

Non-Tariff Measures as Export Barrier: Insights from Malaysia's Small and Medium Enterprises in Agribusiness

Nurul Hanan Abdull Manaf, Haniff Ahamat

Faculty of Law, Universiti Kebangsaan Malaysia, 43600 Bandar Baru Bangi, Selangor, Malaysia

Corresponding Authors Email: P90580@siswa.ukm.edu.my

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Abstract

The proliferation of non-tariff measures (NTMs) globally has become a major concern for exporters following on their potential to restrict export. Within this realm, particular attention is to be given to understand NTMs' impact on small and medium enterprises (SMEs) in agribusiness due to: (1) SMEs' vulnerability compared to multinational corporations; and (2) agricultural industry inclines to have more NTMs because of concern on health and safety. As such, this study aims to determine the impacts of NTMs on export capacity of agri-business smalls in Malaysia. This study adopts qualitative approach. The researchers had conducted face-to-face, semi-structured interview sessions with government officials and selected agribusiness SMEs. The key findings of the study are: (1) NTMs pose additional financial and capacity challenges to agribusiness SMEs; and (2) NTMs not only a concern when exporting agribusiness product to United States of America and European markets, but it is also an issue when exporting to Asia-Pacific and Association of South East Asian Nations (ASEAN) countries. This study further reveals that even domestic NTMs act as export barrier to agribusiness SMEs.

Keywords: Non-tariff Measures, Export Barrier, Agribusiness, Small and Medium Sized Enterprises (SMEs), Malaysia.

Introduction

Small and Medium Enterprises (SMEs) are playing significant roles in economic development, enhancing social status and providing political stability in every country. In Malaysia, 98.5% of business establishment of this country is in the form of SMEs. As of 2021, Malaysian SMEs has contributed 36.2% of the country's Growth Domestic Production (GDP) and 48% to the employment opportunity (Department of Statistics Malaysia, 2021).

Malaysian SMEs are expected to contribute 25% of the country's total export as of 2020 (National SME Development Council, 2012). However, SMEs' contribution to total export is

still low. Central to the issue of export-readiness of SMEs is not only limited to financial funding but addressing trade restrictive effect of Non-Tariff Measures (NTMs) (Fliess and Busquets, 2006; Chia, 2013; Ito, 2017; Sithamparam et al., 2017).

The decline of tariff lines worldwide prompts countries to resort to systematically biased NTMs. Not only NTMs has twice the impact on international trade compared to tariffs, information on NTMs is limited as well (World Trade Organisation, 2012). It is further to note that most of the studies concerning NTMs are quantitative in nature. On that issue, Knebel (2017) argued that quantitative study in respect to NTMs only able to “reflect trends/patterns but say little about specific policies”, thus justifying the needs to investigate NTMs themed study through qualitative perspective. Ernawati (2016) also suggested that the lack of qualitative analysis on legal documents makes the impact of NTMs on intra-ASEAN trade is less understood.

Within this realm, particular attention ought to be given to understand NTMs’ impacts on SMEs in agribusiness sector on the basis of: (1) their vulnerability compared to multinational corporations; and (2) agricultural industry inclines to have more NTMs due to health and environmental concerns.

With regard to agribusiness SMEs in Malaysia, statistics shows that their export growth fluctuated especially between 2017 to 2021. The fluctuation contradicts with increasing number of export promotion programs targeted at SMEs by the Malaysian government annually. Simultaneously, there is an increase of financial budget yearly to sustain those programs. The budget allocation for 2021 was RM 322.54 billion, while for 2022, the budget has increased up to RM 332.1 billion, the largest ever recorded for the country (Malaysia Ministry of Finance, 2021). The paradox between fluctuation in Malaysian agribusiness SMEs’ export and the increasing number of export promotion programs motivated the researchers to conduct this study. The issue surrounding NTMs and agribusiness SMEs become the researchers’ main preoccupation following to quantitative study by Sithamparam, Devadason and Chenayah (2017) that Malaysian SMEs find NTMs have trade restrictive impact on export.

In addition, the present research attempts to cover the knowledge gap in research methodology. Literature review revealed that bulk of researches regarding NTMs are quantitative in nature. Hence, the researchers attempted to contribute to the body of knowledge concerning NTMs by adopting qualitative research. The present study therefore concentrates on micro-level evidence, based on interviews aimed to determine the impacts of NTMs on export capacity and export decision among Malaysian SMEs in agribusiness sector. This qualitative data has the benefit of drawing personal experience of economic actors directly involve in agribusiness SMEs. Information on *how* and *why* NTMs have affected their decision to, or not to export, will provide a guideline to cover policy blind-spot in Malaysia’s trade policy as well as SME development plan (Knebel, 2017; Ernawati, 2016).

Literature Review

Opportunity to Export for Agribusiness SMEs

The increasing global demand for agricultural goods is an opportunity for agribusiness SMEs in Malaysia to penetrate foreign markets. Under National Key Economic Area initiative,

agriculture industry is expected to raise the total Gross National Income contribution (Ministry of Agriculture and Agro-Based Industry, 2010).

