

# NON-TARIFF MEASURES IN THAILAND\*

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## ABSTRACT

This paper provides a descriptive analysis of a newly constructed database of non-tariff measures (NTMs) in Thailand. A total of 1,630 NTMs were classified; they were extracted from 425 official regulations of Thailand. Analysis of the database indicates that NTMs are pervasive, affecting 99 percent of products under national tariff lines. For each product group, defined by Harmonized System (HS) codes at the two-digit level, 100 percent of NTM incidence was found in almost all product groups. The depth of NTM is particularly strong in animal products, vegetable products, foodstuffs, and mineral products. In some other products, a significant intensity is found for some NTM types.

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## 1. INTRODUCTION

This paper is a descriptive analysis of the database of Thai NTMs, which was constructed from January to August 2015 using the methodology of the United Nations Conference on Trade and Development (UNCTAD) and its NTM classification.<sup>1</sup> The comprehensiveness of the database was evaluated by computing proxies for the incidence, depth, and intensity of the NTMs. NTMs imposed on some products (at the eight-digit tariff line level) are explained in detail in order to highlight their layers and complexity. Briefly mentioned are a number of policy recommendations aimed at

<sup>1</sup> See UNCTAD (2014) and (2012), respectively.

streamlining NTMs in Thailand. In section 2, an overview of Thailand's NTMs is provided, along with a description of the comprehensiveness of the database, the types of NTMs imposed, and regulatory institutions. In Section 3, the incidence and the depth of NTMs are discussed by product group. Section 4 contains an analysis of the intensity of NTMs for each product group obtained by computing the average number of NTMs per tariff line. Products with a particularly high average number of NTMs imposed are emphasized by explaining their NTMs in detail to give perspectives on the procedures with which importers/exporters have to comply. Section 5 provides a brief set of policy recommendations, and Section 6 concludes the study.

## 2. OVERVIEW OF THAILAND'S NON-TARIFF MEASURES

### 2.1 Comprehensiveness of the database

Table 1 shows a total of 425 regulations coded out of the approximately 600 regulations reviewed. Some regulations are not mandatory, or are unofficial, or have been revoked; according to the UNCTAD methodology, these were not included in the database. Counted were only 250 non-tariff measures<sup>2</sup> "in force" reported to the World Trade Organization (WTO); measures "in initiation" were not included. A total of 1,630 NTMs were classified using decentralized methods, i.e., analyzing regulations of each regulatory agency at the most disaggregated level starting from ministerial notices and then moving up to higher levels of regulation, such as royal decrees or acts. A very thorough and careful interpretation of contents/clauses of each regulation resulted in identifying 9,558 affected products (at eight-digit national tariff lines), which constitute 98.90 percent of all tariff lines (9,664 lines at the eight-digit level). NTMs related to international conventions were also classified. Two D321 (volume-based ag-

<sup>2</sup> NTMs reported to the World Trade Organization are "measures" and not "regulations," although some reported measures provide links to regulation sources.

**Table 1: Comprehensiveness of the Database of Non-Tariff Measures**

Comprehensiveness	
Total number of coded regulations	425
Total number of “NTMs” reported to the WTO (measures in force)	250
Total number of coded NTMs	1,630
Total affected products (HS lines, national tariff lines)	
Total number of affected products <sup>a</sup>	9,558
Share of the number of affected products to the number of total products <sup>b</sup> (%)	98.9
Total number of “regulatory agencies”	26

<sup>a</sup> A product may be affected by more than one measure, but the same HS-coded product is counted as one product, e.g., HS 840731 has three NTMs; yet it would be counted as “one affected product.”

<sup>b</sup> Thailand adopts HS-8 digits at national tariff lines and has 9,664 tariff lines.

*Abbreviations:* HS = Harmonized System, NTM = non-tariff measure, WTO = World Trade Organization.

*Source:* Thai NTM database (2015).

gricultural special safeguard) measures were found in Thailand-New Zealand and Thailand-Australia free trade agreements. These were not included in the database since NTMs related to foreign trade agreements are considered by related international organizations. A limited number of anti-dumping and safeguard measures have been included in the database.<sup>3</sup> The other types of NTMs that have been incorporated into the database were those reported to WTO. The author considers reporting the number of “regulatory agencies” at the sub-ministerial level more meaningful than reporting the number of “issuing institutions” at the ministerial level,<sup>4</sup> as the latter is too aggregated to provide a meaningful perspective on just how diverse are NTM-related government agencies. Accurate understanding of this issue is crucial in designing the correct institution to streamline NTMs.

