared on the label by descending order of ingoing weight (m/m), Volume (v/v) or percentage (%); Net Contents

and Drained Weight; Names and Address; Country of Origin; Lot number of product; Date Marking and Storage Instructions; Instructions for Use

+ Size and images printed on the label:

Singapore: The illustrations of the image must not be misleading to the nature or origin of food.

Malaysia: some images or pictures such as Buddha image or national flag are not allowed to use on the label or brand.

For the Muslim countries: To consume goods having Halal certificate for Muslim community should pay attention to the color of the packaging, and have friendly language (Arabic).

Cambodia: Any information or pictorial device which is important shall be permitted to display on the food labeling, if it is not in conflict with the mandatory requirements of this standard and those relating to claims and deception given in section 3 – General principle. The grade designations are used; they shall be readily understandable and not be misleading or deceptive in any way.

+ Specific products: Rice and Halal products

*** Rice**

A long with India and Thailand, Vietnam is one the biggest rice exporting countries in the world. China is one of the biggest rice customers of Vietnam and their import volume accounts for 1/3 of the total rice export volume of Vietnam. Vietnam’s rice is exported in large quantities to ASEAN countries, especially to the Philippines, Malaysia and Indonesia.

In 2013, Vietnam exported approximately 6.6 million tons of rice, decreasing by 1.4 million tons with the total export turnover of rice decreasing by 2.93 billion USD, a 20.36% decrease in value, which is the least rice value exported in the past 3 years. With this results, Vietnam rank third after India and Thailand on the rank of rice exporting countries. The decline can be put down to high pressure of competition and a decrease in the demands of traditional markets such as Malaysia, the Philippines and Indonesia. Major rice exporting markets of Vietnam in 2013 were China, Malaysia, the Philippines, Singapore, Hong Kong and Ivory Coast.

Table 18: Rice export turnover of Vietnam in 2013

Market \ Items	Amount (thousand tons)	Value (million USD)	Weight (%)		Increase/decrease compared to 2012
			Volume	Value	
Total	6.600	2.930	100	100	Decreasing by 17.76% in volume and by 2036% in value
Major markets					
-China	2,150	901.86	32.57	30.78	Increasing by 3.21% in volume and by 0.38% in value
-Malaysia	465,977	231.43	7.06	7.89	Decreasing by 40% in volume and value
-The Philippines	504,558	225.44	7.65	7.69	Decreasing sharply by more than 50% in volume and value
-Ivory Coast	561,333	228.53	8.50	7.8	Increasing by 17% in volume and by 12.37% in value

<http://www.vietrade.gov.vn/go/3475-xut-nhp-khu-go-vit-nam-mua-v-201314-va-mt-s-d-bao.html>

However, due to the lack of timely changes to meet technical requirements of market, exported volume and value of Vietnam's rice are decreasing. These standards are:

Notation	Standard
Rice standards of Malaysia	MS 225 : 1997 – Technical requirement for milled rice classification
Rice standards of Myanmar	Myanmar's standards- Technical requirement for Myanmar's rice-paddy quality standards- quality characteristics of Myanmar's rice
Rice standards of the Philippines	Requirements for the Philippines' rice – physic-medical properties of grains, ranks and standards of paddy/rice
Rice standards of Thailand	Rice standards of Thailand (B.E.2540)
Indonesia	Standards of asen content

Moreover, ASEAN is a market with multistandards set on rice. Example, Indonesia import 25% broken non-basmati rice, Malaysia and Singapore import 20% broken (non-basmati) rice. This indicates that these are a multiplicity of product standard even among ASEAN countries and it becomes very difficult for exporters to meet individual country demand.

Thus, the standards of rice grain size, milling quality and chalkiness degree are technical barriers reducing the export volumes and prices of rice from Vietnam (see Appendix ...). In 2013, the export situation and consumption of rice in Vietnam faced a lot of difficulties; therefore, Vietnam has dropped to 3rd place after India and Thailand on the table of rice export summary rating. The volume of rice export in Vietnam fell by more than 1 million tons compared with 2012 because of the reduction of import in traditional markets such as Indonesia and Malaysia. Vietnam rice is subjected to fierce competition with Thai rice export items such as fragrant rice, and white rice. Average rice prices have fallen over USD 13/t. Not only does the problem of pesticide residues adversely affect the rice quality of Vietnam. Thailand gives priorities to growing high quality rice such as jasmine rice – the rice of which growing duration lasts about one year and is the most expensive in the USA and Japan while Vietnam often grows rice of low quality and short growth duration. The thing is, Vietnam's agriculture are small and scattered. Unlike developed agricultural or industrial countries, most of Vietnamese farmers still gather their crops by hands or with low efficient machines. Post-gathering technology also remains poor, which adversely affects the rice quality. Agricultural equipment for manufacturing and gathering are backward and it is very difficult for changes to take place.

According to the Ministry of Agriculture of USA, in April 2014, rice prices excluding fragrant rice price and other rice prices, price of white rice with different ratio is main export product of Vietnam as table following. Some types of long-grain and white rice of average quality of Vietnam are sold at lowest price compared to same rice type of Thailand and India. Thus, the imperative requirement for Vietnam is satisfying the standards of markets which will increase their value and ratio of rice import and other agricultural products as well.

* **Halal product:** Halal Certification is common in Brunei, Malaysia, and Indonesia. Halal certification means the product is verified not including Haram components and ensures purity in the production process. This certification is issued for a product or multiple products in a specific business. Halal certification is granted for products made from meat and other food, beverage and nonfood products such as pharmaceuticals, cosmetics and some services.

The requirements for Halal products are very strict: (1) The product does not contain components or materials derived from foods and animals which are inconsistent with Islam; (2) Products must be produced, processed and stored by the equipment, tools and machines which are hygienic and disinfectant in accordance with the religious method of Islam; (3) Products must be preserved, isolated and avoided exposing to the foods opposed to canonical Islam during production, processing, storage and transportation.

Muslim Community has a special laboratory for analysis of and research on the product compositions to check whether the product comprises Haram component or not. Validity period of the certificate is 1 year, and 6 months for 1 monitoring time. Revaluing certificate is done no later than one month before the expiry date. Enterprise certified Halal product can bring products to other markets. Halal certification is an independent and objective process complying with international standards ISO / IEC Guide and ISO / TS 220 003.

In the mentioned standards, the regulations of halal standards is a big obstacle for Vietnam enterprises in accessing markets of Islam in Malaysia, Indonesia and the Philippines, especially meat products and processed agricultural products. According to unofficial statistics, in Vietnam, there are 100 businesses certified Halal, most of them are seafood processing business because the enterprises producing beef and pork products are not certified Halal. The reason lies in the strict regulations about materials, slaughtering processes, processing: for example there are no pork in components, and materials of the product and processing tools for Halal products are not being used to process other products; Halal foods must be slaughtered by Muslims; animals must be slaughtered properly and animals must not have a fang and birds have claws... Especially, alcohol and alcoholic beverages are not certified Halal. ...and many other detailed provisions. Therefore, although Halal product market in ASEAN countries are very large and potential, export turnover of these items of Vietnam is not high.

Material selection is the best challenge for production of Halal goods in Vietnam. Even material suppliers must also commit that all materials supplied are Halal. For example: Many countries over the world develop regulations on alcohol content in Halal products, only Malaysia accepts the level is under 0.05%, the acceptance level in Indonesia is 0.03% ; however, accepted alcohol content must be generated in the fermentation process instead of adding directly into products. Goods certified Halal is mainly seafood (up to 60%), beverage, food packing and other products such as candies, vegetarian foods and medicines.

3. SPS faced by Vietnam's exporters in major markets

3.1 Legislation of SPS in Vietnam's major market

3.1.1 Japan

Japan is always one of the most difficult markets with high quality standards and strict product examination. When importing and doing business in Japan, there is a buying and selling portfolio regulated by law or not. If a product is subject to a law, the relevant procedures also vary by that law. Also, in recent years, Japan has intellectual property rights for most products; therefore, exporters to Japan should be vigilant for the risk of violating these rights.

- *ASEAN-Japan Comprehensive Economic Partnership (AJCEP)* (Chapter 4 - Article 38 to 42) 1/12/2008 takes effect on SPS between Japan and ASEAN countries.
- *Trade Regulation and Quality Labeling*: Japan requires imported products must comply with the provisions of the Food Sanitation Act, Japanese Agricultural Standards Law and Measurement Law.
- *Regulations on Food safety*: In Japan, the Ministry of Health, Labor and Welfare and the Environment Agency are responsible for setting up and testing of the residue.
- *Food Quarantine Regulations*: Japanese government requires water suppliers must comply with the Plant Protection Act, Plant Health Act and Food Sanitation Act. These regulations are enforced by the Plant Protection Department under the Ministry of Agriculture, Forestry and Fisheries (MAFF).
- *Customs declaration*: Before arrival, the exporter must notify the quarantine stations in the importing locations via electronic system by the Ministry of Health and Social Welfare Management in order to reduce the time for experiments in Japan or in the exporting country and the test results will be used for customs declaration.

Table 19: List of basic law applied in import to and sales in Japan

<i>Products</i>	<i>Laws applied in importing to Japan</i>	<i>Laws applied in sales in Japan</i>
Food in general	Food Sanitation Act	Food Sanitation Act, Japanese Agricultural Standards (JAS)
Additives	Plant Protection Act, Food Sanitation Act	Food Sanitation Act, Japanese Agricultural Standards (JAS)
Meat-products, such as hot dog,	Act on Domestic Animal Infectious Diseases Control, Food Sanitation Act	Food Sanitation Act, Japanese Agricultural Standards (JAS)
Alcoholic, beverages	Law of wine tax, Food Sanitation Act, Act on Union of wine tax sector	Law of wine tax, Food Sanitation Act , Act on Union of wine tax sector
Tea, black tea, coffee	Plant Protection Act, Food Sanitation Act	Food Sanitation Act, JAS Law
Rice, flour	Regulation on demand-supply and stable prices of staple food (Food Act), Food Sanitation Act	Food Law, Food Sanitation Act, JAS
Healthy food	Food Sanitation Act	Food Sanitation Act, JAS, Health Enhancement Act
Leather products (shoes, bags, clothing) feather	Washington convention	Trademark Law, Trademark Act

products		
Seeds, tubers	Plant Protection Act, Plant Variety Protection and Seed Act, Foreign Exchange & Foreign Trade Act (Enforcement Ordinance of the Law).	Plant Variety Protection and Seed Act, Law on the protection of wild animals and plants at risk of extinction
Foods for pets	Pet food Safety Act	Pet food Safety Act
Dog, cat, panda, fox, skunk	Rabies Control Law	Rabies Control Law

Source: <http://www.vietrade.gov.vn/en/>

Procedures under the Food Sanitation Act

When importing food in Japan, based on the Food Sanitation Act of Japan, the importer is obliged to send "declaration of imported food" for the quarantine station of the Ministry of Health, Labor and Welfare of Japan. Papers should be submitted together with the list of ingredients and materials that clearly states the additives used and description of production and processing, so the papers should be prepared in advance.

After receiving a "declaration of imports," staff of food hygiene inspection will inspect each item based on declarations (exporter, importer, manufacturer, place of manufacture, raw materials, production methods, use additives (or not), etc.). Considering the import volume and history of violations in the same kinds of imported food, if the inspectors conclude that it is unnecessary to check, they will seal "already declared" and give the importer the evidence of this declaration.

Where inspectors find it necessary to examine the items, the test methods will be decided. Through the test, if the product is fitted as standard, the paper of declaration will be returned to the importer to attach with declarations for imports.