Agriculture goods are Malaysia's third largest export component. With 8.4% contribution valuing at RM 78.12 billion to total export, agriculture sector shows prospect to contribute further to Malaysia's export. However, contribution of agribusiness SMEs to export is insignificant as "the overseas forays (among over 900,000 local SMEs) stood at merely 17.8%." (The Sun, 2017). This warrants further investigation on why agribusiness SMEs do not excel in export despite of myriads export promotion programs targeted to them?

Previous studies suggests that apart of financial funding, addressing NTM related issues is essential to promote export readiness among SMEs (Fliess and Busquets, 2006; Chia, 2013; Sithamparam, Devadason and Chenayah, 2017). In the context of Malaysian exporters, Sithamparam, Devadason and Chenayah (2017) concluded that smaller firms of resource-based industries -including food processing – find NTMs as an issue when exporting.

NTMs as Export barriers to Agribusiness SMEs

There are variations of NTM definition offered by scholars. However, for practical purpose, United Nations Conference on Trade and Development (2010) has defined NTM as "policy measures, other than ordinary custom tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both." NTMs faced by the exporters include technical barriers to trade, sanitary and phytosanitary regulations, packaging and labelling requirements, testing and inspection requirements as well as other international standards. While large literatures concentrate on NTMs imposed by importing countries, in most cases exporting countries and transit countries would exercise them too (International Trade Center, 2018).

Based on previous studies, World Trade Organization (2012) estimated that the effect of NTMs is almost twice bigger than tariff. This is likely due to:

- a. The rise of NTMs globally: The reduction of tariff lines ironically has led to the rise of TMs globally. Some countries arguably resorted to protectionism measures cloaked as NTMs (Azlina et al. 2011; WTO, 2012; Chia, 2013 Piewthongngam, 2014; Sithamparam, Devadason dan Chenayah, 2017). Malouche, Reyes and Fouad (2013) reported that the number of NTMs applicable to international trade has increased significantly after the 2008 Global Financial Crisis and one-third of them are from G20 countries;
- b. Lack of uniformity and transparency on NTMs: While tariff can be expressed in numerical values, NTMs are largely qualitative in nature and unique to each export destination and sector. Previous studies attempted to quantify effects of NTMs on trade. Nonetheless, it is proven to be a 'mission-impossible' styled job given to the facts that the required information is unavailable or incomplete, and vast informations are required for that purpose (Korinek, Melatos and Rau, 2008). From business perspective, lack of uniformity and transparency on NTMs is translated as burdensome and costly business decisions.

World Trade Organization (2012) reported that NTMs in agriculture tend to be more restrictive and widespread than those in manufacturing sector. Throughout the years, they

also become more complex, hence, affecting agri-food exports from developing and least-developed nations (Disdier, Fontagne and Mimouni, 2008). In the same vein, NTMs applicable to processed foods may hinder poorest countries from diversifying their agricultural exports from raw commodities to value-added products (Food and Agricultural Organization, 2011)

NTMs are more pervasive in agricultural sector due to public concerns on consumer protection, animal and plant protection as well as environmental conservation. Sanitary and phytosanitary related measures are prominent for fresh animal produce, plants and vegetables, while technical barriers are largely applicable to processed foods (Cadot et al. 2015). Although such measures are welcomed to address public concerns, their formulation and implementation sometimes are unnecessarily burdening to foreign exporters.

There are number of studies indicating that NTMs applicable to agricultural products are able to reduce export propensity. Mehta and George (2003) concluded that the complex and constraining application of sanitary and phytosanitary measures on processed foods from India has pushed Indian exporters to exit the market or find alternative markets. Fontagne, von Kirbach and Mimouni's study (2005) shows that environmental related measures in the form of have negative impact on global trade agricultural products – mainly on cut flowers, swine meat, vegetables, citrus, juices, sugar, wine, animal feed preparation and leather. Similarly, other researchers also concluded that sanitary and phytosanitary standards imposed by European Union has negative impacts on agricultural exports from Africa and Latin America (Otsuki, Wilson and Sewadeh, 2011; Gebrehiwet, Ngqangweni and Kirsten, 2007). In another study, Bao and Qiu (2012) has reported an interesting finding. Focusing on the relationship between technical barriers' effects on China's agricultural and food export, they found that technical barriers to trade has negative implication on export, although it is smaller compared to tariffs.

The effects of non-compliance to NTMs requirements can be daunting to the point where food products from a country are banned from entering another country. In 1997, European Union has banned all seafood products from Bangladesh for food safety reason. Investigation revealed that the seafood processing plants at Bangladesh failed to fulfill European Union's quality control requirements including on hygiene and infrastructure. As a result, Bangladeshi seafood exports has declined 8.7% globally (Cato and Lima dos Santos, 1998). In another situation, United States Food and Drugs Administration has removed a Malaysian instant coffee brand from its market for containing traces of undeclared drug substance and milk (United States Food and Drugs Administration, 2016).

The common assumption is that discussion on NTMs is only relevant at destination market. However, apart of NTMs in foreign markets, exporters also have to fulfill domestic NTMs in their home countries. International Trade Center (2015) has reported that some problems concerning export corresponds with measures applied at home country. Those problems - excessive customs documentation, import and export requirements, lack of cooperation among customs and other government agencies, inadequate use of information technology, information asymmetry and lack of transparency - correspond with trade facilitation concerns.