<sup>3</sup> Type D NTM measure, which includes anti-dumping, countervailing, and safeguard measures, is not the focus of this data collection. UNCTAD, however, has added some anti-dumping measures to the Thai database based on anti-dumping measures reported to WTO.

<sup>4</sup> Most regulations classified are ministerial notices and are issued by relevant ministries.

## 2.2 Types of Non-Tariff Measures

Table 2 shows sanitary and phyto-sanitary (SPS) measures and technical barriers to trade (TBT), measures which comprise 82.8 percent of all NTMs and affect 54.8 percent of national tariff lines.<sup>5</sup> Price control measures (F type) contribute 1.3 percent of NTMs but actually affect a relatively large number of product lines: 15.8 percent of tariff lines. Detailed inspection of F type measures indicates that “special fees” are applied on some sensitive agricultural products, such as F69 (additional charges, not elsewhere specified (n.e.s.)) for the import of maize and soybean meal. Other important F measures include, for example, F65 (import license fee) for chemical weapons, F72 (excise tax) for tobacco and liquor, and F9 (price control measures, n.e.s.) for alcoholic beverages. Non-automatic licensing/quotas/prohibitions (E) affect about 5.4 percent of tariff lines. Detailed inspection of E measures indicates only a small number of measures and affected products with the clear objective of protecting domestic industry. These are measures aimed at

<sup>5</sup> With some double counting because some tariff lines are affected by both type A and B NTMs.

**Table 2: Types of Non-Tariff Measures Imposed, and Number and Percentage of Products Affected**

Code	NTM by type	No. of NTMs	Percentage of total coded NTMs	No. of products affected (national tariff lines)	Percentage of products affected <sup>b</sup>
A	Sanitary and phyto-sanitary measures (SPS)	788	48.34	2,136	22.10
B	Technical barriers to trade (TBT)	562	34.48	3,164	32.74
C	Pre-shipment inspection and other formalities	44	2.70	157	1.62
D	Contingent trade protective measures	44	2.70	109	1.13
E	Non-automatic licensing, quotas, prohibitions, and quantity control measures other than SPS or TBT reasons	40	2.45	525	5.43
F	Price control measures, including additional taxes and charges	21	1.29	1,527	15.80
G	Finance measures				
H	Measures affecting competition	3	0.18	25	0.26
I	Trade-related investment measures				
J <sup>a</sup>	Distribution restrictions				
K <sup>a</sup>	Restrictions on post-sales services				
L <sup>a</sup>	Subsidies (excluding export subsidies under P7)				
M <sup>a</sup>	Government procurement restrictions				
N <sup>a</sup>	Intellectual property				
O <sup>a</sup>	Rules of origin				
P	Export-related measures	128	7.85	9,558	98.90
	Total coded NTMs	1,630	100.00	17,201	

<sup>a</sup> Data on J to O types of non-tariff measures (NTMs) were not collected in this project.

<sup>b</sup> The percentage of products affected is the proportion of product lines affected by the corresponding NTM types to the total number of eight-digit national tariff lines (9,664).

Source: Thai NTM database (2015).

some sensitive agricultural products, such as E113 (licensing linked to local production) for milk. To import milk, importers must buy domestic milk in the ratio of 1:2 by weight. Other such sensitive products are soybean/coconut/palm oil (to control effects on vegetable oil sold in the domestic market), coconuts/onions (in the event of shortages, imports are allowed within certain limits in terms of quantity and timeframe). It was found that only three H11 measures (state-trading enterprise, for importing) affected 25 product lines. Soybean oil, palm oil,

and palm kernel are examples of products that could be imported only by Thailand's Public Warehouse Organization. P measures (export-related measures) affect almost all tariff lines, but, depending on products, the measures range from simple inspection to registration and issuing licenses/granting permits and even to export prohibition.

### 2.3. Regulatory Institutions

Regulatory agencies for NTMs are quite diverse across different ministries, offices, and