If the food shipment was concluded as a case of violation (under-standard), it is unable to be imported into Japan. The content of violations will be notified by the Quarantine Station of Ministry of Health, Labor and Welfare to the importer and the solution will then obey the instructions of this quarantine station. Goods will be destroyed or returned to the exporting country, or converted for other usage but not eating.

Prior Consultation

In particular, for the quarantine stations with large volumes of imports, The Imported Food Consultation Office is set to perform consultancy tasks before each case of importing. In some cases, though additives permitted for use in foreign countries, they are not allowed to use in Japan. Before conducting the official import procedure, the importer may consult for free whether their food comply with the Food Sanitation Act. Prior consultation is different from prior verification and prior authorization. If importer wishes to have a prior check, they can apply the prior declaration.

Plant Protection Act and Act on Domestic Animal Infectious Diseases Control

Procedure for import of vegetables, fruits, grains is covered by Plant Protection Act; while procedures for the processing products of meat and raw meat, etc., is based on Act on Domestic Animal Infectious Diseases Control. These procedures should be done before the food quarantine.

On the standard parameters of radioactive substances in food

After the breakdown of the nuclear power plant as well as the earthquake-tsunami disaster in Northeastern Japan, Ministry of Health, Labor and Welfare has proposed temporary regulation parameters of radioactive substances in food, at the same time take measures to prevent the food exceeding this parameter from circulating in the market. However, to ensure the food safety and security, in addition to a long term perspective, Ministry has set a new standard parameters taking effect from April 24, 2012.

Table 20. New standard value for radioactive cesium (in vector/kg)

Food	Food in general	Food for infants	Milk	Drink
Standard value	100	50	50	10

- Includes standard parameters of radioactive substances such as strontium and plutonium.
- The duration criteria: the list needs time to prepare such as rice and beef need 6 months, soybean needs 9 months.

Labeling requirements for domestic sale

In Japan, food should be labeled for domestic sale, according to the law, which stipulates that items must be labeled in Japanese in accordance with conditions of laws and the local governments.

Food sold in Japan, whether by imports or domestic production, are also required labeling under the Food Sanitation Act, Japanese Agricultural Standards (JAS), Measurement Law, Health Enhancement Act, etc. Food not labeled in accordance with regulations is prohibited both to sell and to display for selling. Besides laws previously listed, there are cases needing labels in accordance with the practices of provinces, cities, Promotional Product Control Act, Pharmaceutical Law, and Special Commercial Transactions Law.

Law	Subjects of labeling	Items of labeling	Management Agency
Food Sanitation Act	<ul style="list-style-type: none"> - Artificial Butter - Alcoholic beverages - Pure Water - Products made from meat - The type of fish ham, fish and sausages, smoked whale meat - Tofu contains cyanide - Frozen Food - Irradiation, radioactive Food - Thermal pressure sterilization of food canned, packed in containers and packaging. - Eggs - Food in containers and packaging. - Food is genetically modified and foods made from this material. - Health enhancing foods. - Additives 	<ul style="list-style-type: none"> - Name - Time of use or expiration date -List the name and address of the manufacturer (sellers or importers) -Products containing additives -Products containing allergens (specific ingredients such as eggs, milk, wheat, buckwheat, peanut, shrimp, crab) - Methods of preservation -As health enhancing food -As genetically modified foods (soy, corn, potato, sugarcane, rapeseed, cotton bolls, alfalfa, 7 crops of sugar beets and other foods made from these materials). 	Ministry of Health, Labor and Welfare (The Consumer Protection Department is responsible for labeling)

Standardization of agro forestry and legislation optimizing quality labels (JAS), (Standards of quality label)	Fresh and live food	Agricultural Products	- Name - Place of manufacture (if imported goods - country of origin)	Ministry of Agriculture, Forestry, Fisheries (The Consumer Protection Department is responsible for labeling)
		Fisheries	- Name - Place of manufacture (if imported goods - country of origin) - Defrost - Aquaculture	
		Household animals	- Name - Place of manufacture (if imported goods - country of origin)	
Standardization of agro forestry and legislation optimizing quality labels (JAS), (Standards of quality label)	Processing food		- Product name and materials - Country of manufacture - Net Weight - Time of use or expiration date - Production method - Name, or trade name and address of the manufacturer.	
	Brown rice	Brown rice White rice	- Product name/ Material brown rice /Net weight. - Date of producing white rice - Name, or trade name and address of the seller	Ministry of Agriculture, Forestry, Fisheries (The Consumer Protection Department is responsible for labeling)
	Agricultural products of gene mutations and products made from these materials (including 32 groups of foods made from soy, corn, potato, rapeseed, cotton bolls, alfalfa, 7 crops of beets, tofu etc.)		- If the product is mutant gene, label must be clearly stated. - If processing food, state the name of the main raw materials	
Measurement Law	Food prescribed by ordinance of the Government (especial food)			Ministry of Economy, Trade and Industry
Health Enhancing Law (Standards of nutritional labels)	Case of labeling of processed foods, nutritional foods containing eggs		- Calo/ Protein/ Lipid - Cacbonhydrad - State respectively sodium and nutrient composition shown	Ministry of Health, Labor and Welfare (The Consumer Protection Department is responsible for labeling)

* In terms of quality labeling standards, label need to based on separate quality labels standards.

Source: Vietrade.gov.vn

There are also some arbitrary labels, which are not compulsory and depending on business, including:

1/ *JAS Labels*: are labels attached on food and forest products that meet the standard specifications of JAS (general specifications of JAS): components, features, product-level, etc.

2/ *Fair competition rules*:

Pursuant to the Law on Promotional Product Labels, in recognition of Fair Trade Committee, the business or business association can issue voluntary rules on items related to the types of promotional gifts or labels of promotional items.

3/ Guided by the Association of Business Sectors.

3.1.2. ASEAN and others (Korea, China)

Thailand

Food safety	Animal Health	Plant Health
<ul style="list-style-type: none"> - Food Ordinance 1963 - Act on Alcoholic Beverage Control - 13/02/2008: - Food Act - 05/08/1979 - Liquor Act (amended) - Liquor Law - 1950/06/2003 include: Making Wine Imports; Alcohol Tax; Use of alcohol and defeat; Liquor, liquor licenses; Miscellaneous; penalties; and Enforcement Act. 	<ul style="list-style-type: none"> - Import and export of goods Act, 1979 - Fisheries Act 1947. - Consumer protection Law B.E. 2522 (1979). - Food Law B.E. 2522 (1979). - Standards exports Act BE 2503 (1960). - Law on drug use B.E. 2510 (1967). - Law to control imports and exports BE 2522 (1979). - Law of the risk of substances B.E. 2535 (1992). - Public Health Law B.E. 2535 (1992). - Law on the Control of animal slaughtering and selling meat BE 2535 (1992). - Law on Animal Disease B.E. 2542 (1999). - Control Animal Food Act BE 2542 (1999). - Law on import and temporary import of animals BE 2544 (2001). - Standards of agricultural commodities Act (2008) - National Commission on foods Act - Pharmaceutical Law No. 5 12/30/1986 - Law on Animal Disease 09/18/1956 	<ul style="list-style-type: none"> - Plant Quarantine Law in Thailand in 1999 and 2007 revisions - Regulations on Plant Quarantine of 2/BE enacted guiding and organizing the quarantine law enforcement - Regulations on imported plant phytosanitation - Catalog of pests subject to plant quarantine in Thailand - List of prohibited items - List of limited items
84 other provisions relating to the production and export - import of food additives, labeling, ...		

Indonesia

Food safety	Animal Health	Plant Health
- Ordinance on the "Food - Products of heaven", No. 7 of	<ul style="list-style-type: none"> - Food Law No. 7 4.11.1996 - Decree No. 265 of the Ministry 	- Quarantine Law of Indonesia 1992

<p>1996.</p> <ul style="list-style-type: none"> - Regulations on Food Labeling and Advertising-National Bureau of Food and Drug Control of Indonesia-1999. - Regulations on Food Safety, Quality and Nutrition and the Blessings of God, No. 28 in 2004. - Regulations and standards for food and agricultural products 9/1/2009. 	<p>of Agriculture concerning quarantine requirements for the importation of live fish in Indonesia</p> <ul style="list-style-type: none"> - Regulations of Commerce Ministry and Ministry of Sea and Fishery No. 64/m-DAG/PER/12/2009 about temporary ban on import of shrimp under a certain number of species in the territory of Indonesia - Decree of the Ministry of Agriculture No. 1977/kpts/PD.620/4/2009 regulate temporary prohibit importing pigs and pork-related products from countries with swine flu into Indonesia territory - Decree of the Minister of Agriculture No. 245/Kpts/LB730/4/90 about quarantine measures on fish exports from the territory of Indonesia - Government Regulation No. 15/2002 concerning fisheries quarantine 	<ul style="list-style-type: none"> - The provisions of the Indonesian government on plant phytosanitary - Decree of Indonesian Ministry of Agriculture No. 38/KPTS/HK.310/1990 about requirements and tasks in relation to the importation of plants and plant products into the territory of Indonesia. - Decree of Indonesian Ministry of Agriculture No. 796/KPTS/TP.830/1984 about requirements for plant quarantine for imported Packaging with plant-origin ingredients - Regulation No. 37/KPTS/HK.060/2006 of Ministry of Agriculture on technical requirements for phytosanitary for import of fresh vegetables into Indonesia - Regulations of the Ministry of Agriculture Indonesia 18/OT.160/2006 on the implementation of plant phytosanitary outside import-export place
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Malaysia

Food safety	Animal Health	Plant Health
<ul style="list-style-type: none"> - Organically Produced Food. - Food Act 1983. - Food Regulation 1985. - Food Hygiene Regulations 2009, PU (A) 095/2009 - Pacific Food System Outlook 2002-2003. - Malaysia Food and Agricultural Import Regulation and Standards Narrative. - Food Safety Legislation in Malaysia. - Guide to Nutrition Labeling and Claims (as April 2006). - Summaries the general requirement and standards and food and agricultural imports into Malaysia. - Law of Malaysia Act 368, Sale 	<ul style="list-style-type: none"> - Animal Act (amended) 4/30/1953 3/16/2006 b) Law of Fisheries (amended) 1/1/2006 05/22/1985 c) Provisions on import of hatched eggs in Malaysia d) Provisions on imported rabbits in Malaysia e) Conditions of imported beef, sheep, deer 8/26/1992 f) Food Regulations 1985 g) Law slaughterhouse No.597 (1993) h) Provisions on Food (Amended) 2005 i) Regulation on modified food 04/19/2004 	<ul style="list-style-type: none"> - List of Quarantine Pest - Malaysia Plant Quarantine Act - Plant Quarantine Regulation 1981 - Malaysia Agricultural pests and noxious plants regulation - Permit to import plants, planting materials, plant products, ... into Malaysia

of Drug Act 1952 (Revised 1989).		
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Singapore

The production, import and sale of food products in Singapore are governed by the board of the Food Act 2002 and Food Regulations 2006, under the management of National Agency for food safety, of the Food and Agriculture Products and Veterinary Authority of Singapore (AVA). Agency for Veterinary and Agricultural Food (AVA) of Singapore is a national authority on food safety for both primary products and processed foods. AVA ensures the safety of all foods before the time of production to retail. AVA complies to risk analysis based on science and the methods of management based on international standards to assess and ensure food safety.