Overcoming NTMs require significant investment both in resources and time to companies of all sizes. However, compared to multinational corporations, NTMs affect SMEs disproportionately due to:

- a. Limited technical capabilities: SMEs have limited capabilities not only because of their lack of investment in Research and Innovation (R&D); but also limited ability to hire high skilled employees;
- b. Limited experience, knowledge and information: SMEs generally 'younger' in the context of years of establishment. Thus, they may have not accumulated experience, knowledge and information on know-how export;
- c. Limited access to credit: smaller firms generally are struggling to obtain loans to invest in R&D, facilities, capitals or hiring skilled employees.
- d. Of smaller size compared to Multinational Corporations (MNCs): Larger MNCs are able to exploit economies of scale to reduce fixed costs and marginal costs related to export. (Bernard and Jensen, 2004; Wignaraja, 2012; International Trade Center, 2017).

International Trade Center (2011) stipulated that small producers in Sri Lanka often find difficulty in meeting with standards on agricultural products. Informants mentioned that they frequently encounter issues on technical requirements and conformity assessment, and 30% of taxing NTMs experienced throughout export are sanitary and phytosanitary measures and technical barriers to trade. Exporters of fresh produces were mostly affected by NTMs, followed by processed food exporters and exporters in manufacturing sector. The basis of this issue is "lack of information about technical measures, and there was a need for improved quality awareness and a strengthened domestic inspection regime." A capacity-building project was launched to address the issue, and it successfully create awareness and accessibility to domestic and international markets.

The findings on the trade restrictive impact of NTMs are not conclusive. There are number of studies showing that NTMs do facilitate trade through harmonisation of standards. The harmonisation of standards allows exporters to venture into different markets while experience lower costs of exports as they avoid cost to comply to different standards (Moenius, 2004; Fontagne, von Kirbach and Mimouni, 2005; Disdier et al. 2008). Compliance to standards also allows exporters to be competitive in foreign markets, and bigger access to consumers would later offset the compliance cost through economies of scale (Maskus, Wilson and Otsuki, 2001; Athukorala and Jayasuria, 2003; Chen, Wilson and Otsuki, 2008). Chen, Wilson and Otsuki (2008) indicated that standards and labelling requirements have positive correlation with export volume and export scope (measurement based on number of export products and export markets). They further argued that quality standards enhance consumers' confidence and raise their willingness to purchase the products; while design standard ensure product compatibility and coordination among producers.

Research Method

This study is to determine the impacts of NTMs on export capacity and export decision of Malaysia SMEs in agribusiness sector. The researchers adopted qualitative approach for this exploratory study. Semi-structured, face-to-face and in-depth interviews were used for data collection. The use of semi-structured interview has enabled the researchers and the informants to explore new ideas while discussing the main issue.

The researchers used purposive sampling in this study. Series of interviews were conducted with fourteen informants consisting of eleven government officials representing seven federal government agencies and three agribusiness SMEs' practitioners who are owner-managers or director of their business. Those senior government officials were selected to be part of this study based on their experience in export procedure and their agencies' roles in promoting agribusiness SMEs' export. They were marked as Officer A to Officer L. The three agribusiness SMEs practitioners were selected in this research based on the status of their business as agribusiness SME, their role as decision maker in their respective business and export readiness of their businesses. They were marked as SME M to SME O.

To ensure anonymity, the informants' name is not revealed. The duration of each interview was between one hour to two hours depending on the informants' willingness to cooperate. During the interview, detailed notes were taken, and all interviews were recorded and immediately transcribed.

Thematic analysis was used in data analysis as suggested by Attride-Sterling (2001). This analysis has gone through three sequential stages which are (1) filtering the text; (2) exploring the results; and (3) integrating the results to create themes and conclusion (Attride-Sterling, 2001; Berg, 2001). When filtering the text, the researchers divided the texts into segments to facilitate analysis in later stages and to give meaning to the text. Next, exploration of possible themes for the text was conducted. The key characteristics of the theme were compared and consolidated. Lastly, from the result exploration process, datasets were connected accordingly to determine validity and conclusion.

Results And Discussion

The impacts of NTMs on export capacity and export decision of Malaysia SMEs in agribusiness sector can be discussed from the following perspectives:

Acknowledgement on Export Opportunity and Its Benefits

Informants in general agree that local agro-based products have the potential to be marketed overseas. In addition, the overall positive attitude towards export signaling that agribusiness SMEs community has inner motivation to export. For example, Officer D remarked that *"They like lots of Malaysian products. When we see tourists, they usually buy 3 in 1 instant coffee. They buy a lot."* Officer A also remarks that in-line with healthy lifestyle prevalent at USA, *tempe* can be marketed there as plant-based protein to substitute animal protein. Officer C further acknowledge the potential of agribusiness SMEs by mentioning that their products including sparkling juice, coffee and frozen food already available at Singapore, China and Saudi Arabia's markets.

Touching on the size of firm, Officer A also positive that even a small firm can export with proper assistance. In his words, *"I've seen so many small companies can export. If you are small, you still can export. That is what the government is trying to do with Alibaba - to get Malaysian products online."* The Digital Free Trade Zone initiative assists SMEs regardless of size to through streamlining and simplification of custom procedure, efficiency and competitiveness in e-commerce, as well as virtual access to new market. Through Digital Free Trade Zone, agro-based products by SMEs such as seaweed, frozen shrimp, bird nest, *durian*

products, coffee and traditional cookies already reaching consumers living in Italy, Poland, China, Australia, Ghana and South Africa (Digital Free Trade Zone, 2017).