**Table 3: Non-Tariff Measure Regulatory Institutions**

Number	Regulatory institution	Number of NTMs	Percentage of total number of NTMs
1	Ministry of Public Health	697	42.6
1.1	General <sup>a</sup>	116	7.1
1.2	Food and Drug Administration	574	35.1
1.3	Bureau of Pathogens and Animal Toxins Act	7	0.4
2	Ministry of Agriculture and Cooperatives	476	29.1
2.1	General <sup>a</sup>	37	2.3
2.2	Department of Agriculture	420	25.7
2.3	Department of Fisheries	18	1.1
2.4	Department of Livestock Development	1	0.1
3	Ministry of Industry	238	14.5
3.1	General <sup>a</sup>	2	0.1
3.2	Thai Industrial Standard Institute	189	11.5
3.3	Department of Industrial Works	31	1.9
3.4	Office of the Cane and Sugar Board	12	0.7
3.5	Department of Primary Industries and Mines	4	0.2
4	Ministry of Commerce	147	9.0
4.1	General <sup>a</sup>	3	0.2
4.2	Department of Foreign Trade	113	6.9
4.3	Office of the Central Commission on Prices of Goods and Services	26	1.6
4.4	Department of Internal Trade	3	0.2
4.5	Central Bureau of Weights and Measures	1	0.1
4.6	Committee for Grain Trade Act	1	0.1
5	Ministry of Finance	15	0.9
5.1	Excise Department	15	0.9
6	Ministry of Natural Resources and Environment	10	0.6
6.1	General <sup>a</sup>	4	0.2
6.2	Department of National Parks, Wildlife and Plant Conservation	6	0.4
7	Office of The National Broadcasting and Telecommunications Commission	7	0.4
8	Prime Minister's Office	3	0.2
8.1	Consumer Protection Board	3	0.2
9	Ministry of Defense	1	0.1
9.1	Defense Industry Department	1	0.1
10	WTO-related committees	43	2.6
10.1	General <sup>a</sup>	37	2.3
10.2	Committee on Anti-dumping Practices, Subsidies and Countervailing Measures	3	0.2
10.3	Committee on Safeguard Measures	3	0.2
Total		1,637 <sup>b</sup>	100.0

<sup>a</sup> NTMs under the regulatory institution “General” are those issued by ministries but with no lower-level units indicated as responsible, such as departments, and bureaus. They are issued usually by the secretariat of the relevant ministry.

<sup>b</sup> The 1,637 NTMs exceed what was previously reported (1,630) because seven of the measures reported here are regulated by both the Department of Agriculture and the Department of Industrial Works.

Source: Thai NTM database (2015).

committees (see Table 3). NTMs regulated by each ministry are, however, not fragmented in lower-level agencies; instead, they are usually “lumped” together under one or two sub-ministerial agencies. The Ministry of Public Health, for example, contributes 42.6 percent of the total number of NTMs, 35.1 percent of which come from the Food and Drug Administration alone. The Ministry of Agriculture and Cooperatives imposes 29.1 percent of the NTMs, of which the Department of Agriculture alone contributes 25.7 percent. The Ministry of Industry imposes 14.5 percent of the NTMs, of which the Thai Industrial Standard Institute accounts for 11.5 percent. The Ministry of Commerce contributes 9 percent of the NTMs, of which 6.9 percent are applied by the Department of Foreign Trade. These aspects, however, should not obscure the great difficulty involved in coordinating these sub-ministerial units in order to streamline NTMs.

### 3. INCIDENCE AND DEPTH OF NON-TARIFF MEASURES

The incidence of NTMs is defined as the proportion of tariff lines in each product group (to be defined later) affected by at least one NTM. The depth of NTMs is defined as the proportion of tariff lines in each product group affected by three or more NTMs. The division of products into groups according to their HS code at the two-digit level is shown in Table 4.

Figure 1 shows that machinery products comprise 21.4 percent of the tariff lines affected by one or more NTMs. Of these products, 17 percent have only one NTM. Textiles and metal products comprise 11.2 percent and 9.4 percent, respectively, of the total, with the majority of products for each group having one NTM. Chemical products comprise 12 percent, with approximately equal shares of products affected by one and three or more NTMs. Not surprisingly, the majority of products under animal products, vegetables products, and foodstuffs are affected by three or more NTMs. The “depth” of NTMs for these product groups may be anticipated

**Table 4: Product Groups Classified by HS Code at Two-digit Level**

HS code	Product groups
01-05	Animal and animal products
06-15	Vegetable products
16-24	Foodstuffs
25-27	Mineral products
28-38	Chemicals and allied industries
39-40	Plastics/rubber
41-43	Raw hides, skins, leather, and furs
44-49	Wood and wood products
50-63	Textiles
64-67	Footwear/headgear
68-71	Stone/glass
72-83	Metals
84-85	Machinery/electrical
86-89	Transportation
90-99	Miscellaneous