Food safety	Animal Health	Plant Health
<ul style="list-style-type: none"> - Agri-Food and veterinary Authority Act (Chapter 5). 15/12/2004. - Sale of Food Act (Chapter 283) - Sale of Food Act (Chapter 283, Section 50(3)). Sale of Food (Composition of Offences) Regulations. 29/2/2004. - Sale of Food Act (Chapter 283, Section 56(1)). Sale of Food (Food Establishments) Regulations. 29/2/2004. - Sale of Food Act (Chapter 283, Section 56(1)). Sale of Food (Prohibition of Chewing Gum) Regulations. 31/12/2004. - Sale of Food Act (Chapter 283, Section 56(1)). Sale of Food (Fees) - Regulations. 01/8/2006. 	<ul style="list-style-type: none"> - Fisheries Act 1969 (Chapter 111) as amended in 2002 - Rule of Animals and Birds (Quarantine) 10.10.1988 - Law of horned animals (chapter 34), 1965 as amended 04/04/2002 - Law on offices of veterinary and feed 04/01/2000 - Feed Law (Chapter 105) as amended in 1966 2000 - Law No.12 on trading in food in 1973 (Chapter 283) amended 11/30/2001 - Act No.5 of fish and fresh meat products in 1999 (Chapter 349A) revised 2000 - Order of Animals and Birds (import) 1966 - Rule of animals and birds (Department of bird diseases for poultry no commercial purpose) 7/9/2006 - Rules of clean meat and fish (import, export and transport) 09/10/1999. 	<ul style="list-style-type: none"> - Control of Plants Act - Plant Cultivation, licensing and certification Rules - Import and Transshipment of Fresh Fruits and Vegetables - Phytosanitary Certification Rules - Plant Importation Rules 01122007

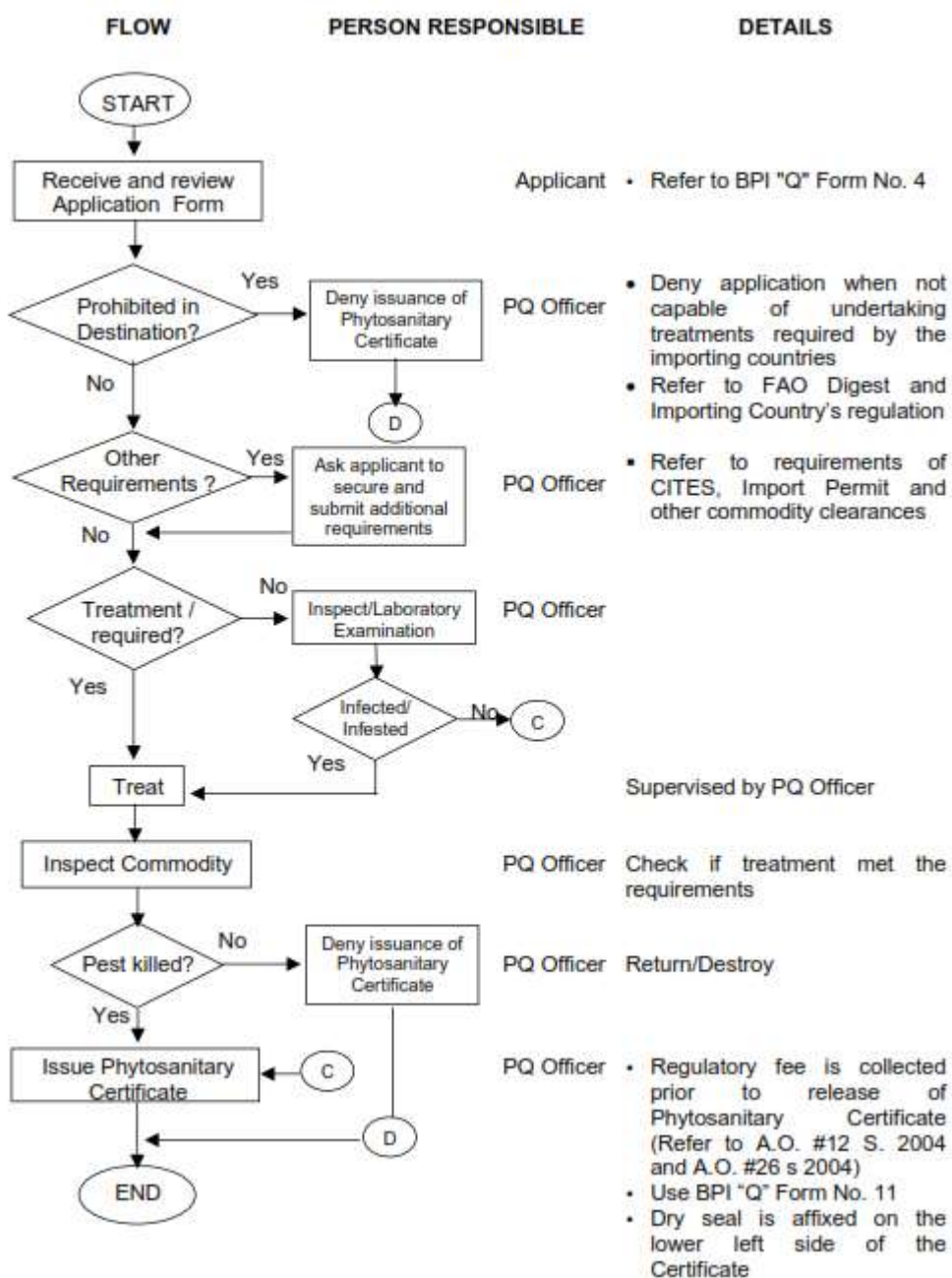
Philippines

Food safety	Animal Health	Plant Health
<ul style="list-style-type: none"> - An Act Establishing the Philippine Food Fortification Program and for other purposes. Republic Act No 8976, November 7, 2000. - Summaries the general requirement and standards and 	<ul style="list-style-type: none"> - Law on inspection of meat products. No. 9296, 05.12.2004 - Law of veterinary medicine No. 9268, 19.3.2004 2004 - Fisheries Law No. 8550 05/16/1998 - Implementing rules and 	<ul style="list-style-type: none"> - Philippines Plant Quarantine Law - Inspection of Imported Plant – plant products - Issuance of Import Permit - Issuance of Phytosanitary Certificate

<p>food and agricultural imports into Philippine.</p> <p>- An act to ensure the safety and purity of foods, drugs, and cosmetics being made available to the public by creating the food and drug administration, which shall administer and enforce the laws pertaining thereto.</p>	<p>regulations of the 1998 Fisheries Law (Administrative Order No. 3, 1998 of the Ministry of Agriculture</p> <p>- Animal Welfare Act No. 8485 dated 15.02.1998</p> <p>- Rabies Act 2007 No. 9482 dated 25/5/2007</p> <p>- The Philippine Food Fortification Act 2000</p>	
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According to Issuance of Phytosanitary Certificate of Philippines, there is a procedure that exporters to Philippines must follow:

Figure 9: Issuance of phytosanitary certificate - Flow process (procedural details)



Source: <http://www.spsvietnam.gov.vn/Doitacthuongmai/BVTV/Philipin.aspx>

3.2. SPS frequently faced by Vietnam's exporters in major markets with main exporting-products and bussiness's measures

3.2.1. Vietnam's main SPS-sensitive export commodities and trading partners

According to the data from the General Department of Vietnam Customs, there are 22 commodity groups achieving export value of over 1 billion USD in 2013. Among them, the most likely to be influenced by SPS regulations are agricultural products. Agricultural products play an important role in Vietnam's export sector with collective export share of main commodities reaching over 14% of the total export. In this group, fisheries are exported most with value of 6.69 billion USD, equivalent to 5.1% of the total export (Table 1). The main trading partners of Vietnam in fisheries include the US (21.8%), EU (17.1%), Japan (16.6%), Korea (7.6%), China (6.3%) and ASEAN (5.7%)¹². Rice and coffee each account for a little above 2% of total export. While rice is mainly exported to China (30.8%), ASEAN (24.6%), Ivory Coast (7.8%), the main trading partners of Vietnam's coffee exporters remain the U.S, EU and Japan¹³. Regarding to cashew nut, the US, China and EU are the largest importers. Meanwhile, China is the largest importers of both manioc and manioc products (nearly 90%) and fruit and vegetable (about 30%). China, Japan and the US are top three fruit and vegetable buyers of Vietnam.

Table 21: Vietnam's exports by main commodity groups, 2013

No.	Main exports	Value (bil. US\$)	Share in total EX. (%)
1	Telephones, mobile phones and parts thereof	21.24	16.1
2	Textiles and garments	17.93	13.6
3	Computers, electrical products, spare-parts and components thereof	10.60	8.0
4	Foot-wear	8.40	6.4
5	Crude oil	7.24	5.5
6	Fishery products	6.69	5.1
7	Machine, equipment, tools and instruments	6.02	4.6
8	Wood and wooden products	5.59	4.2
9	Other means of transportation, parts and accessories thereof	4.96	3.8
10	Rice	2.92	2.2
11	Coffee	2.72	2.1
12	Rubber	2.49	1.9
13	Yarn	2.15	1.6
14	Handbags, purses, suit-cases, headgear and umbrellas	1.93	1.5
15	Plastic products	7.82	1.4
16	Iron and steel	1.78	1.3
17	Cashew nut	1.64	1.2

¹² Data from the General department of Vietnam Customs

¹³ Data from the General department of Vietnam Customs

18	Still image, video cameras and parts thereof	1.62	1.2
19	Iron and steel products	1.57	1.2
20	Petroleum products	1.25	0.9
21	Manioc and manioc products	1.10	0.8
22	Fruit and vegetables	1.07	0.8

Source: General department of Vietnam Customs (2014), *Customs Handbook on International Merchandise Trade Statistics of Vietnam 2013*

It can be clearly seen that the US, EU, Japan, Korea, China and ASEAN are the main trading partners of Vietnam's agricultural products. Among these markets, the first three are often regarded as the most difficult ones with very stringent SPS regulations. The study of Ngoc Thuy Ho, Ha Ngoc Huyen, Ngan Kim Vu (2013) also supports this argument. In their study, 252 out of 314 exporting enterprises interviewed said that they had faced import measures, most of which came from EU, the US and Japan. And agricultural products are always on the top of products facing SPS and other regulations in every market in the survey.

3.2.2. SPS-related rejections of Vietnam's export in major trading partners

To see how hard and what type of import regulations a country's exporters have to deal with, it is helpful to analyze rejections of this country's export in importing countries. Data provided by the US, EU, and Japan all indicate relatively high incidents of rejections of Vietnamese agricultural food products. During 2002-2010, there were 3,443 times Vietnam's agricultural product consignments rejected in United States and 613 times in EU. Meanwhile, in a shorter period of time from 2006 to 2010, the Japanese market recorded 563 cases in which Vietnam's agricultural products did not meet the SPS requirements. During the above periods, Vietnam ranked 3rd in Japan, 9th in EU and 6th in the US among the countries with most frequent agricultural food import rejections (Table 2).

Table 22: Number of Vietnam's rejected agricultural products consignments in major markets, 2002-2010

Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002-2010	Vietnam's rank
US	428	333	478	350	315	379	464	358	338	3443	6
EU	67	35	55	124	68	44	54	96	70	613	9
Japan	-	-	-	-	130	165	74	77	117	563	3

Source: UNIDO dataset, based on EU RASFF, US OASIS, and Japanese MHLW data

Beside the number of rejections, rejections per US\$ billion of imports is also a good indicator to see how difficult exporters can access a foreign market. In 2010, the rejections per US\$ billion of agricultural products imports from Vietnam were 181, 27 and 111 in United States, EU and Japan, respectively¹⁴. It appears that the US is the hardest importing partners in terms of both absolute and comparative indicators. Meanwhile, among the most difficult customers, EU seems to be a less difficult one for Vietnam's agricultural products exporters.