Free trade agreements (FTAs) between Malaysia and its trading partners further open up opportunities to agribusiness SMEs to expand their business overseas. The Malaysia – Turkey FTA has benefitted SME C through exemption from custom duty. SME C said *“Malaysia is selected. They have their own codes. There is no custom duty on our products. It is good.”* Officer D also remarked that ASEAN economic cooperation eliminate export/import duties and help the movement of goods within ASEAN countries. *“Now we have cooperation between Malaysia-Indonesia, Malaysia-Thailand, Malaysia and the Philippines. Now we have cross-border agreement, we have agreement among ASEAN countries. No export or import duties,”* he said.

Firms endeavour to export in order to expand sources of revenue, to diversify market and reduce risk, to increase competitiveness, to achieve economies of scale and to avoid saturated market (Matrade, 2016). SME O relates the expansion of sources revenue with currency exchange rate. He gave an example that a packet of chips sold to Malaysians only can be priced at RM 5.00, but the same packet of chips can be sold to Singaporeans for 3 Singaporean Dollar. Based on current exchange rate, he estimated that his gains will threefold higher if he manages to penetrate Singaporean market. For SME M, saturation of Malaysian market motivates her the most to export. She estimates that domestic market is bound to saturate as so many SMEs selling the same product - in her case instant coffee – to a small population of 30 million. She decided to penetrate Turkish market considering Turkish’s large population of 80 million and strong coffee culture. To quote her words:

“Here in Malaysia we like a small pool with so many fishes. The population there (Turkey) is 80 million. Even at Istanbul alone is already 20 million. It is enough if I only focus at Istanbul’s market. That is better than competing with your fellow SMEs.”

NTMs at Importing Countries as Export barrier

Previous study by Sithamparam et al (2017) shows that small and medium resource-based enterprises, with limited exposure to international trade – find NTMs limit their ability to trade. However, calling for total elimination of NTMs is undesirable because NTMs are necessary to address public concerns. What left is to manage NTMs so as not to be export barriers to SMEs, and simultaneously able to protect population within the importing countries. For that purpose, analysis on how and why, NTMs affect export capacity and export decision among agribusiness SMEs is essential.

Importing countries would subject sanitary and phytosanitary measures upon fresh agricultural produce to detect or remove pests, diseases and contaminants. However, frequency and stringency of this measure is different between one region to another. To quote Officer E,

“Non-tariff barriers exist. Sanitary and phytosanitary measures usually targeted to fresh produce. When we export flower cuts, or leaves, they will thoroughly check them. If they found any insect or pest, they will quarantine the products.”

Then they will fumigate using water vapour for 1 to 2 hours. This will lessen the cuts' shelf lives from 6 weeks to 2 weeks only."

Although he admitted that this measure is legitimate, Officer E raised on the issue that Malaysia rarely resorts to stringent sanitary and phytosanitary measure compared to other countries. Being probed further on the impact of this measure on capacity to export, Officer E answered that this will reduce profit margin and frustrate importer:

"Once the products being subjected to sanitary and phytosanitary, the importers will complaint. Of course, as the shelf-life is reduced from 6 weeks to 2 weeks, they can't make much (out of the sales of flower cut). As a result, you have to issue credit note to the them. Yes, you can issue credit note, but for how long? You yourself do not make much money."

Sanitary and phytosanitary measures also is a concern for processed food. Processed foods containing egg, dairy products, poultry, sugar and hormone-like substance are prohibited from being imported in certain countries. This is an issue considering agro-based processed foods typically contain any of these ingredients. Officer A said:

"Egg-based products should not be exported, because of salmonella. If you do not know, you mix in the product, they would not let it in. Let's say you want to export to United States of America, products containing sugar would not make it. You need saccharine as substitute. Our dairy products also are not allowed there."

SME M also explained that: *"Over there (Turkey) they do not want hormone-like substance. At Malaysia we are fine with that. Only mineral is allowed."*

The non-compliance to this rule amounts to removal of products out of market as Officer A said:

"Your products entering their market without going through custom procedures, no declaration, has traces of milk, controlled drugs substance. Of course, United States Food and Drug Administration would take them out of the market."

Apart of that, such incident induces the importer country to tighten up inspection on upcoming shipments. Officer G elaborated:

"Previously, your product is at level 4. Every time your products are coming in, they will let it go through. After this incident, your product will fall to level 2, or worst level 1. At level 1, every time your products reach their shore, they will block them (the products) first."

Variations in labelling and packaging requirements also prevent SMEs from diversifying their markets. Compliance to different labelling and packaging requirements means increasing expenditure on machineries and inefficiency in production line. This contrary to practice of

SMEs that often see packaging as add-on cost (International Trade Center, 2018). It follows that it is easier for SMEs to limit export destination or not to export at all. Officer K explained:

“So, how ready is the company? The simplest thing, packaging. Where to print manufacturing date? As for Middle East region, some countries require Arabic font. So, it is how their (SMEs) machine is ready to cater the differences. Larger SMEs have those machines. For smaller SMEs, they only have the basic machine.”