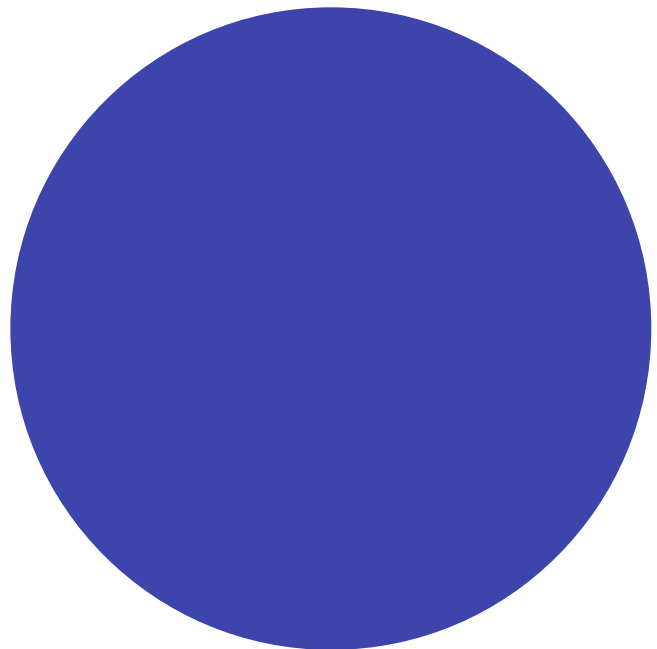
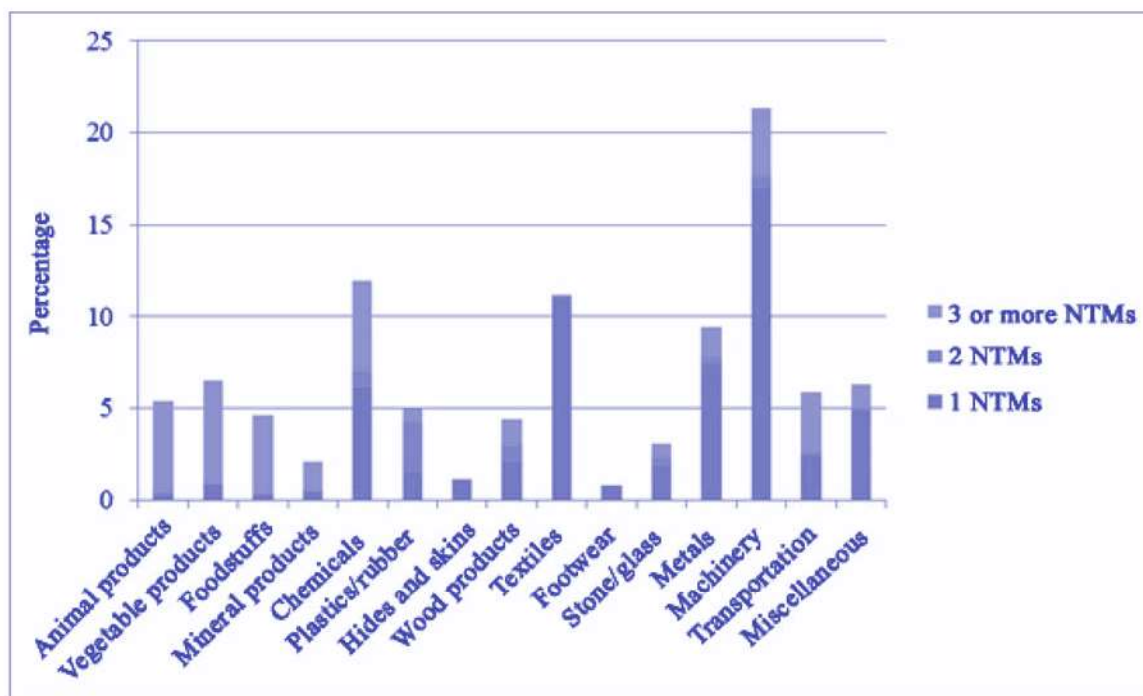


Figure 1: Incidence and Depth of Non-Tariff Measures, Computed as Percentage of 9,664 Tariff Lines



NTM = non-tariff measure.

Source: Thai NTM database (2015).

due to the complexity and details of SPS and TBT measures.

A major drawback of the analysis based on Figure 1 is that the percentage is computed as a percentage of the total number of tariff lines (9,664 lines). A more interesting representation would involve using the number of tariff lines affected by one or more NTMs in each product group divided by *the number of the tariff lines in each product group* (Figure 2).