Table 23 shows the reasons for import rejections of Vietnam's agricultural product across the three main markets. There were a wide range of reasons and reason frequency varied in

¹⁴ UNIDO (2013)

different markets. While in the US, labeling and adulteration/missing documentation are two of the biggest problems for Vietnam's exporters (21.6% and 10.6%, respectively); there was no rejection at all in Japan and only a minor share of rejections relating to these reasons in EU (0.3% and 2.5%, respectively). Similarly, non-compliance with hygienic condition/controls results in significant level of rejections in the US (25.4%) while it accounts for only about 4% in the other two markets. In contrast, veterinary drugs residues is the most prominent reason for rejections in Japan and EU, making up of 52.8% and 27.3%, respectively, of the total rejection of agricultural product imports from Vietnam. Pesticide residue is also a relatively regular reason for rejection in Japan (8.9%). The US only makes very few rejections due to these causes. Moreover, non-compliance of heavy metals requirements makes up nearly 10% of rejected cases in EU while no cases rejected in Japan and the US. However, beside many differences, bacterial contamination is the common reason for rejection across the three markets with the share of it all above 20%. The high incidence of rejections in relation with veterinary drugs residues, bacterial contamination and pesticide residues refers to the non-compliance issues at the farming stage of the value chain.

Table 23: Reasons for import rejections of Vietnam's agricultural products exports in major markets, the share of rejection reasons (%)

	US (2002-2010)	EU (2002-2010)	Japan (2006-2010)
Mycotoxins	0.7	3.2	1.2
Additives	8.7	10.8	5.7
Bacterial contamination	23.6	23.4	25.8
Veterinary drugs residues	3.8	27.3	52.8
Pesticide residues	0.4	2.1	8.9
Other contaminants	4.6	9.1	0.2
Heavy metals	0.0	8.4	0.0
Adulteration/missing documentation	10.6	2.5	0.0
Hygienic condition/controls	25.4	3.9	4.1
Other microbiological contaminants	N/A	4.8	0.0
Labeling	21.6	0.3	0.0
Packing	0.0	0.6	0.4
Others	0.5	3.7	1.1

Source: UNIDO dataset, based on EU RASFF, US OASIS, and Japanese MHLW data

In all three major markets, fishery products are always the subject to be rejected most frequently. In EU and US over the period 2002-2010, fishery products account for about 70% of all rejections¹⁵. Meanwhile, the share of rejection of these products was even higher in Japan with a proposition of 82% during 2006-2010. Fruits and vegetables ranked second with a rate of only 6% of the total rejections (Table 26).

Table 24: Agricultural product groups of Vietnam's exports rejected in Japan,

¹⁵ Tran Viet Cuong, Nguyen Thi Hong Mai, Nguyen Quang Hieu, Nguyen Thi Thu Phuong, Spencer Henson (2013)

2006-2010

	2006	2007	2008	2009	2010
Fishery products	117	147	60	57	83
Fruits and vegetables	5	5	5	8	11
Nuts and seeds	2	1	0	0	0
Herbs and spices	2	1	0	0	2
Others	4	8	5	1	2
Total	130	165	74	77	117

Source: UNIDO dataset, based on Japanese MHLW data

Table 27 indicates that Vietnam's fishery exports were rejected for various reasons. In the United States, bacterial contamination, hygienic conditions and labeling seem to be major problems. In the EU market, veterinary drug residues, bacterial contamination, and heavy metals pose difficulties for Vietnam's exporters. In Japan, veterinary drug residues, bacterial contamination are also big challenges for imports from Viet Nam. .

Table 25: Reasons for import rejections of Vietnam's fishery products in major markets

	US (2002-2010)	EU (2002-2010)	Japan (2006-2010)
Mycotoxins	-	0	7
Additives	120	33	32
Bacterial contamination	961	127	145
Veterinary drugs residues	170	172	297
Pesticide residues	0	4	50
Other contaminants	209	24	1
Heavy metals	0	61	0
Adulteration/missing documentation	103	7	0
Hygienic condition/controls	981	20	23
Other microbiological contaminants	-	26	0
Labeling	349	2	0
Packing	0	2	2
Others	21	6	6

Source: UNIDO dataset, based on EU RASFF, US OASIS, and Japanese MHLW data

We can see that in different markets, fishery products' exporters do not face the same challenges. This is probably because of different product groups exported to each market and specific regulations of each one. It is hard to say whether the rejections legitimate and reasonable or not because there is no official recording of SPS-related disputes among Vietnam (as an exporting country) and its trading partners. Until now, most of disputes cases settled by WTO involve antidumping. A small number of disputes relating to SPS measures are mainly among developed countries. For example, Canada and U.S complaint against Australia's import restrictions on fresh, chilled or frozen salmon; U.S complaint against EU ban on meat treated with growth-promoting hormones; US complaint against Japan's "varietal testing" requirement for fresh fruits, etc. As Vietnam has not complaint against any country's SPS regulations yet, we cannot tell exactly if Vietnam's exporters find the

regulations reasonable or not (Even if they are not satisfied with such regulations, significant compliance costs may prevent them from action). It is only clear that Vietnam's exporters have to face more SPS measures and these measures tend to be more stringent with more types of antibiotics and chemicals banned or restricted. However, beside external reasons, it is Vietnam's weak SPS management throughout all stages of the value chain of fishery products that contribute a lot to the high incidence of import rejections. Poor control at farming stage results to problems of veterinary drugs, pesticide residues, bacterial and other contaminants. Unqualified management in production process is the cause of heavy metal detection. Labeling issues often happen in the last step. Meanwhile, problem in relation with hygienic conditions may occur in any stage of the supply chain. To reduce the import rejections, therefore integrated solutions should be built to ensure good control and management in all stages of the value chain.

Specific cases of SPS-related rejection in major trading partners

The previous part has provided an overview of SPS regulations regularly faced by Vietnam's agricultural products exporters. In this part, specific cases in each major market will be presented. It would be helpful for exporters of specific products to specific market to avoid rejections.

Japan

In 2012, Vietnam had four items subject to Japan's enhanced monitoring inspection, including cultured shrimp, immature peas, tilapia, spinach with inspected substances of ethoxyquin, acephate, enrofloxacin and indoxa carb, respectively. Among these four items, cultured shrimp was transferred to inspection order after that. Some foods (limited to manufactures) with inspected cyclamic acid were immediately transferred to inspection order.

Japan's report on violation in 2012 has listed 99 violation cases from Vietnam's exports, as following:

Table 26: Violations of Vietnam's export in Japan by type, item and reason, 2012

Type of violation	Item category	Reasons	Cases
Hazardous and Toxic substances and pathogenic microorganisms	Cassava	Cyanide (3)	3
Microbial Criteria	Frozen fresh fish and shellfish for raw consumption	Coliform bacteria(4) , Bacterial count(3)	22
	Frozen food (shrimp)	E.coli(4), Coliform bacteria, Bacterial count	
	Frozen food (vegetable)	Coliform bacteria(3)	
	Boiled octopus	Coliform bacteria, Bacterial count	
	Fish paste products	Coliform bacteria	
	Frozen food (squid)	Bacterial count	
	Frozen food (fish)	Bacterial count	

	Frozen food (marine animals)	Bacterial count	
Residual agricultural chemicals	Shrimp	Trifluralin (2)	2
Additives	Shrimp preparation	Sodium benzoate, Potassium sorbate	9
	Vegetable preparation	Benzoic acid, Sorbic acid	
	Confectionery	Cyclamic acid	
	Health foods	Methyl parahydroxybenzoate	
	Soya sauce	Benzoic acid	
	Instant noodle	Cyclamic acid	
	Seasonings	Cyclamic acid	
Residual Veterinary Drugs	Shrimp	Excess of standard values of Ethoxyquin (20), do not contain enrofloxacin (19), non-detectable of chloramphenicol (11), Furazolidone (as AOZ) (2)	59
	Squid	Non-detectable of Chloramphenicol (6)	
	Tilapia	Do not contain Enrofloxacin	
Others	Rice (4)	Decay, Deterioration, Nasty smell and Fungus Formation	4

Source: Authors' work based on data from Japanese MHLW data, <http://www.mhlw.go.jp/english/topics/importedfoods/12/12-07.html>

Several Vietnamese agricultural products (such as tea, rice, cashew etc...) do not meet the requirements on food safety according to Law on food safety in Japan, therefore, their quantity exported and the export turnover in Japanese market remains modest. For tea industry, based on the consultation with the representative of Vietnam Tea Association, it can be seen that meeting the requirements on food safety is the biggest barrier, especially the problem of pesticide residues. Although Vietnam Ministry of Agriculture and rural Development has introduced the List of legal pesticides used in tea plantations, it has not been applied successfully in localities. The currently used pesticides are mostly of Chinese origin without clear information of manufacturers or manufacturing locations. On the other hand, since Chinese market is willing to import a large amount of low quality products our farmers have not attended to food safety.

Japan is the largest importer of Vietnamese tea. However, this is the market with the strictest requirements, some even higher than those of EU. For example, the limited amount of pepronin in tea according to EU standards is 0.005 mg/kg, while its Japanese counterpart should be 0.002 mg/kg.

Japan is also a large importer of rice in the region; however most Vietnam's rice cannot meet the strict standards of this market. Japan stopped importing Vietnam rice since 2008 after an exceeded amount of pesticide residues was found.

The US

Based on data from the US Food and Drug Administration, from 2011 to 2013 there were totally 1057 cases of import refusals of Vietnam products in the US. Some of the main problems faced by Vietnam agricultural product exports at the border are listed in the below table.

Table 27: The US's import refusals of Vietnam's export by product group, reasons and item, 2011-2013

Product group	Reason of rejection	Item category
Fishery products	Salmonella (A poisonous and deleterious substance which may render it injurious to health)	Non-ictalus fish, Catfish, Perch, Tuna, Shrimp and prawns, Scad, Crab, Snapper, Mahi, Clams, Anchovy, Frog, Barramundi, Eel, Octopus.
	Filthy (Consisting in whole or in part of a filthy, putrid, or decomposed substance or be otherwise unfit for food)	Tuna, Snapper, Mahi, Eel, Pctopus, (slipper) Lobster, Squid, Cuttlefish
	Containing a new animal drug that is unsafe	Non-ictalus fish, Catfish, Shrimp and prawns, Crab, Frog
	Histamine (A poisonous and deleterious substance)	Swordfish, Tuna, Mahi, Fish sauce
	Nitrofurantoin (A food additive that is unsafe)	Non-ictalus fish, Shrimps and prawn
	Insanitary conditions of preparing, manufacturing, processing or packing	Anchovy, Cold smoked fish, Shrimps and prawn
	Labeling	Shrimps and prawn, Crab, Clams, Mahi
	Poisonous or deleterious substance	Swordfish, Crab
Fruits and vegetables	Chloramphenicol (A food additive that is unsafe)	Crab
	Pesticide chemical that is unsafe	Subtropical and tropical fruit, Dragon fruit, Rambutan, Leaf and stem vegetables
	Filthy (Consisting in whole or in part of a filthy, putrid, or decomposed substance or be otherwise unfit for food)	Ginger root, Tamarind, Artichoke, Prickle pear