Officer E further remarked that

“Labelling requirement is the other problem for them (SMEs). If you are going to Middle East, then you need to print in Arabic font together with English font. If you are aiming for China, then you need to print in Chinese font. This is compulsory.”

Officer I elucidated the impact of variations in labelling and packaging requirements as follows

“But then, let’s say Country A ask the SMEs to change the products, taste and packaging; Country B does not ask such. Of course, it is better for SMEs to concentrate at Country B only. They (SMEs) do not want to invest (on machineries). After all, their funding is limited.”

Some of the informants noted on arbitrary and inconsistent behavior of foreign officials regarding application of NTMs. This includes delay in processing the documents, changes between old regulations and new regulation without prior notifications, rejection of application without due reasoning and difference of standard between imported goods and local goods. In this instance, SMEs usually resort to costly export agent services, or simply decide not to export to that particular country. Interestingly, the informants also reported although the standards among Western countries tend to be higher, these countries are more transparent than Asia-Pacific and ASEAN countries. SME M told her experience dealing with officials from an ASEAN country:

“You need to use consultants. If you do it on your own, you will find yourself being lied to. My friend invested on application. RM 30,000.00 already. Using consultant. No certification issued yet...”

She added:

“It is easy through consultant because they know the officers there. They also apply different standards between their products and our products. If you conduct lab test, their products actually contain prohibited substance.”

On the issue of delays and abrupt changes of laws, she told:

“We have to wait for 6 months after filing documentations. They are playing around, changing regulations on their whims. They make it so hard (to export) so we no longer export to that country.”

As a result, SME M changed her export destination from ASEAN to Turkey. Officer C and Officer E also voiced out similar frustrations. Their feedbacks are consistent with findings in

other studies that ASEAN's intra-regional trades are still surrounded by arbitrariness and lack of transparency (International Trade Center, 2016), which then leads to price-rising effect of NTMs on exporters (Cadot, Munadi and Ing, 2015).

Although the main aim of NTMs is to address public concerns, there are evidences suggesting that some regulations are designed to protect domestic industries within importing countries. Such regulations are subset of NTMs and termed as non-tariff barriers ('NTBs') (Multi-Agency Support Team, 2009). NTBs are carried out without much transparency and due reasoning. Officer E suspects that there are some Malaysia's trading partners within Asia-Pacific and ASEAN regions displaying protectionist's behavior:

"There was pandemic attacking their Cavendish bananas. In case of Malaysia, we will allow importation of bananas. But over there, they do not issue importation permit although the price of banana has skyrocketed. Why? Because they want to protect their local farmers. That is trade protectionism"

"Currently we are applying market access for frozen whole fruit durian. But they do not want to process this application because we have another pending application, market access for jackfruit. Jackfruit, we have been waiting for 10 to 12 years for market access. Ok, why they do not process market access for jackfruit? Because their farmers are growing jackfruit too."

"We try to export durian. They said after June they will process the importation permit. Why? Because up until June, there is local production of durian within their country. Yes, ASEAN spirit is there, but not all the time"

When encountered with protectionist behavior, agribusiness SMEs are likely change their export destination, halting their plan to export or choose not to export at all. Decision varies depending on projected costs, profitability, and stringency of legal and procedural barriers at new export destination. In case of SME C, after witnessing her colleagues encountering protectionist behaviours of an ASEAN country, she decided not to concentrate on this region anymore. After spending one year for market research, she chose Turkey for its market potential and transparency of laws.

The feedbacks further show that the markets in Asia-Pacific region pose challenges for agribusiness SMEs' exporters in the form of complex and costly customs procedures. Officer E explained his displeasure:

"The barrier is, every time you are sending your cargoes, you need to register with their Custom Inspection and Quarantine. And every time you register, they will check (the products). Each Stock Keeping Unit, I think you have to pay RM 1,500.00."

This will lead to time consuming and costly custom procedures, as Officer E explained further:

"Stock Keeping Unit. One product, one Stock Keeping Unit. If your company has 10 products, it means 10 Stock Keeping Unit. Every time you are sending a product, you need to register online. After that, you need to send a sample and

you have to pay, then they will process the application. If they approve the application, you pay RM1,500.00. You have 10 products, you are paying RM15,000.00.”

He also suggested this complexity will deter agribusiness SMEs from exporting. Officer E's displeasure confirmed Sithamparam, Devadason and Chenayah's study (2017) that Malaysian exporters in general still find export to China and ASEAN involve "cumbersome custom procedures." The complexity surrounding custom procedures further requires employment of certified private entities as custom clearance agents. However, custom clearance agents are not necessarily trustworthy. According to Officer D:

“Agents are supposed to bring those forms to us, Custom. If agents keep those forms at their homes instead of bringing them to us, this is not our issue. Do not totally depend on agents. SMEs have to be knowledgeable. Agents are not 100% trustworthy. In newspapers, there are so many cases of fraud involving import/export agents.”

As custom procedures tend to be complex, programs concerning this subject targeted to agribusiness SMEs are necessary. However, SMEs in general find this subject as beyond their comprehension, thus, discourages them from attending such programs. Officer D shared his observation:

“SMEs, as far as I know, they do not want to meet Custom. Not many SMEs attended our programs. The trade ministry even invites us to explain custom procedures to them. They (SMEs) complained that custom procedures are hard for them to understand.”