All tariff lines in all product groups, except vegetable products and foodstuffs, are affected by at least one NTM. This is a striking result compared with the previous literature on Thailand's NTMs. Cadot, Munadi, and Ing (2013), using the 2009 ASEAN Secretariat NTM Database, found the highest incidence of NTMs in textiles, where approximately 23 percent of tariff lines are affected by one or more NTMs (see Figure 3). The major reason for this discrepancy is the different methods of NTM collection. The ASEAN Secretariat Database is based

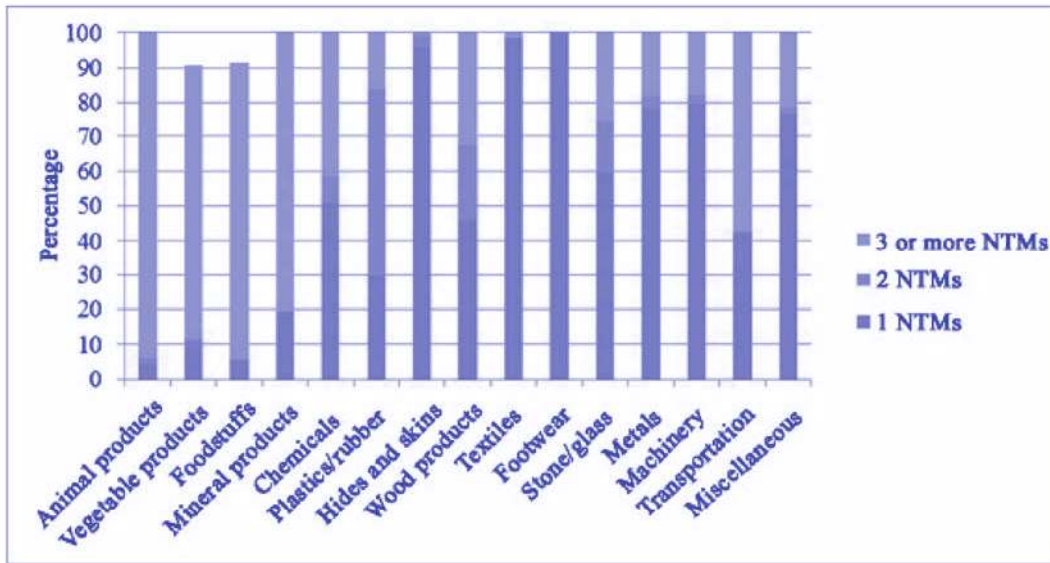
on reports by government officials, whereas the Thai database was constructed using first-hand analysis of actual regulations by independent researchers. Methodologies used in classifying NTMs in the two databases may also differ.

According to the new Thai database, it may be concluded that Thailand has 100 percent incidence of NTMs in all product groups, except vegetable products and foodstuffs where the incidence is 90.8 percent and 91.3 percent, respectively. Figure 2 highlights the depth of NTMs for animal products, vegetable products, foodstuffs, and mineral products, where the majority of tariff lines have three or more NTMs.

#### 4. INTENSITY OF NON-TARIFF MEASURES

The intensity of NTMs is defined as the average number of NTMs per tariff line for each product group. The average number of measures for each tariff line is further classified into the average

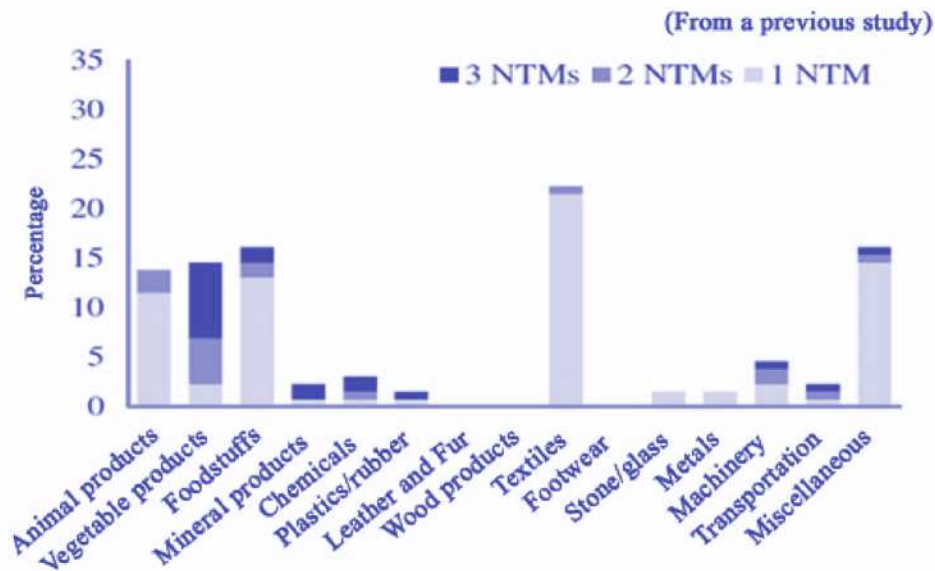
**Figure 2: Incidence and Depth of Non-Tariff Measures, Computed as a Percentage of the Number of Tariff Lines in Each Product Group**



NTM = non-tariff measure.