	Labeling	Leaf and stem vegetables, Artichoke, Dried fruits or paste (e.g. mango, pineapple, papaya, plum, apricot, banana), Ginger root
	Color additive which is unsafe	Ginger root
	Adulteration/ Missing documentation to prove sanitary condition of manufacturing process	Prickle pear
Nuts, nuts products and seeds	Salmonella	Shelled cashew
	Filthy	Shelled cashew
	Labeling	Coffee, coffee ground
Herbs and spices	Salmonella	Pepper
	Filthy	Capsiums
	Pesticide chemical that is unsafe	Spice ground
	A new drug without an approved new drug application	Herbals and boniticals (not tea), Oolong tea, Tea rose hip
	Labeling	Herbals and boniticals (not tea), Tea, Oolong tea, Tea rose hip
Others	Pesticide chemical	Plain rice, Honey
	Salmonella	Instant noodle
	Filthy	Rice vermicelli, Rice sticks
	Color/Food additive that is unsafe	Rice cake, rice flour, flavored candy soft without nuts and fruits, Prepared dry sweet goods mix, Tapioca starch product, Honey
	Labeling	Rice sticks, Honey
	A valuable constituent has been in whole or in part omitted or abstracted from the article/ a substance has been substituted wholly or in part for one or more of the article's ingredients	Honey
	A new animal drug (or conversion product thereof) that is unsafe	Honey

Source: Authors' work based on data from USA FDA

<http://www.fda.gov/forindustry/importprogram/importrefusals/default.htm>

In summary, the paper analyzes SPS requirements regularly faced by Vietnam's agricultural product exporters in the US, EU and Japan. These markets are not only major trading partners of Vietnam but also those applying very stringent SPS regulations. The number of rejection cases and the rate of rejection per US\$ billion of Vietnam are relatively high and as

a result, Vietnam ranks top 10 of the most rejected countries in all of these markets. The reasons of import refusals are various across the three partners. In the US, bacterial contamination, hygienic condition/control, labeling are the most common reasons of import rejections of Vietnam's products. In the EU market, Vietnam's exporters have challenges in meeting standards relating to bacterial contamination, veterinary drugs residues, additive and heavy metal. Meanwhile, in Japan, regulations of veterinary drugs residues, bacterial contamination and pesticide residues are really big problems to Vietnam's exporters. Among agricultural products, fishery products are the most often rejected at the borders of the three countries. The high incidence as well as the most common reasons of rejections also indicates a poor SPS control throughout all stages of the supply chain of Vietnam's agricultural product. Integrated solutions to ensure good control and management in all stages of the value chain, therefore, are required to improve the situation.

South of Korea

Strict regulations of South Korea on phytosanitation remain the major obstacle to the export of agricultural products, especially, fresh fruits, livestock and poultry meat made in Vietnam. For example, some complicated requirements are set for planting procedures, examination, certification, on-spot measures and the risk evaluation often takes too long. (It took the Government of South Korea to complete the risk assessment and allowed importing dragon fruits from Vietnam). Also the ethoxyquin analysis in imported shrimps from Vietnam must have the result of 0.01 ppm, which is the same level set by Japan.

Recently, on September 17th, 2014, the Ministry of Food and Drug Safety of South Korea issued a document No. **G/TBT/N/KOR/526** on the review of food labelling regulations as followed:

- Lengthening the list of food that might cause allergies subject to the requirements on labelling.
- + The former list included (13 kinds): eggs (only eggs of poultries), milk, buckwheat, peanuts, soy beans, wheat, mackerel, crab, shrimp, pork, tomatoes, sulphites (in case end-user products contain over 10mg of SO₂ per kilo)
- + The new list with another 11 kinds added: walnuts, pineal, kiwi, chicken, clams, oysters, abalone, mussels, squid, beef, and sesame seeds.
- + Separating and distinguishing the allergies by requiring a warning box of distinct background color for these items at the end of the list of ingredients
- + Requiring that a general name for the group of allergic substances must be written in brackets or next to the foods that contain these allergic substances.
- Increasing font size for names and ingredients on the main part of the label (Principal Display Panel) (from font 12 and now the font must be no less than 14).
- Eradicating the regulations on labelling for bread and imposing new regulations on labeling for peanuts and products made from beans.¹⁶

Remarks, responses and recommendations of enterprises regarding SPS regulations

- Responding to SPS regulations, enterprises know that they have to make efforts to overcome the strict barriers to enter such markets as Japan and Korea.

¹⁶ <http://tiengiang.tbtvn.org/default.asp?action=article&ID=4022&category=2>

With this spirit, some products such as peppercorn and cashews start to win customers' trust in the Japanese market. After many years of struggle to meet the standards, dragon fruits from Vietnam are now allowed to be imported and consumed in Japan. The export turnover of fruits and vegetables of Vietnam to Japan witnesses a rapid and stable growth of 10-30% annually. According to the statistics by the Ministry of Agriculture and Rural Development, in 2013, the value of exported fruits and vegetables to Japan reached 61.22 million USD and the target set for 2015 is 77 million USD.

Vietnam, one of the leading rice exporting country, only exports a rice volume relevant to 20 million USD in value to Japan, accounting for only 3% of the rice import turnover of Japan. However, it is an encouraging start because after many years of absence, rice from Vietnam now comes back to serve this market mostly because of strict regulations of Japan on food safety and sanitation.

- Standards set for agricultural products for export¹⁷:

Through the consultation with representatives of associations, especially Vietnam Association of Seafood Exporters and Producers (VASEP), it can be concluded that the selection of and guidances on standards set for exported agricultural products to producers are highly important. The Ministry of Agriculture and Rural Development encourages enterprises to follow the orientation known as Vietgap procedures (Good agricultural practices). It is developed by Vietnam and meets requirements and standards in agriculture. However, in many markets, VietGap remains unknown and unrecognized and they require that the products must follow their standards such as GlobalGap, ASC, and BAP, etc.

In reality, according to Dr. Nguyen Huu Dat, Director of Center 2 for Phytosanitation supervision on post-importing products, to export fruits to the USA, the products must be produced following the standards set by the USA and their government bodies in charge will issue an regional code for materials and also the requirements on processing and packaging.

In addition, to export rice to Japan, Vietnam's enterprises must meet over 500 standards set by their national quality control institutions and to Korea, the number of standards is more than 100 (most of them are standards to check pesticide residues)

Moreover, international safety standards such as ASC, GlobalGap and BAP, etc. – Good agriculture practices- are at least equal to those set by Vietnam in VietGap. Therefore, it is a waste of time and resources for enterprises that have already met the international standards now try to lower their practices to meet VietGap.

According to enterprises, it is clear that markets demand products that meet the international standards. Currently GAP (Good Agricultural Practice) is a great challenge to Vietnam's producers for the fact that the current and traditional practices are scattered with many plants failing to meet the standards, the overuse of pesticides, and backward and poor post gathering technology. On the nationwide scale, the number of agricultural products that meet GAP is tiny. Nowadays, Vietnam has adopted more than 325 standards on the quality

¹⁷ <http://www.thesaigontimes.vn/117156/Tieu-chuan-cho-nong-san-Chon-minh-hay-chon-nguoi?.html>

of agricultural products, but only more than 100 of which are consistent with regional and international ones.¹⁸

- To meet increasingly strict and ever-changing regulations of trade partners, the government help is highly important.

Fishery products are one of the main exporting sources of Vietnam. Therefore, although Japan always introduces regulations that can affect shrimp export of Vietnam, the government bodies in charge and the Association always provide help for enterprises. Since 2010, Japan has always been imposing new regulations on shrimps imported from Vietnam:

From October 21, 2010	Japan has decided to conduct Trifluralin check on 100% of imported products from Vietnam	This month, the volume of exported shrimps to Japan fell sharply from the growth of two digits to -1.6%. One month before, the growth of exported volume to Japan was only 2.9% when Japan increases their Trifluralin check frequency from 0 to 30%.
February, 2011	The residues of Enrofloxacin in exported shrimps to Japan exceed the standards.	In March and April 2011, the volume of exported shrimps to Japan fell again and very sharply in 3 following months. On June 9, 2011, Japan officially conducted Enrofloxacin check on 100% imported volume of shrimps from Vietnam
May 18, 2012	Japan suddenly decided to examine Ethoxyquin on 30% of imported volume of shrimps from Vietnam in the situation that shrimps exported from Vietnam to Japan increased considerably from 26% to 50% in 3 consecutive months.	It is said that Japan is developing more barriers to shrimps imported from Vietnam because Ethoxyquin is a common antioxidant substance in animal foods. In Japan, this substance is allowed to be used in food for shrimps with the maximum concentration of 150ppm while Vietnam has to deal with the concentration of 0.01ppm

Source: <http://www.tbtquangtri.org.vn>

According to Mr. Tran Thanh Nam, Deputy General Director of Sai Gon Trade Corporation (Satra), Japan is a good export market for Vietnam's enterprises, but recently, Japan has been increasing its prohibited lists of imported agricultural products. In response, export enterprises of Vietnam based on Japan's standards to select products to export in 2013. However, in 2014, more agricultural products are subject to the regulations of Japan. Therefore, some kinds of products could not be able to be exported.

Fisheries exported to Japan annually face new regulations adopted by Japan. The export of pangasiidae to UAE also faces unstable import policies, new regulations, and temporary import prohibition without quota or prohibition removal without any advanced notice, which pushes enterprises into a passive position.

Therefore, it is vital that government bodies and the related associations provide assistance, instructions and orientation for enterprises and farmers to find solutions and sound responses to each situation in order to maintain and promote fishery export to Japan as well as other markets.

¹⁸ http://www.lmhtxqnam.org.vn/index.php?option=com_content&view=article&id=138&catid=92:bai-vit-v-ktht-htx&Itemid=11

4. General assessment of TBTs, SPS for target markets for the exports of Vietnam

4.1. For SPS

In general, SPS is often applied in developed countries, which are likely to protect their agriculture. These markets always require very high quality standards and strict product examination. This is expressed through the law system applied in importing to and sales in the markets as well as procedures of SPS control.

Information on import rejections shows that Vietnam's exporters face big challenges in meeting standards relating to veterinary drugs residues, bacterial contamination and pesticide residues in Japan. Meanwhile in the U.S, bacterial contamination, hygienic condition/control, labeling are the most common reasons of import rejections of Vietnam's products. In EU, bacterial contamination, veterinary drugs residues, additive and heavy metal are really big problems to Vietnam's exporters. The reasons of import refusals vary across these markets; however, fishery products are the most rejected at the borders of the all three. In contrast, for agricultural products and processed foods which are currently being exported, it is not difficult for Vietnamese producers and exporters to meet the SPS standards of ASEAN countries.

It is notable that SPS regulations relating to all stages of value chain, not only in processing but also farming stage, which is one of shortcomings of Vietnamese farmers and producers. Therefore a comprehensive control on quality from the beginning to the last is required to help Vietnam's exporters overcome challenges from SPS measures.

Moreover, there is still a gap between Vietnam's standard and international standards. At present, Vietnam government encourages manufacturers to apply VietGap standards. However, global importers and consumers prefer Global Gap Standards, BAP Standards, and other commonly accepted international standards. Therefore, Vietnam government and enterprises should pay more attention to apply and follow international standards so that it would be easier for Vietnam products, especially agricultural to penetrate into foreign markets.

4.2. For TBT

+ In fact, the system of ASEAN countries does not set high or numerous standards, and usually follows with ISO standards, while other developed countries like Japan, Korea or China have adopted varied and diversified system of principles and sometimes different from international standards. Most of standards are applied reasonably and continuously. For exported items from Vietnam, barriers related to technical principles are not many; however, it does not have enough technical quality, machinery to meet higher standards.

However, these principles vary among ASEAN countries, which leads to difficulties for Vietnam's exporters and producers because they have to change to meet these standards.