In relation to this, all SMEs in this study commented that these programs should be conducted using different approach. Rather than frequently using technical terms, they suggest that the presenters may explain custom procedures in simpler terms so that average agribusiness SMEs would understand them.

Domestic NTMs as Export Barrier

Domestic NTMs include export-license, export quota, prohibition of exports, export taxes and charges and export technical measures imposed by exporting countries on their exporting goods (United Nations Convention on Trade And Development, 2012). Exporting countries regulate their exports mainly to maintain peace and security at national and international level. Officer D explained:

“For Custom, we have issued Customs (Prohibition of Export) Order 2017. There are items you should not export. We are doing this especially after 11 September... For export, either you are prohibited from export or you need to have export permit.”

Nevertheless, informants also identify that there are certain export-related measures in Malaysia are barrier to agribusiness SMEs' export.

Conformity assessment requirements for food hygiene certifications – Good Manufacturing Practice ('GMP') and Hazard Analysis and Critical Control Points ('HACCP') - are often cited as export barrier at domestic level. Two of agribusiness SMEs in this study – SME N and SME O - experience great obstacle to fulfill GMP or HACCP due to lack of facilities, machineries and poorly designed food factory. For example, SME N mentioned that her food factory is yet to be certified as GMP-compliance due to improper location of toilet, wash basin, exit door and broken floor. The importance of proper food factory is mentioned by SME M whose factory is GMP certified:

“Malaysia is very strict. Ministry of Health, every week they will come and monitor you. If they see broken any floor, they (will) say please fix that right now. You have to paint your factory fully, including that floor. Failure to do so? No certification from them, and no export.”

These factors later on are attributable to lack of knowledge. Some agribusiness SMEs are not aware of GMP and HACCP's importance when they started their business. Therefore, they tend to build their factory without readiness for GMP and HACCP compliance (Noor Hasnan *et al.*, 2014). For example, SME O told that when his farther started the business, he did not foresee the need for certification. Thus, the factory was built on convenience. When the business management is finally at his hand, SME O decided to aim for food hygiene certification. However, he finds that renovating an existing factory for the purpose of hygiene certification is harder than building a new one:

“GMP consultant visited our factory. He advised us to change the layout (of factory). I told him (the consultant) this is as if I am starting (to build) a new factory. In fact, building a new factory is way easier.”

When being asked on why he finds remodeling an existing factory is harder than building a new factory, SME O answered that renovation will disrupt production line where some areas in the factory need to be closed down. Furthermore, renovation of factory is costlier because he needs to pay the contractor twice – for demolition of an old building and for construction of a new building.

GMP or HACCP certification is essential for export because importing countries require either of these certifications for imported processed foods. For that reason, Ministry of Health requires Malaysian processed food exporters to acquire any of them. However, many agribusiness SMEs find certification process is strict and beyond their financial capacity. This is highly associated with characteristics associated with SMEs – difficulties in obtaining financial resources, higher bank interest rate and lack of collateral (Hasnan *et al.*, 2014). It follows that their opportunity to export is little to none. Officer E commented:

“GMP is internationally accepted. For stricter countries, they want HACCP. This will become a big issue to our entrepreneur. For GMP you need thousands of ringgits. This is their biggest obstacle.”

Export procedures are complicated following to involvement of multiple agencies, laws and regulations, and different level of jurisdiction between Federal and State governments. For

SMEs, this is cumbersome for their limited knowledge and experience on export, together with limited number of skilled employees to handle the process. According to Officer D, agribusiness SMEs have to go through different export procedures depending on their exported goods:

“For palm fruit, they (SMEs) need the permit from Malaysian Palm Oil Board. (For) pineapple (they) need pineapple’s slips, (They need) to go to Pineapple Board. Fresh, chilled or frozen pineapple, it does not matter. For rattan products, please go to Department of Forestry.”

Agribusiness SMEs of Peninsular Malaysia and Sabah and Sarawak also have to deal with different agencies depending on their location. Officer D also mentioned:

“For Sarawak it is quite different. For Peninsular Malaysia or Labuan, they have Malaysian Quarantine and Inspection Services. For Sabah and Sarawak, they have their own Agriculture and Forestry departments. (For)timber, export or import, Malaysian Timber Board. For Sabah and Sarawak, they have to go to their own Forestry Departments”

Officer G also emphasis the need to simplify Form K2 Declaration of Goods Exported. As of now, the form has 38 elements to be filled in, in which many SMEs found to be complicated. To quote him:

“Which Harmonisation System Code for durian? If you said agro-based products, which code? It is not easy to identify that code. SMEs do not know much about code. For bigger companies, they have specific department to deal with this.”

The impact of complex export procedures is reflected through SME M’s case. She even spent a year studying export and import process for a single product – instant coffee - before making a decision to export.

Conclusion

This study is to understand the impacts of NTMs on export capacity and export decision of agribusiness SMEs. The present study contributes to the body of knowledge concerning NTMs by adopting qualitative approach. Most of the studies concerning NTMs adopt quantitative approach. Quantitative study is useful to answer the question of *what*. Indeed, bulk of quantitative studies established that NTMs have restrictive impact on trade. Nevertheless, the question of *how* and *why* NTMs restrict export is to be addressed by qualitative study (Knebel, 2017; Ernawati, 2016). Thus, the present study is a humble contribution to cover the knowledge gap in methodology.