Source: Thai NTM database (2015).

**Figure 3: Incidence and Depth of Thai Non-Tariff Measures: Percentage of Tariff Lines Affected by One or More Non-Tariff Measures**



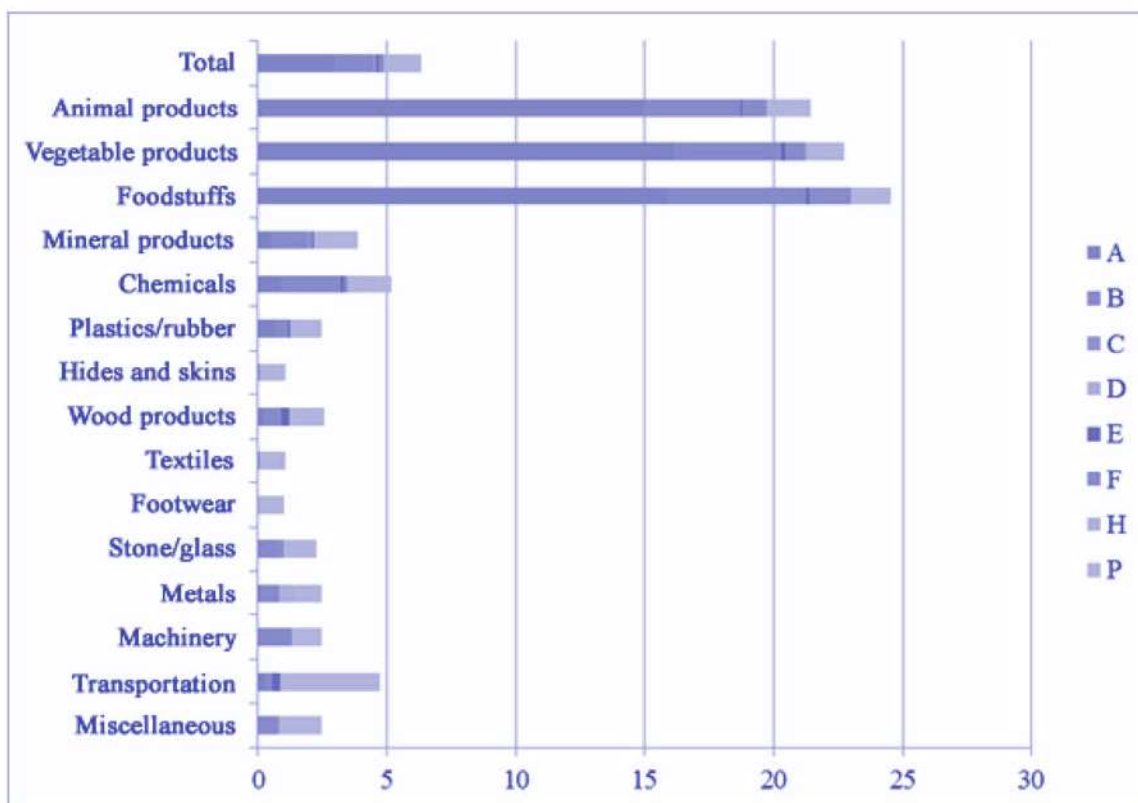
NTM = non-tariff measure.

Source: Cadot, Munadi, and Ing (2013).

number of measures of A, B, C, D, E, F, H, and P types. The overall average number of NTMs per tariff line for Thailand is 6.4 (see Figure 4). Animal products, vegetable products, and foodstuffs have the highest intensity of NTMs: the average numbers of NTMs per tariff line for those products are

21.4, 22.7, and 24.6, respectively. Most measures for these product groups fall under the SPS and TBT categories. Mineral products, chemicals, and transportation products have, on average, from three to five measures per tariff line, with the B and P types having the most. Other product groups have

Figure 4: Intensity of Non-Tariff Measures: Average Number of Non-Tariff Measures per Tariff Line for Each Product Group



Source: Thai NTM database (2015).