Besides, the Muslim countries, which are large markets, such as Malaysia and Indonesia have other rules and barriers such as Halal standards - this can be interpreted as religious standards, or barriers together with the administrative procedures, anti-dumping laws, etc., which makes it difficult for manufacturers and exporters.

+ Standards in some countries such as Japan, Korea are rather high. Some are the same or even higher than the standards of European markets. Moreover, Japan has introduced

principles based on domestic natural features or separate standards for construction materials (because Japan is often struck by earthquakes). Besides, the number of standards is numerous in comparison with ASEAN countries and increases steadily. This causes difficulties for Vietnam enterprises to access and satisfy the technical standards of South Korea and Japan.

+ China seems to be an easy import marketplace; however, exports from Vietnam into China are mostly through unofficial channels. The volume of qualified exports into this country through official channel when China tightens their standards is not very large. The reason lies in the complicated and detailed system of technical standards of China, which is more specifically demanding than the general system of standards.

5. Impacts of SPSs and TBTs on Vietnam export enterprises and solutions applied

5.1. Positive impacts

- Tight SPS and TBT testing measures will encourage companies to be aware of the importance of controlling the quality of materials and improving the quality of products.

The enforcement to meet TBT and SPS drives enterprises to invest both extensively and intensively, sharpen the competitive edge of Vietnam exports to be imported by this market. Therefore both the Government and enterprises of Vietnam are trying to promote exports, innovate the production, enhance investment in management and increase product quality. In this way, TBT and SPS have encouraged the improvement of competitive edge, quality, image and prestige of Vietnamese exports to not only be exported to Japan, the US and EU but also to other markets in the world.

- Promote changes in perspective.

+ Perspective about product quality: facing the technical barriers posed by import nations forces the Vietnamese exporters to switch from just focusing on the outside of the products to paying more attention to the real quality of the product; from emphasizing only the product quality to emphasizing production and product quality; from prioritizing economic profits to focusing more on balancing economic profits and consumers' interests.

+ Being more active in learning and meeting technical standards

Many Vietnam enterprises have been conscious of the problem: the system must meet the standards of the market in order to survive and develop. Therefore, businesses have proactively closed manufacturing processes to reduce cost, identified their markets and goods, done research on the required procedures and criteria, and invested in technology to fulfill the standards, etc.. The information in the following boxes is typical examples:

Box 3: Experience from Casumina and Ngo Han

Having practical experience, Mr. Nguyen Quoc Anh analyzes: to overcome the technical barriers of the countries, Vietnam enterprises should notice the following key points: goods must meet the quality, technical safety issues (or food hygiene); and environmental protection, etc. To advanced countries, the satisfaction of these standards is not difficult because they have already adopted those standards.

It is vital for us to invest in equipment, learning and production following their technology. No nation forces us to pay for use of their system. The important thing is that businesses need to sound decision to choose the standards of the typical countries to follow so that their

products have great impact on the region and around the world.

For example, in Asia we should learn and research the Japanese standards; in North America we should select the United States, and the EU common standards ... Since Vietnam opened its market, Casumina has built the internal standards compatible with the advanced standards while Vietnam's standards were absent and they also applied for the recognition of their conformity to the standards. Specifically, Casumina has applied 6366-6676 JIS (Japanese) for motorcycle tires since 2000. It is also a prerequisite for the construction of ISO 5721.

To get this result, according to Nguyen Quoc Anh, Casumina has to build a system of laboratories with adequate conditions to learn advanced techniques in the world. Casumina annually spends about 10% -20% on equipment investments; establishes a team in charge of product design in accordance with the international standards.

In addition, Casumina also emphasizes on environmentally friendly products. Thus, products such as motorcycle tires accounts for 45% of market shares, and exports to 25 countries and territories around the world.

Similarly, Mr. Ngo Van Sung, Representative of Ngo Han JSC – a producer of electrical wires – said, wires in VN have had standards such as 4305-92, 6337-1997, 6338 -1997. These standards are based on common standards such as JIS C 3202 and JIS 3204; NEMA MW -1000; and IEC60 317 of International Electric Committee.

These standards do not often differ in the basic elements, but each standard has its own differences, such as size, method and test conditions. These standards are often reviewed when necessary and regularly updated.

Ngo Han possesses these above standards; the majority is updated and purchased via the Internet, with a full range of testing equipment in accordance with the standards. Even some customers order to be delivered sample products to ensure the quality so that it is easy for them to control and inspect accordingly.

Source: <http://tuoitre.vn/Pages/Printview.aspx?ArticleID=104783>

With the change in perception and action, many businesses have achieved great success. For example, in the steel industry, although the overall situation is not sanguine, but a number of businesses in the steel sector have conducted technological innovations, closed processes (invest from upstream), and defined markets and set product ranges, which has sustained growth, for example, in HoaPhat steel, Ton HoaSen, Vinakyoie ... On June 2014, HoaPhat Steel Corporation exported to Australia rolled steel, signed contracts on construction steel with Laos and exported steel billet to Thailand and the Philippines. Products of HoaPhat Steel Corporation is considered to have a stable quality and their delivery time is shorter compared with China and Russia, etc.

Besides the steel business, the textile and garment industry of Vietnam has witnessed a positive change.

- As an exporter, Vietnam can receive technical support from international organizations or importers to improve their capacity to meet and overcome technical barriers

In recent years, thanks to cooperation programs between Vietnam and Japan, difficulties in the mode of production of Vietnamese farmers such as small scale, inconsistent quality, shortage of preservation technique have been partly improved. More specifically, Japan has

helped Vietnam in upgrading training facilities for agricultural officials, sponsoring technique-improving programs for cooperatives of agriculture, cooperatives of fruit crops as well as supporting rice seed proposals, etc. Additionally, some Japanese companies introduced their rice seed to be planted in Vietnam to sell to restaurants or import to markets where Japanese people live. Currently, Support Program for Small and Medium sized enterprises in footwear industry has been implemented with the support from Mutrap.

- Highly demanding markets such as Japan and Korea are competitive environments, on which enterprises have to bring cheaper and better services for consumer applying new technologies, which will help to direct production measures for Vietnam's business and serve as a pressure for domestic companies to reform. Importers strengthen trade barriers to limit imports by enhancing requirements for food safety and applying control system on chemical substance in imported products. Small sized enterprises can hardly meet these requirements of social responsibility posed by importers.

- Improve the ability to negotiate, discuss and settle international disputes. In a positive way, facing problems related to increasing economic barriers in import markets equips managers and export enterprises with precious real experience for them to learn and build up their capacity to deal with and overcome economic barriers.

On the whole, beside challenges, SPS and TBT also bring opportunities for export-country like Vietnam. They serve as "a unified international language for quality standard", and technical measures to protect the domestic consumers.

5.2. Negative impacts and causes

Economic barriers are not risks anymore but they do have great influence on Vietnamese exports. Vietnamese enterprises are facing increasingly strict economic barriers even in the markets of the freest trade such as the US, Japan and EU.

Over-requirements, discrimination or inappropriate regulations of technical methods at present may reduce competition, prevent creativity and trade. Even when technical methods are properly used, companies, especially small and medium sized enterprises, still face great challenges in approaching information related to standards, compliance to different standards and changes of major import markets, especially when technical methods change quickly or technical requirements vary from one market to another.

- Increased costs for exporters and producers

+ *Increased production costs*: If a firm adjusts its production facilities to comply with diverse technical requirements in different markets, production costs per unit are more likely to increase. This put enterprises, particularly small and medium sized enterprises, under difficulties.

+ *Conformity assessment costs*: These costs involve testing, certification or inspection by laboratories or certification bodies. They are usually at the company's expense.

+ *Information costs*: These include the costs of evaluating the technical impact of foreign regulations, translating and disseminating product information, training of experts, etc.

Information costs result from the fact that systems of technical standard of foreign countries are numerous and complicated while Vietnam's enterprises are mainly small and medium-sized and they are not interested in or confused with the application of standards and

technical regulations. Many small businesses do not know how to apply appropriate standards and whether their products have met the standards and market demand or not. So they have to spend time and money to find out about TBT of other countries.

In conclusion the cost of satisfying the technical standards and of conformity assessment is a significant difficulty for Vietnam enterprises.

- Currently, Vietnam's enterprises mainly process goods to export; therefore, primarily they have to passively follow the standards set by customers. Thus, the enterprises can not be proactive to meet the technical standards of the traditional as well as potential markets.

- Moreover, when exporting to a market with moderate technical standards, Vietnam enterprises tend to accept lower standards, which will result in lower returns. They do not find solutions to rationalize their resources or have vision to improve the product standards to satisfy highly demanding markets to gain more profits.

- A number of key export goods are computers, electronic products and components and cell phones and a substantive volume is from FDI enterprises. Their products have already followed a set procedure and adequately met high technical standards; thus they should not face trade barriers related to technical standards. However, to increase the number of export enterprises in electronics in the country, especially the ones that label their products as made in Vietnam, will be a tough challenge. Strong growth in the field of electronics manufacturing is creating opportunities for small companies in the country that provide services or spare parts for large firms.

- Less opportunities of market access for Vietnamese exports

TBTs imposed by other exporting markets, mainly developed countries, do not only make Vietnamese enterprises bear higher costs, but also make Vietnam's exports hardly impossible or in certain case, impossible to enter markets. This is because some countries may set unreasonable TBTs, which are not scientific based. So certain Vietnamese enterprises have modern technology to produce, though, they cannot penetrate into some markets.

Technical barriers in import markets can mislead Vietnamese export direction and make the country's enterprises lose their market segment and then they are forced to find other markets. This may occur when enterprises' competitiveness reduces or the requirements of importers are too high for them. Find new markets may be fine, which shows the enterprises' activeness, but most new markets with lower requirements have increasing but fluctuating demand and also offer lower prices with small orders.

- Unfair treatment to Vietnamese exports compared to those from other countries

According to TBT Agreement, TBT measures must be set based on scientific evidence and applied in a non-discriminatory manner. However, in fact, TBT measures can be applied in a discriminatory manner. For instance, in order to prevent exports of Vietnam but at the same time, put exports of a certain number of countries at a favor, a country may set TBTs so that Vietnam's exports cannot satisfy, but some others can, at the excuse of scientific base. This is known as de facto discrimination.

CONCLUSIONS AND RECOMMENDATIONS

The participation in the WTO in general and the implementation of the TBT Agreement in particular bring challenges and advantages. If Vietnam's goods meet technical barriers, their competitiveness will increase.

Transparency in the implementation of the TBT Agreement actually facilitates Vietnam enterprises to be active in their manufacturing activities, timely adjust or forecast in the research and development activities to develop and introduce commercial products that can satisfy the demands of the market.

Most of the technical measures in import markets are applied consistently, regularly and continuously, so imported goods of all origins must meet these requirements. In principle, for Vietnam enterprises, there are no measures to prevent or avoid but to comply with the set standards.

However, the conformity requires significant changes such as (1) complete export goods, (2) cultivation process, (3) extraction of raw materials, processing, packaging, transporting products.

If enterprises fail to meet the technical requirements, faulty goods may be refused entry. More seriously, in some cases, if the violation appears severe and difficult to control, importing countries can strengthen their measures to control or even ban imports of similar goods from all exporting enterprises of industrial countries involved (though some enterprises do not violate at all).