The findings of this study show that Malaysian agribusiness SMEs are interested to export their products. Nevertheless, both foreign NTMs and domestic NTMs limit their capacity to export. The informants find the following foreign NTMs and their associated procedural obstacles are cumbersome – frequent and stringent sanitary and phytosanitary measures, variations in labelling and packaging, arbitrary behavior of foreign officials, protectionist behavior and complex custom procedure. For domestic NTMs, the informants pointed out that strict GMP and HACCP requirements, and complex export procedure limit agribusiness

SMEs' capacity to export. As for export decision, the informants indicate that agribusiness SMEs are still interested to export although their pace are different depending on their capacity to deal with NTMs. Furthermore, the informants agree that foreign NTMs imposed by United States of America and European markets are stricter; while Asia-Pacific and ASEAN markets are less transparent about their NTMs.

The findings in this study further implicate (1) the need to administer and streamline NTMs at domestic and international levels; (2) Malaysia should record on possible protectionists behavior displayed by its trading partners. These should be factored in trade facilitation negotiations; and (3) in light of NTMs, there is a need to further assess the effectiveness of export promotion programs targeted at agribusiness SMEs.

References

- Athukorala, P., & Jayasuria, S. (2003). Food safety issues, trade and WTO rules: A developing country perspective, *World Economy* 26(9): 1395-1416.
- Attride-Stirling, J. (2001). Thematic Networks: an Analytic Tool for Qualitative Research, *Qualitative Research* 1(3): 385-405.
- Bao, X., & Qiu, L. D. (2012). How do technical barriers to trade influence trade? *Review of International Economics* 20(4): 691-706.
- Berg, B. L. (2001). *Qualitative Research Methods For The Social Sciences*. (4th eds.). Boston: Allyn and Bacon.
- Bernard, J., & Jensen, B. (2004). Why some firms export? *Review of Economics and Statistics* 86(2): 561-569.
- Cadot, O., Asprilla A., Gourdon J., Knebel, C., & Peters, R. (2015). Deep regional integration and non-tariff measures: A methodology for data analysis, UNCTAD Study Series Policy Issues in International Trade and Commodities No. 69, United Nations: New York and Geneva.
- Cadot, O., Munadi, E., & Ing, L. Y. (2015). Streamlining NTMs in ASEAN: The way forward, *Asian Economic Papers* 14(1):35-70.
- Cato, J. C., & Santos, L. C. A. M. (1998). Costs to upgrade the Bangladesh Frozen Shrimp Processing Sector to adequate technical and sanitary standards and to maintain a HACCP program, Paper presented at Economics of HACCP Conference, Washington D.C. June 15-16, 1998.
- Chen, M. X., Wilson, J. S., & Otsuki. (2008). Standards and export decisions: Firm-level evidence from developing countries, *Journal of International Trade & Economic Development* 17(4), 501-523.
- Chia, S. Y. (2013). The ASEAN Economic Community: Progress, Challenges, and Prospects, ADBI Working Paper Series 440. Asian Development Bank Institute: Tokyo
- Department of Statistics Malaysia. (2021). Small and Medium Enterprises (SMEs) Performance, retrieved at https://www.dosm.gov.my/v1/index.php?r=column/cthemedByCat&cat=159&bul_id=KzdrS25pRTZ1VGFkcTINY0FEczBYUT09&menu_id=TE5CRUZCblh4ZTZMODZlbnk2aWRRQT09
- Digital Free Trade Zone. (2017). DFTZ: Digital Free Trade Zone retrieved from <https://mydftz.com/>