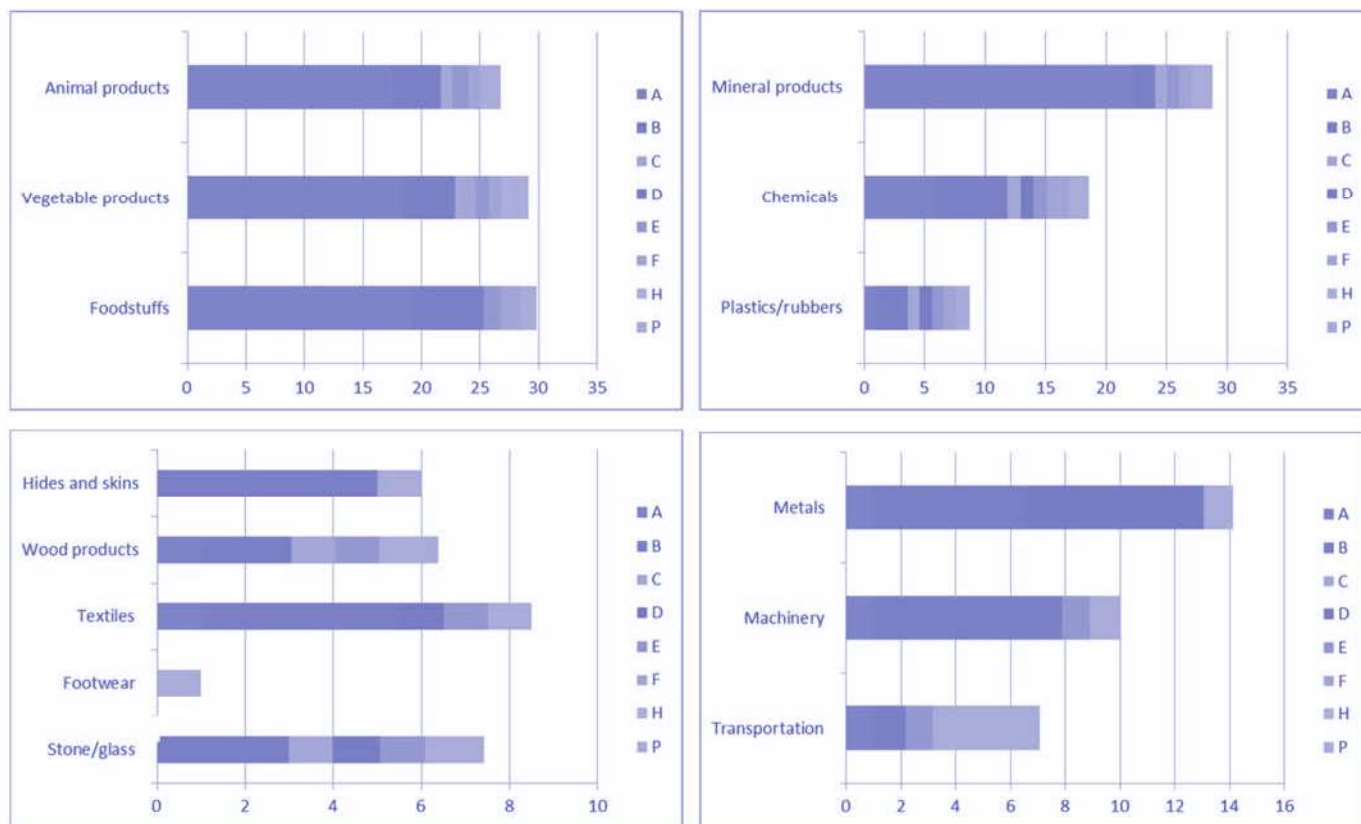
an average of fewer than three NTMs per tariff line. Figure 4 presents a very different result from previous work on Thailand’s NTMs. Intaravitak, Luksanapanyakul, and Tunmunthong (2013), also using the 2009 ASEAN Secretariat Database, found the average number of NTMs to be less than one per tariff line for all product groups.

The analysis based on Figure 4 may underestimate the severity of NTMs. Each NTM type tends to be associated with certain types of products. For example, SPS measures in general are applicable to vegetable/animal products and foodstuffs. Many TBT measures concerning product performance/quality are particularly applicable to metal and machinery products. For this reason, for each product group, *the average number of measures of each NTM type have been computed among those tariff lines affected by that particular NTM type* (Figure 5).

Within the animal products group, certain tariff lines are affected by type A NTMs. The average number of type A NTMs imposed on this product group is 17.6. Using the same logic within the animal products group, certain tariff lines are affected by type B NTMs. The average number of type B NTMs imposed on these products is 4.1.