Such international commitments as TPP Agreement have come to the final rounds of negotiation, which may pose challenges to the exports of Vietnam agricultural products due to the barriers of requirements by the importers. After TPP is signed, the participant nations will enjoy tax incentives but their non-tariff barriers will also be improved. The same will be done to food safety requirements. In such big markets as the US, Japan and etc, these requirements are really high. Thus, Vietnamese agricultural products have to meet these to be exported. Otherwise, they will never be able to tap into any market no matter how open it is. In that case, the advantage brought by TPP would mean nothing. Importantly, TPP contains a very serious provision regarding the copyright of breed and technology, etc. Many TPP negotiating countries have succeeded in following it while Vietnam remains in confusion. If the situation does not improve, both Vietnamese farmers and export enterprises will face difficulties.

Thus, the challenge of fulfilling the technical standards is not small. To do this, Vietnam businesses need to have the support of the government, industry associations and the effort of the businesses itself.

First, the Vietnamese government should:

- work out a plan to construction or support enterprises to equip laboratories. With laboratory and advanced system standards, we build technical barriers to self-defense; prevent the production of low quality goods which can affect Vietnam's reputation.

We should be aware that exporting, especially agricultural products, processed food will always face the risks due to applying the food safety standards of importing countries. The only way to overcome these technical barriers is to issue the industry standards (with the

participation of State-owned management agencies, Associations of industries and Clubs of enterprises). Although the industry standards only have application encouragement quality, traders are also aware of the importance of SPS and TBT. These industry standards are used with the aim at guiding manufacturers in some aspects such as collecting data, training human resources, regional segmentation, managing & controlling quality (shrimp's health, rice, etc), waste management, use of chemicals and pharmaceuticals.

For specific items, such as rice and other agricultural products, standards for those products are obsolete; no longer fit the market needs of the region and the world. Therefore, the State should develop and promulgate technical standards systems intended to improve product quality and consistent market demand; thereby, orient production for agricultural sector and increase added value, increase exports for this item.

Enterprises should not only rely on the loosening of food safety requirements but should require the government to support them in bilateral negotiation intended to create technical cooperation programs to improve the product quality as well as to have agreed commitment on approving the other's food safety investigation results. This is an effective way for Vietnam to meet the food safety requirements.

- Actively comment drafts of regulations on SPS and TBT of other WTO members, particularly members which are Vietnam's main partners and ask them to revise drafts in a reasonable and WTO-consistent manner. According to the SPS and TBT agreements, WTO members have the opportunity to comment and revise before issuance. In Vietnam, the SPS and TBT Offices are in charge of this. So, they should coordinate with relevant government bodies, enterprises and agencies to comment and revise drafts of SPS and TBT regulations of other WTO members to protect Vietnamese exports.

- Involve in disputes concerning SPS and TBT in the WTO when necessary. This involvement includes attending SPS and TBT cases as the third party to have experiences in TBT and SPS cases or taking legal actions concerning SPS and TBT to the WTO. By doing this, Vietnam can make other WTO members understand that Vietnam is aware of SPS and TBT issues and can use the WTO dispute mechanism to protect Vietnamese exports.

- Make more efforts to sign agreements or treaties which harmonize SPS and TBT measures. This is to reduce conformity costs and give Vietnamese exports more opportunities to export to other markets.

- Build comprehensive database on TBT and SPS, including TBT and SPS regulations and drafts of other countries, particularly Vietnam's main partners, experiences to overcome TBT and SPS of other countries, TBT and SPS agreements with other countries etc.

- For specific products:

- + In the long run, authorities must build technical standards for leather products, shoes and establish regulations on the quality, chemical limits and environment protection for shoe makers to apply so that their products can be exported to such strictly regulated markets as the US, EU and Japan.

- + Textile and garment enterprises must build long-term strategies, depend on scale and ability of each company, but general orientation is move from FOB to ODM, even OBM. This is the way to increase product value add and Vietnam enterprise competitiveness.

+ Vietnam must also enact and strengthen the technical standards for steel products and unify their standards with those of other countries in the world in order to avoid any difference in the steel quality among them.¹⁹

Second, trade associations should:

- Research, notify information of regulations, technical standards of export markets for their commodities, guide and support and promote enterprise to adopt principles and technical standards.

Associations of Industries play an important role in encouraging enterprises to adopt food safety standards. These Associations are responsive for monitoring and inspection to prevent a number of businesses for immediate benefits to discredit the industry. Effective operation of Associations will determine the efficiency of production and business prospects of the enterprises, especially the private sector. Due to extremely high information fee, only the exporters which belong to the strong associations and are well-organized can have enough abilities to get confidence of importers. In addition, the production and exporting associations easily collaborate with Governmental institutions to have necessary information for the industry. The most important information types are new policies or international trade negotiations. This is one of the decisive factors of production and business prospects of private enterprises.

- More actively get involves in commenting SPS and TBT drafts of other WTO members

- More cooperate with government agencies in protecting Vietnamese enterprises' interests and benefits concerning SPS and TBT regulations of other countries. For example, more cooperate with government agencies in lawsuits concerning TBT and SPS against other countries

Third, businesses should:

- Pay attention to business practice methods, marketing strategies, packaging design ... focus on improving product quality in the direction of increasing levels of high-tech, because that is the key to unlock the door of success. It is necessary to build images of safe and high quality products, thereby manufacture different products with competitors' ones and overcome limitations in term of cost and trade barriers.

- Obtain information on the national quality standards. Because of implementation of national standards, businesses understand and have basis to meet quality standards of other countries. In addition to the standards of the host country, firms should also note the provisions on technical standards of the private organization. Currently, there are over 40 organizations develop technical standards hinders the export business. To capture market information system standards, particularly in emerging markets, firms should capture through consulting agencies, trade representative of Vietnam in the host country or trade representative.

In addition, the enterprise is to change the thinking and ways of organizing production, reorganize production through building relationship, because when a business is in trouble, community is also affected; control input factor; update requirements of the market because countries changes technical standards frequently; be closely connected with the importer.

¹⁹ <http://www.baothuongmai.com.vn/tong-hop-cac-tieu-chuan-trong-nganh-thep-xay-dung/>

Vietnam is producing agricultural products in a "strong as everyone": not according to the technical process, strict safety standards, unknown provenance, origin ... then most products can only be accepted by the Chinese market which has equivalent production and consumption at a low price. However, it is necessary to give up this habit and thinking that China is consumption market of cheaper and low-quality goods. China is changing its import policy towards improving the quality of the products. Meeting this demand, the goods having origin, source and ensuring food safety, the Vietnam exports to China will be less affected. Vietnam businesses also need to change the trading way with China to professional ways with contracts, invoices and vouchers.

The promulgation of technical standards in the industry need to have the contributions and transparency of enterprises in order to increase abilities to put the policies into practices.

Besides promulgating industry standards, the State should also have the instructions, specific support for farmers, manufacturers in term of problems such as techniques, materials ... to produce products meeting with the standards.

- Cooperate more with associations and state agencies in commenting and revising TBT and SPS drafts of other countries.

- Supervise activities of state agencies concerning TBT and SPS and report to the government about these activities in order to improve accountability of TBT and SPS state agencies.

- Share experiences concerning how to overcome SPS and TBT regulations of other countries, particularly Vietnam's key partners.

- Big companies can invest in building labs to supervise their own products to make sure that their products meet TBT and SPS regulations of other countries while small and medium-sized companies can cooperate to help each other overcome SPS and TBT regulation of other countries.

- To deal with the increasing technical barriers in traditional markets, enterprises should find new markets by themselves. They should make the most of their advantage on production and product delivery and opportunities to increase the exports and diversify the consumption markets.

- For specific products:

- + Steel products:

Enterprises should have good media strategies and build their trade mark in potential markets and actively learn about international regulations to be well prepared and ready for any trade protectionism activity in the import countries.

Most importantly, enterprises need to understand to take advantage of Trans-Pacific Partnership Free Trade Agreement (TPP) as TPP plays an important part in helping Vietnamese enterprises to tap into potential markets such as the US, Canada and Australia.

- + Textile products: Build the chain link

In their new strategy, Vietnam Textile Garment Group – the original key unit for the development and orientation of Vietnam textile industry – has set the basic goal to produce textile products in ODM. It is not only the way to increase added value of Vietnamese textile exports but is also to promote the whole chain of Fiber-Textile-Dying-Garment in the

country and strengthen the connection in this chain in order not to be passive or miss any chance of increasing the income.

They are determined to establish the chain link together with investment into marketing strategy to provide customers with package solutions is a way for Vietnam textile to enter the global supply chain. ODM is now the most effective way for textile enterprises to manage market risks, understand their markets and produce their target products to earn the biggest profits for enterprises. This is a required change for our country's textile industry to stand on the professional stage though there exists quite a number of difficulties

References

1. Ho Thuy Ngoc, Nguyen Ngoc Ha, Vu Kim Ngan (2013), *“Implementation of SPS/TBT agreements - experiences from other countries and lessons for Vietnam”*, SECO / WTI Academic Cooperation Project.
2. Nguyen Thi Lua (2013), *“Technical barriers for export textile and garment products and solution to Vietnam”*, Doctoral Thesis, Vietnam Institute for Trade, Ministry of Industry and Trade.
3. MHLW (Japan's Ministry of Health, Labor and Welfare) (2013), *“Results of Monitoring and Guidance Based on the Imported Foods Monitoring and Guidance Plan for FY 2012”*, available at <http://www.mhlw.go.jp/english/topics/importedfoods/12/12-07.html>, accessed on 30th July 2014
4. Tran Viet Cuong, Nguyen Thi Hong Mai, Nguyen Quang Hieu, Nguyen Thi Thu Phuong, Spencer Henson (2013), *“Using Multi Criteria Decision Analysis to Identify and Prioritise Export-Related Sanitary and Phytosanitary Capacity-Building Options in Vietnam”*, STDF (The Standards and Trade Development Facility) Workshop on Multi Criteria Decision Analysis, WTO, Geneva, 24-25 June 2013.
5. Silja Baller, East Asia PREM, World Bank (2006), *“Technical Barriers to Trade in East Asia, Standards Inventory and Trade Effects from Liberalization”*, World Bank – BFA Workshop, Hainan, China, June 26-27, 2006
6. UNIDO (United Nations Industrial Development Organization) (2013), *“Meeting Standards, Wining Markets, Regional Trade Standards Compliance Report East Asia 2013”*, Vienna: UNIDO.
7. UNIDO (United Nations Industrial Development Organization) (2010), *“Meeting Standards, Wining Markets, Trade Standards Compliance Report 2010”*, Vienna: UNIDO.
8. WTO (2013), G/SPS/GEN/804/Rev.6, Overview regarding the level of implementation of the transparency provisions of the SPS agreement
9. WTO (2013) G/SPS/GEN/204/Rev.13., Specific trade concerns
8. Japanese government, *Report on Trade Policy Review*, 2013
9. Japanese Industrial Standards Committee, Articles on TBT
International Trade Administration, Market Reports/ TariffsTextiles, Apparel, Footwear and Travel Goods – Japan, 2012.
10. Annual report 2010, Department of standard Malaysia
11. OECD, Technical barriers to trade

12. US Representative Trade, 2013 Report on TBT

13. WTO, Reports on TBT

Websites:

RASFF Portal (European Commission Rapid Alert System for Food and Feed)

<https://webgate.ec.europa.eu/rasff-window/portal/?event=SearchForm&cleanSearch=1>

FDA (US Food and Drug Administration) Import Refusal Report for OASIS

<http://www.accessdata.fda.gov/scripts/importrefusals/>

MHLW (Japan's Ministry of Health, Labor and Welfare)