- Disdier, A. C., Fekadu, B., Murillo C., & Wong, S. A. (2008). Trade effects of SBS and TBT measures on tropical and diversification products, ICTSD Paper No.12. International Centre for Trade and Sustainable Development: Geneva
- Disdier, A. C., Fontagne, L., & Mimouni, M. (2008). The impact of regulations on agricultural trade: Evidence from the SPS and TBT agreements, *American Journal of Agricultural Economics* 90(2): 336-350
- Ernawati, M. (2016). Chapter 5 Indonesia's Non-Tariff Measures: An Overview, in Ing, L.Y., S. F. de Cordoba and. O. Cadot (eds.), *Non-Tariff Measures in ASEAN*. ERIA Research Project Report 2015-1, Jakarta: ERIA, pp.65-76.
- Fliess, B., & Busquets, C. (2006). The Role of Trade Barriers in SME Internationalisation, OECD Trade Policy Papers No. 45. Organisation of Economic Cooperation and Development Publishing: Paris,
- Fontagne, L., Von Kirchbach, F., & Mimouni, M. (2005). An assessment of environment-related trade barriers *World Economy* 28(10): 535-562
- Food And Agricultural Organisation. (2011). Non-tariff measures in agricultural trade, retrieved from www.fao.org/3/a-i8002e.pdf
- Gebrehiwet, Y., Ngqangweni, S., & Kirsten, J. F. (2007). Quantifying the trade effect of sanitary and phytosanitary regulations of OECD countries on South African food exports, *Agrekon* 46(1): 23-29
- Hanif, A., Alavi, R., Mat Ghani, G., & Duasa, J. (2011). The Determinants of Non-Tariff Barriers in Malaysia's Manufacturing Sector, Paper presented at International Conference on Economics and Business Information, (9), IACSIT Press, Bangkok, Thailand.
- International Trade Center. (2011) 'Sri Lanka: Company Perspective – An ITC Series on Non-Tariff Measures, retrieved at http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/NTM%20Report_Sri%20Lanka.pdf
- International Trade Center. (2015). The Invisible Barriers to Trade How Businesses Experience Non-Tariff Measures, retrieved at <http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/how%20business-ntf.pdf>
- International Trade Center. (2016). Thailand: Company Perspectives – An ITC Series on Non-Tariff Measures, retrieved at <http://www.intracen.org/publication/NTM-Thailand/>
- International Trade Center. (2017). SME Competitiveness Outlook 2017, retrieved at <http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/SMECO-2017-Exe%20Summ.pdf>
- International Trade Center. (2018) 'Packaging' retrieved at <http://www.intracen.org/itc/exporters/packaging/>
- International Trade Center. (2018) 'Uganda: Company Perspectives – An ITC Series on Non-Tariff Measures' retrieved at www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Uganda_NTM_final_v3_high_res.pdf
- Knebel, C. (2017). Review of theoretical and empirical work on the measurement of NTMs Or: "juggling crucial specifics and generalization, presentation during Expert meeting on Indicators to monitor the impact of NTMs on SDG progress organised by UNCTAD at Bangkok

- Korinek, J., Melatos, M., & Rau, M. L. (2008) 'A review of methods for quantifying the trade effects of standards in the agri-food sector' OECD Trade Policy Working Paper No.79 Organization for Economic Cooperation and Development
- Malouche, M., Reyes, J. D., and Fouad, A. (2013). Making Trade Policy More Transparent: A New Database of Non-Tariff Measures' Economic Premise, Paper No. 128 World Bank: Washington D.C.
- Maskus, K. E., Wilson, J. S., & Otsuki, T. (2001). Quantifying the impact of technical barrier to trade: A framework of analysis, Policy Research Working Paper No.2512 World Bank: Washington D.C.
- Matrade. (2016). *Beginner's Guide to Exporting* (3rd Ed.) Matrade: Kuala Lumpur
- Mehta, R., & George, J. (2003). Processed food products exports from India: An exploration with SPS regime Habitat Centre: New Delhi, retrieved at https://openresearch-repository.anu.edu.au/bitstream/1885/41962/1/aciar_2003_mehta_george.pdf
- Ministry of Agriculture & Agro-Based Industry. (2010). Chapter 15: Transitioning from Agriculture to Agribusiness, retrieved at <http://www.moa.gov.my/documents/20182/26813/nkea-sektor-pertanian.pdf/61001c74-97fd-4746-b89e-e18b49afa36f>
- Ministry of Finance. (2021). Budget 2022 (highlights), retrieved at <https://www.mof.gov.my/portal/en/news/press-citations/budget-2022-highlights-summary>
- Moenius, J. (2004). Information Versus Product Adaptation: The Role of Standards in Trade, SSRN Electronic Journal, retrieved at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=608022
- Hasnan, N. Z., Ab. Aziz, N., Zulkifli, N., & Taip, F. S. (2014) 'Food Factory Design: Reality and Challenges Faced by Malaysian SMEs' Agriculture and Agricultural Science Procedia 2: 328-336
- Otsuki, T., Wilso, J. S., & Sewadeh, M. (2011). Saving two in a billion: Quantifying the trade effect of European food safety standards on African exports, *Food Policy* 26(5): 495-514
- Sithamparam, A., Devadason, E. S., & Chenayah, S. (2017) 'Stringency of Non-Tariff Measures in Partner Countries: Perception of Malaysian Exporters' Malaysian Journal of Economic Studies 54(1): 1-21
- SME Corp. (2012). *SME Masterplan 2012-2020: Catalysing Growth and Income*, SME Corp.: Kuala Lumpur
- SME Corp. (2017). SME Statistics, retrieved at www.smecorp.gov.my/index.php/en/policies/2015-12-21-09-09-49/sme-statistics
- The Sun. (2017). Export contribution of SMEs still low: Matrade, retrieved at <http://www.thesundaily.my/news/2017/04/21/export-contribution-smes-still-low-matrade>
- United Nations Convention on Trade And Development. (2012). Non-Tariff Measures to Trade: Economic and Policy Issues for Developing Countries, retrieved at http://unctad.org/en/PublicationsLibrary/ditctab20121_en.pdf
- United States Food and Drugs Administration. (2016). Public Notification: Kopi Jantan Tradisional Natural Herbs Coffee contains hidden drug ingredient, retrieved at <https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/MedicationHealthFraud/ucm518588.htm>

Wignaraja, G. (2012). Engaging Small and Medium Enterprises in Production Networks: Firm-Level Analysis of Five ASEAN Economies' ADBI Working Paper 361. Accessible at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2071547##

World Trade Organisation. (2012). World Trade Report 2012: Trade and public policies: A closer look at non-tariff measures in the 21st century accessible at https://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report12_e.pdf