Using this method to compute the intensity (or severity) of NTMs is more precise than that used in Figure 4. According to Figure 4, mineral products have, on average, 3.9 NTMs per tariff line, with an insignificant proportion having type A NTMs. With regard to Figure 5, on the other hand, it is shown that for tariff lines in the mineral products group affected by type A NTMs, the average number of type A measures is 22.3 per tariff line. For example, HS 25010010 (salt, including table salt and denatured salt; and pure sodium chloride) contains type A measures ranging from a tolerance

Figure 5: Intensity of Non-Tariff Measures: Average Number of Measures of Each Non-Tariff



Source: Thai NTM database (2015).

limit for contamination to hygienic practices during production and to packing, storage, and labeling requirements. Similarly, it is striking to note that the average numbers of type A NTMs faced by tariff lines affected by type A NTMs in the animal products, vegetable products, and foodstuffs groups are 17.6, 18.5, and 19.3, respectively. For textile products, an average of 4.5 measures are applied to the tariff lines affected by type B NTMs, mostly to ensure that imported fiber wastes are properly reported and managed. On average, 5.5 measures are applied to metal products subject to type B measures (product quality or performance requirements). For metal products subject to type D measures 6.5 measures are applied on average; most are anti-dumping measures. Similarly, for machinery products subject to type B measures (product quality or performance requirements), an average of 6.9 measures are applied.

## 5. POLICY RECOMMENDATIONS FOR STREAMLINING NON-TARIFF MEASURES

The focus of this paper is a descriptive analysis of the Thai NTM database and not so much on designing policies to streamline NTMs. In this section, some ideas are briefly discussed concerning how to address the NTM issues that came to light during NTM data collection. The author generally concurs with the methods proposed in the World Bank toolkit on streamlining NTMs (see Cadot, Malouche, and Saez (2012)). This general approach, however, should be modified to suit the local context in each country. In particular, the following steps are proposed to streamline NTMs:

- **On NTM data collection.** Establish a one-stop NTM service center where importers/exporters can report and be notified of NTMs in a timely manner.



- **On reviewing NTMs.** The cost-benefit of an NTM should be carefully analyzed. Equally important is understanding who benefits and who bears the cost of such measures. Sometimes, NTMs represent economic rents for some third parties, causing unnecessary inefficiency.
- **On streamlining NTMs.** The following step are proposed:
  - Establish a strong independent oversight body;
  - Focus on regional mutual recognition agreements (MRAs) as an intermediate, short-to-medium-term solution;
  - Encourage adoption of international standards in place of national/regional standards.

## 6. CONCLUSION

A relatively comprehensive database of Thai NTMs has been constructed by analyzing official regulations and using UNCTAD methodology; a total of 1,630 NTMs have been identified in 425 regulations and classified. These NTMs affect 9,558 products at eight-digit national tariff lines, which

comprise 98.90 percent of all tariff lines (9,664 lines at the eight-digit level). Of these NTMs, 83 percent are SPS and TBT measures that affect 55 percent of tariff lines. Limited use of price control measures (F type) was found, although they affect a relatively large number of tariff lines. Type E measures, especially those with the clear objective of protecting domestic industry, such as E113 (licensing linked with local production), are barely used. It was also found that there is limited use of the H11 (state-trading enterprise, for importing) measure. P measures (export-related measures) affect almost all tariff lines but, depending on the products, the measures range from simple inspection to registration and the issuing of licenses/permits and even to export prohibition. NTM-related regulatory institutions are quite diverse because they are part of different ministries. However, NTMs tend to “lump together” in some sub-ministerial agencies. The database indicates that Thailand has 100 percent incidence of NTMs in all product groups except vegetable products and foodstuffs where the author found incidence of 90.8 percent and 91.3 percent, respectively. Animal products, vegetable products, foodstuffs, and mineral products feature more



“depth” of NTMs since the majority of tariff lines in these product groups are subject to three or more NTMs. For each product group, the author devised a new method to serve as a proxy for the intensity (or severity) of NTMs by computing an average number of measures of each NTM type among the tariff lines affected by a particular NTM type. As a result, significant NTM severity was found for some NTM types in various products. For example, for those tariff lines in the mineral products group affected by type A NTMs, the average number of type A measures is 22.3 per tariff line. Similarly, for tariff lines affected by type A NTMs in the animal products, vegetable products, and foodstuffs group, the average numbers of type A NTMs are 17.6, 18.5, and 19.3, respectively.

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