<http://www.mhlw.go.jp/english/topics/importedfoods/12/12-07.html>

The General department of Vietnam Customs

<http://www.customs.gov.vn/default.aspx>

<http://www.spsvietnam.gov.vn/>

<http://www.tbtdn.org/default.aspx>

<http://www.sirim.my>

<http://lpk.kemendag.go.id/daftar-sni-1.html>

<http://ngsuyasa.wordpress.com/2014/01/17/introduction-and-implementation-of-sni/>

<http://www.globaltrade.net/f/business/text/Singapore/Legal-and-Compliance-Trade-Regulations-and-Standards-in-Singapore.html>

<http://www.laotradeportal.gov.la/index.php?r=site/display&id=34#c1>

<http://www.agc.gov.my/Akta/Vol.%2011/Act%20549.pdf>

http://www.apec.org/~media/Files/AboutUs/AchievementsBenefits/2012_BG_Reports/BruneiDarussalam_BogorGoalsProgressReport_13Aug2012.pdf

<http://dns.btclick.com.bn/frontpage-news-national/2013/12/17/proposed-agency-ensure-industry-meets-international-standards>

<http://bic.thaiembassy.sg/node/132>

<http://www.ecvn.com/ROOTSYS/book/member/GioithieuthitruongMalaysia.html>

wms. Mofcom.gov.cn

http://www.standardsportal.org/usa_en/prc_standards_system/standards_used_in_china.aspx

<http://laocai.gov.vn/sites/ttxuccion/Tintucsukien/tinquoc/Trang/634051418180240000.aspx>

http://export.gov/china/doingbizinchina/eg_cn_027466.asp

<http://www.tradecommissioner.gc.ca/eng/document.jsp?did=125684&cid=512&oid=32>

<http://web.ita.doc.gov/tacgi/overseasnew.nsf/alldata/China#Labeling>

<http://www.intertek.com/consumer/news/v105-2012-updated-textile-standards-china/>

<http://web.ita.doc.gov/tacgi/overseasnew.nsf/alldata/Japan#Labeling>

http://www.kats.go.kr/en_kats/isa/KAEU05_1.asp

WTO, e learning course on WTO

US commercial service, South Korea Standards and Conformity Assessment System.

<http://www.ita.doc.gov/td/standards/Final%20Site/CCG/CCG%20PDFs/South%20Korea.pdf>

http://www.chanrobles.com/republicacts/republicactno4109.html#.U65kEJR_vzs

http://www.wto.org/english/news_e/news11_e/tbt_10nov11_e.htm

[HTTP://WWW.NAFIQAD.GOV.VN/QUY-111INH-CUA-THI-TRUONG/THI-TRUONG-KHAC/QUY-111INH-VE-THUC-PHAM-VA-SAN-PHAM-NONG-NGHIEP-NHAP-KHAU-CUA-MOT-SO-QUOC-GIA](http://www.nafiqad.gov.vn/QUY-111INH-CUA-THI-TRUONG/THI-TRUONG-KHAC/QUY-111INH-VE-THUC-PHAM-VA-SAN-PHAM-NONG-NGHIEP-NHAP-KHAU-CUA-MOT-SO-QUOC-GIA)
http://www.iso.org/iso/about/iso_members/iso_member_body.htm?member_id=382920
http://gain.fas.usda.gov/Recent%20GAIN%20Publications/General%20Rules%20for%20the%20Labeling%20of%20Prepackaged%20Foods_Beijing_China%20-%20Peoples%20Republic%20of_5-25-2011.pdf
<http://www.quantumbalancing.com/worldelectricity/electricityif.htm>
<http://www.gppb.gov.ph/laws/laws/CPESGuidelines2011/Annex12.pdf>
http://dtincr.ph/faq_product_standards.php
http://tcc.export.gov/Country_Market_Research/All_Research_Reports/exp_005710.asp
<https://www.msonline.gov.my/>
<http://www.tisi.go.th/>
<http://www.sirim.my/>
<http://www.spring.gov.sg/>
<http://www.mod.gov.bn/ms/Theme/Home.aspx>
<http://www.bps.dti.gov.ph>
<http://www.sac.gov.cn/>
http://www.jsa.or.jp/default_english.asp
<http://www.kats.go.kr>
<http://www.ava.gov.sg/>
<http://www.ppd.gov.vn/Lich.aspx?Id=1399&CatId=13>
<http://www.nafiqad.gov.vn>
<http://www.jetro.go.jp/en/market/regulations/>
<http://citinews.net/kinh-doanh/hoa-phat--xuat-khau-thep-sang-thi-truong-uc-TTARVHI/>
<http://s.cafef.vn/hpg-131736/tap-doan-hoa-phat-giai-dap-thac-mac-cua-co-dong-ve-hoat-dong-kinh-doanh.chn>
http://www.nhandan.com.vn/mobile/_mobile_kinhhte/_mobile_tintuc/item/21825602.html
<http://sites.uom.ac.mu/wtochair/attachments/article/83/Jordan.pdf>
<http://www.sggp.org.vn/kinhte/2014/9/360325/#sthash.IE8gTbCD.dpuf>

APPENDIX

Annex 1 : Labeling Requirements for textile product

Country	Language	Fiber Content	Origin	Care	Manufacturer/Importer Info.	Size
ASEAN countries						
Cambodia	Khmer	Mandatory	Mandatory	N/A	Mandatory	Mandatory
Indonesia	Indonesian	Optional	Optional	Optional	Optional	Optional
Malaysia	Bahasa Malay or English	Optional	Optional	Optional	Importer	Optional
Philippines	English or Filipino	Mandatory	Mandatory	Mandatory	Manufacturer	Optional
Singapore	English	Optional	Optional	Optional	Optional	Optional
Thailand	Thai	Mandatory	Mandatory	Mandatory	N/A	Mandatory

Vietnam	Vietnamese	Mandatory	Mandatory	Mandatory	Manufacturer	Optional
Other countries						
Australia	English	Mandatory	Mandatory	Mandatory	N/A	Optional
China	Chinese	Mandatory	Mandatory	Mandatory	Manufacturer	Mandatory
Japan	Japanese	Mandatory	Mandatory	Mandatory	Either	Optional
New Zealand	English	Mandatory	Mandatory	Mandatory	N/A	Optional

Source:

<http://web.ita.doc.gov/tacgi/overseasnew.nsf/d1c13cd06af5e3a9852576b20052d5d5/fad8900a6a29da2b8525789d0049ea04?OpenDocument>

Annex 2: Standard of export rice

No	Items	International standard	Standards of import country	Vietnamese rice quantity
1	Size of rice particles	-Longest: length over 7.5 mm -Length: size from 6.61 -7.5 mm -Average: size from 5.51 to 6.6 mm -Short: size below 5.5 mm	Over 7.7 mm is the standard	6.2 mm
2	Color of bran coat	White, bright brown, dark brown, brown, red, bright violet and violet		
3	Chalkiness degree	Degree 0: no chalkiness Degree 1: chalkiness area is smaller than 10% in rice grains; Degree 5: average chalkiness area is 11-20%; Degree 9: greater than 20%	Rice without chalkiness is taste of market	Chalkiness ratio is high
4	Milling quality	-This factor includes percentage of brown rice, white rice and raw rice. -Brown rice (%)= (grain weight without husk x 100)/ rice weight -White rice (%) = (grain weight after milling and polished x 100%)/ rice weight -Raw rice (%) = (weight of raw rice (not broken) x 100)/ rice weight	Specially care to ratio of raw rice, including: high-class rice: often called rice 5 (95% raw rice, 5% broken rice) or rice 10 (90% raw rice, 10% broken rice). Low-class rice: rice 30 or 25 (ratio of raw rice is lower)	Milling quality is low
5	Cooked rice quality	Including amylose content, temperature of gelatinization and gel consistency. -Amylose content: 0-2% is plastic	- Amiloze content: 0-2% of amiloze: glutinous rice, rarely; 3-20% of	Now, the rice group having 20-25% of amiloze is the

		<p>rice; 2-20% is soft rice (amylose content is low); 20-25% is soft rice (amylose content is average); over 25% is hard rice (amylose content is high)</p> <p>-Gelatinization temperature (GT): is a feature which is temperature to cook rice and cannot return to original state. GT changes from 55-79c. Average GT is perfect condition for high-quality rice.</p> <p>-Gel consistency: international standards of gel consistency are based on the length of gel. Among rice varieties, rice breeds which have same amylose content but higher gel consistency are preferred.</p>	<p>amiloze: plastic rice, account for 30-40%; 20-25% amiloze: soft rice, make up 60%; greater than 25% of amiloze: hard rice, this group is often used to make flapjack or vermicelli.</p> <p>- Gelatinization level 1: difficult to cook; level 5: average (same as IR 64); level 9: crushed rice; this type is not tasty</p>	<p>priority in Vietnam.</p>
6	Flavor (fragrance)	<p>Rice flavor or fragrance is generated by diacetyl-1-pyrroproline chemicals. According to International Rice Research Institute (IRRI), evaluation standards are divided 3 levels: level 0 is non-aromatic; level 1 is less fragrant; level 2 is more fragrant.</p>	<p>Narrow marketplace; India and Thailand are two exclusive countries.</p>	

Source: <http://tapchicongthuong.vn/chat-luong-gao-xuat-khau-cua-viet-nam-kem-vi-sao-20140513043745962p7c419.htm>

Annex 3: South Korea: Information on food labels

Product Name: The name on the product label must be consistent with the declared name to the licensing authority / competent inspection.

Product Type: Required for some special products such as tea, beverages, extracted products, especial foods...

Name and address of the recipient; the address where the goods can be returned or changed in case of damage.

Manufacture date: This information is required for some special products such as canned food package, seaweed rice roll, hamburger, sandwich, sugar, liquid (water than beer and traditional Korean rice water because these products have forced the specified shelf life products) and salt. For liquids, production batch number or date of bottling can replace the production date.

“shelf life” or “best before date”: foods labels must present clearly expiry time which is decided by manufacturers. Products comprising: jam and sakarit chemical products (such as dextrin, fruxtoza), tea, coffee, sterilized drinks, pate and bean sauce, sterilized curry

products, vinegar, beer, cassava flour, honey, flour wheat ... can use the phrases of the expiry date on the label as "shelf life" or "best before date". If different products are packed in the same, the shelf life indicated on the product label must be the earliest expiry date.

Content (calories): specific weight, number or pieces of products. If pieces are recorded, weight or the number of pieces must be put in brackets (). Information on calories is required only for the products having to show nutrition labeling.

Ingredient names and content: Names of all the ingredients in the product must be stated on the label in Korean. However, for products that main advertisement area less than 30 cm² on the label, it is necessary to show only 5 main ingredients.

Composite Ingredients: Artificial pure water and names of materials used to make synthetic raw materials at level below of 5% compared to weight of the product is not indicated on the label and listed in Korean. In cases where raw materials account for over 5% of total product weight, it is vital to keep a list of all the materials in the synthesis of raw materials on product labels, which must be written in English and Korean. The ingredients must be listed in order of weight from largest to smallest.

Additives: food additives must be listed in full name, abbreviated name, or usage on the label (E.g.: iron citric acid salts, FECitrate or the nutritional elements).

Allergens: The product said to cause allergies have to be recorded on the label although it is possible that this component is presented in the mixture at a minimum level. These components include: eggs, milk, buckwheat, peanut, soybean, wheat, mackerel, crab, shrimp, meat, peaches, tomatoes and excess SO₂. Any food product that contains one or more of the raw ingredients causing allergies on the label must be written in Korean.

Labeling inside the package is voluntary in case that the largest surface area of parking is 30 cm². Product name, ingredients, calories, shelf life, nutrition may be indicated in the label inside the package.